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IMPLEMENTATION COMPLETION AND RESULTS REPORT
(IBRD-73800)

ON A

LOAN

IN THE AMOUNT OF US$50 MILLION

TO

PAKISTAN

FOR THE

PUNJAB MUNICIPAL SERVICES IMPROVEMENT PROJECT

May 19, 2014

Sustainable Development Department
Pakistan Country Management Unit
South Asia Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective: November 30, 2013)

Currency Unit = Pakistan Rupees (PKR)
US$ 1.00 = PKR 108.48

FISCAL YEAR
July 01 – June 30

ABBREVIATIONS AND ACRONYMS

ADB	Asian Development Bank
CAS	Country Assistance Strategy
CCB	Citizen Community Board
CB	Capacity Building
CD	City District
CDG	City District Government
CIDA	Canadian International Development Agency
CTS	Complaint Tracking System
DAR	Desk Appraisal Report
DPL	Development Policy Loan
DPR	Detailed Project Report
EA	Environmental Assessment
EIA	Environmental Impact Assessment
EMP	Environment Management Plan
ERR	Economic Rate of Return
ESF	Environmental and Social Framework
FAR	Field Appraisal Report
FMS	Financial management System
FSL	Fixed Spread Loan
GDP	Gross Domestic Product
HUD&PHED	Housing, Urban Development and Public Health Engineering Department
IA	Implementing Agency
ID	Institutional Development
I&S	Infrastructure and Services
ICR	Implementation Completion Report
ID	Institutional Development
KPI	Key Performance Indicator
LG	Local Government
LG&CDD	Local Government and Community Development Department
M&E	Monitoring and Evaluation
MOU	Memorandum of Understanding
MTR	Mid-Term Review
OM	Operations Manual
O&M	Operation and Maintenance
PAD	Project Appraisal Document
P&DD	Planning and Development Department

PIFRA	Project to Improve Financial Reporting and Auditing
PIP	Performance Improvement Plan
PLGO	Punjab Local Government Ordinance
PMDFC	Punjab Municipal Development Fund Company
PMS	Performance Management System
PPIAF	Public Private Infrastructure Advisory Facility
SDWCL	Sustainable Development of Walled City of Lahore
SIL	Specific Investment Loan
SOP	Standard Operating Procedure
TMA	Tehsil Municipal Administration
TMO	Tehsil Municipal Officer
TO	Tehsil Officer
TO(F)	Tehsil Officer (Finance)
TO(I&S)	Tehsil Officer (Infrastructure and Services)
TO(P&C)	Tehsil Officer (Planning and Coordination)
TO(R)	Tehsil Officer (Regulation)
UU	Urban Unit
WAPDA	Water and Power Development Authority
WASA	Water and Sanitation Authority
WBI	World Bank Institute
WCLA	Walled City of Lahore Authority

Vice President:	Philippe H. Le Houerou
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PAKISTAN
Punjab Municipal Services Improvement Project

CONTENTS

DATA SHEET

A. Basic Information			
Country:	Pakistan	Project Name:	Punjab Municipal Services Improvement Project
Project ID:	P083929	L/C/TF Number(s):	IBRD-73800
ICR Date:	05/15/2014	ICR Type:	Core ICR
Lending Instrument:	SIL	Borrower:	Government of Pakistan
Original Total Commitment:	USD 50.00M	Disbursed Amount:	USD 48.86M[1]
Revised Amount:	USD 50.00M		
Environmental Category: A			
Implementing Agencies: Government of Punjab			
Cofinanciers and Other External Partners:			

B. Key Dates				
Process	**Date**	**Process**	**Original Date**	**Revised / Actual Date(s)**
Concept Review:	08/25/2003	Effectiveness:	06/13/2006	06/13/2006
Appraisal:	01/02/2006	Restructuring(s):		08/31/2010 11/13/2012
Approval:	06/01/2006	Mid-term Review:	12/15/2009	01/14/2010
		Closing:	12/31/2010	11/30/2013

C. Ratings Summary	
C.1 Performance Rating by ICR	
Outcomes:	Satisfactory
Risk to Development Outcome:	Substantial
Bank Performance:	Satisfactory
Borrower Performance:	Satisfactory

C.2 Detailed Ratings of Bank and Borrower Performance (by ICR)			
Bank	**Ratings**	**Borrower**	**Ratings**
Quality at Entry:	Moderately Satisfactory[2]	Government:	Satisfactory

[1] The undisbursed amount mainly relates to the cultural heritage pilot project.

[2] There is a discrepancy in the wording of the PDO in the PAD and the legal documents. The PDO in the PAD has been used for the purposes of this ICRR following the ICRR Guidelines (updated on 10/05/2011), since it more closely reflects the tracked results and better describes stakeholders' perceptions of what the project set out to achieve.

Quality of Supervision:	Satisfactory	Implementing Agency/Agencies:	Satisfactory
Overall Bank Performance:	Satisfactory	**Overall Borrower Performance:**	Satisfactory

C.3 Quality at Entry and Implementation Performance Indicators			
Implementation Performance	**Indicators**	**QAG Assessments (if any)**	**Rating**
Potential Problem Project at any time (Yes/No):	No	Quality at Entry (QEA):	None
Problem Project at any time (Yes/No):	No	Quality of Supervision (QSA):	None
DO rating before Closing/Inactive status:	Satisfactory		

D. Sector and Theme Codes		
	Original	**Actual**
Sector Code (as % of total Bank financing)		
Solid waste management	20	20
Sub-national government administration	10	20
Urban Transport	20	25
Wastewater Collection and Transportation	10	5
Water supply	40	30
Theme Code (as % of total Bank financing)		
City-wide Infrastructure and Service Delivery	66	65
Municipal finance	17	10
Municipal governance and institution building	17	25

E. Bank Staff		
Positions	**At ICR**	**At Approval**
Vice President:	Philippe H. Le Houerou	Praful C. Patel
Country Director:	Rachid Benmessaoud	John W. Wall
Sector Manager:	Ming Zhang	Sonia Hammam
Project Team Leader:	Shahnaz Arshad	Jaehyang So, Shahnaz Arshad
ICR Team Leader:	Shahnaz Arshad	
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F. Results Framework Analysis

Project Development Objectives (from Project Appraisal Document)
The objective of the project is to improve the viability and effectiveness of urban services provided by the participating TMAs, and to make such improvements sustainable and replicable in other TMAs through the creation of a performance-based management framework at both TMA and provincial levels.

Revised Project Development Objectives (as approved by original approving authority)
Project Development Objective was not revised.

(a) PDO Indicator(s)[3]

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
Indicator 1 :	Evidence, via reports from independent technical and social audit teams, of improved effectiveness and financial and technical viability of urban services provided by participating TMAs.			
Value quantitative or Qualitative)	TMAs in need of improved and well-structured management systems for improved service delivery and developmental spending.	Improved TMA capacity for provision of effective and viable urban services.		TMA capacities for provision of effective and viable urban services have improved.
Date achieved	11/27/2006	12/31/2010		11/30/2013
Comments (incl. % achievement)	The Institutional Development (ID) interventions have significantly improved the capacity and systems available at 105 TMAs across Punjab for effective service delivery, planning, and revenue management. Findings from the two ID assessments undertaken at MTR and end of project stages, as well as results from intermediate outcome indicators related to ID activities, provide evidence of increased capacity and performance improvement related to: (i) monitoring of coverage and quality targets for service delivery[4]; (ii) registration and resolution of complaints from service consumers[5]; (iii) financial/accounting and revenue management systems[6]; (iv) demand driven development planning[7]; and (v) information dissemination and transparency. Moreover, the capacity and experience developed at TMAs through delivering infrastructure sub-projects under PMSIP will enable them to effectively manage future service delivery investments. Refer to intermediate outcome indicators below for supporting results related to institutional strengthening.			

[3] The PDO Indicators are mostly qualitative. PMSIP was designed as a demand-driven project, and at the time of Appraisal, the type of investments that would accrue or the scope and depth of institutional development support that would be provided to TMAs was not entirely predictable.
[4] Performance Management System operational in 105 TMAs
[5] Complaint Tracking System operational in 105 TMAs
[6] Computerized Financial Management System operational in 102 TMAs
[7] Participatory Planning process completed in 104 TMAs.

Indicator 2 :	Evidence of rising levels of satisfaction among key stakeholder groups with respect to services targeted under the project and improvement in selected service delivery indicators.			
Value quantitative or Qualitative)	Refer intermediate outcome indicators	Improvements in TMAs' key service delivery indicators (refer intermediate outcome indicators)		Improved intermediate results (refer intermediate outcome indicators and comments below)
Date achieved	11/27/2006	12/31/2010		11/30/2013
Comments (incl. % achievement)	Results from the independent third-party survey of beneficiary perceptions provides strong evidence of the increased satisfaction of beneficiary groups from service delivery improvements resulting from 14 infrastructure investments under PMSIP: a) Majority of the beneficiaries reported that both quantity and quality of water supplied by TMAs have improved or significantly improved (households with piped connections to clean drinking water in 11 participating TMAs increased from 40 to 53%). b) A significant majority of respondents were satisfied that investments in roads had improved access, travel times, vehicle maintenance costs, fuel consumption, and business opportunities. c) A significant majority of respondents confirmed improvement in primary collection, transportation, and disposal of solid waste as well as overall cleanliness of their neighborhoods (disposal of solid waste at sanitary landfills increased from 0 to 74% in the 6 participating TMAs). Intermediate outcome indicators related to service delivery substantiate these results (refer intermediate results below and Section 3.2 of the ICRR).			
Indicator 3 :	Evidence of GoPunjab's improved capacity to monitor TMA performance.			
Value quantitative or Qualitative)	GoPunjab currently has no ability to systematically monitor TMA performance.	Data Networking and Performance Monitoring System covering all provincial TMAs fully operationalized, and being utilized for central policy development and decision-making.		Integrated Performance Monitoring System covering all provincial TMAs has been fully operationalized. Provincial Local Government Department is employing monitoring systems for central policy development and decision-making.
Date achieved	11/27/2006	12/31/2010		11/30/2013
Comments (incl. % achievement)	Integrated web-based Performance Management System (PMS) and Computerized Financial Management System (CFMS) are operational at 105 and 102 TMAs respectively, and a monitoring cell has been created at the Local Government and Community Development Department (LG&CDD), which is the parent institution for all local governments in Punjab. In close collaboration with PMDFC, this cell is			

	assisting LG&CDD oversee TMA performance on municipal service delivery, performance of TMA staff, expenditures and financial management. Detailed data on TMA performance being regularly reported by 56 TMAs[8] to LG&CDD for analysis and decision-making.			
Indicator 4 :	Evidence of GoPunjab's improved capacity to manage cultural heritage assets.			
Value quantitative or Qualitative)	Overlapping institutional mandates and lack of coordination in Punjab make it difficult for GoPunjab to manage cultural heritage assets.	GoPunjab will have a clear and effective institutional structure and coordination mechanism for cultural heritage asset management.		GoPunjab has enacted requisite legislation and established the Walled City of Lahore Authority with a clear and effective institutional mandate.
Date achieved	11/27/2006	12/31/2010		11/30/2013
Comments (incl. % achievement)	The Walled City of Lahore Act 2012 has provided regulatory mechanisms for the conservation, planning, development, management, and regulation of the historic core of Lahore. The Walled City of Lahore Authority (WCLA) has been established under the Act as an autonomous and specialized institutional entity for conserving the heritage assets of the Walled City of Lahore, enhancing the quality of life of its residents, and the planning and management of infrastructure and services.			

(b) Intermediate Outcome Indicator(s)

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
Indicator 1 :	% of households connected with water supply system			
Value (quantitative or Qualitative)	40% (average of 11 TMAs with PMSIP water supply sub-projects)	59%		53% (average of 11 TMAs with PMSIP water supply sub-projects)
Date achieved	11/27/2006	12/31/2010		11/30/2013
Comments (incl. % achievement)	Based on TMA water supply consumer records. *Percent achieved: 68%*			
Indicator 2 :	% of street lights working			
Value (quantitative or Qualitative)	70% (average of 105 TMAs)	75% (average of 105 TMAs)		73% (average of 105 TMAs)
Date achieved	11/27/2006	12/31/2010		11/30/2013
Comments (incl. % achievement)	Reported from the integrated Performance Management System established under the Project. The Project did not make direct investments in the improvement of street lights. However, improved service monitoring procedures may be one of the factors behind			

[8] 56 TMAs are generating more than 9 reports per year (Refer Intermediate Outcome Indicator # 8).
81 TMAs are generating more than 6 reports per year.

	improvements in the indicator. *Percent achieved: 60%*			
Indicator 3 :	% of solid waste disposed per day at landfill site			
Value (quantitative or Qualitative)	0 (No landfill sites operational)	70%		74% (average of 6 TMAs with Landfill sites developed under PMSIP sub-projects)
Date achieved	11/27/2006	12/31/2010		10/31/2013
Comments (incl. % achievement)	Reported from the integrated Performance Management System (PMS) established under the Project. No landfill sites were operational at partner TMAs prior to PMSIP. The Project supported investments in collection, transportation, and disposal of solid waste at 6 TMAs. The envisaged targets have been exceeded. *Percent achieved: 106%*			
Indicator 4 :	Number of TMAs staff trained in IT, planning, O&M etc			
Value (quantitative or Qualitative)	1,000		2,300	3,137
Date achieved	08/02/2010		11/30/2012	11/30/2013
Comments (incl. % achievement)	Reported by Punjab Municipal Development Funds Company (PMDFC). Under the Project, the bulk of staff and officials at 105 partner TMAs have received training on a variety of topics. The envisaged targets have been exceeded. *Percent achieved: 164%*			
Indicator 5 :	Number of TMAs having updated GIS-based service maps			
Value (quantitative or Qualitative)	30		100	104
Date achieved	08/02/2010		11/30/2012	11/30/2013
Comments (incl. % achievement)	Reported by PMDFC. GIS based service maps have been developed for 104 partner TMAs. *Percent achieved: 106%*			
Indicator 6 :	Number of TMAs using FMS generated reports for the annual local fund audit.			
Value (quantitative or Qualitative)	0		10	102
Date achieved	08/02/2010		11/30/2012	11/30/2013
Comments (incl. % achievement)	Reported by PMDFC. CFMS reports are being generated by 102 TMAs. The Office of DG Audit is in the process of preparing for system audit, once Account Rules, Budget Rules, and Rules of Business under PLGA 2013 are operationalized. *Percent achieved: 1020%*			
Indicator 7 :	Number of TMAs having updated plans			
Value (quantitative or Qualitative)	20		75	104
Date achieved	08/02/2010		11/30/2012	11/30/2013
Comments (incl. % achievement)	Reported by PMDFC. Participatory planning exercise completed for 104 TMAs *Percent achieved: 153%*			
Indicator 8 :	Number of TMAs generating monthly Performance Management System (PMS) reports			

	(at least 9 reports in a year)			
Value (quantitative or Qualitative)	12		40	56
Date achieved	08/02/2010		11/30/2012	11/30/2013
Comments (incl. % achievement)	Reported from the integrated PMS. 56 TMAs generated at least 9 monthly PMS reports during the last year of the Project[9]. *Percent achieved: 157%*			
Indicator 9 :	Number of TMAs having 90% complaint resolution efficiency			
Value (quantitative or Qualitative)	20		75	81
Date achieved	08/02/2010		11/30/2012	11/30/2013
Comments (incl. % achievement)	Based on data from the Complaint Tracking System (CTS). *Percent achieved: 111%*			

G. Ratings of Project Performance in ISRs

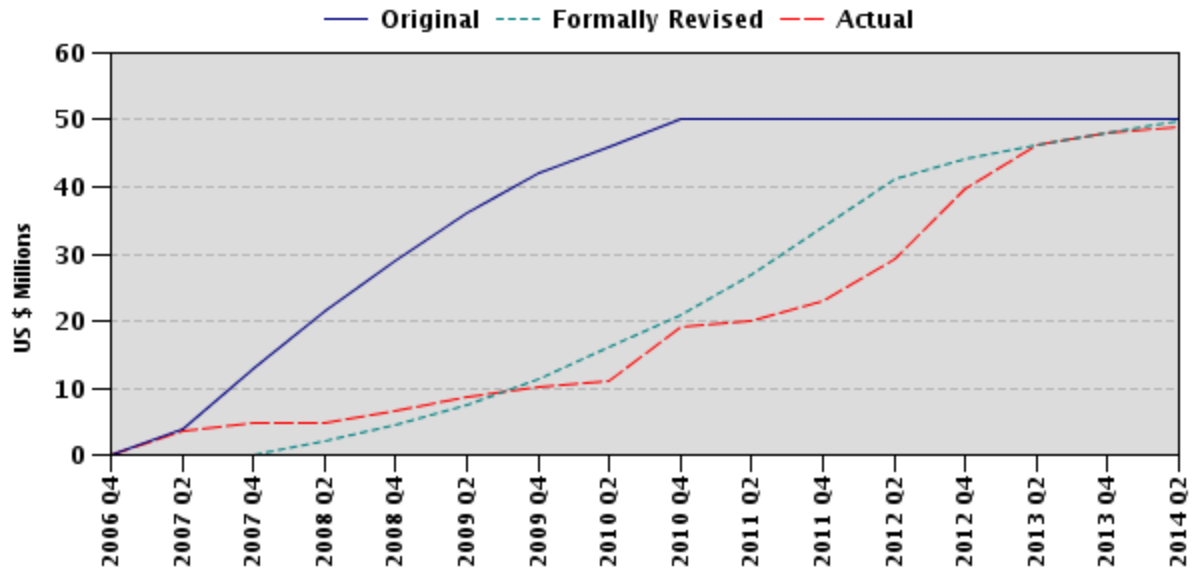
No.	Date ISR Archived	DO	IP	Actual Disbursements (USD millions)
1	12/29/2006	Satisfactory	Satisfactory	3.63
2	06/29/2007	Satisfactory	Satisfactory	4.63
3	12/28/2007	Satisfactory	Satisfactory	4.63
4	06/27/2008	Satisfactory	Satisfactory	6.63
5	12/30/2008	Satisfactory	Moderately Satisfactory	8.63
6	05/27/2009	Satisfactory	Moderately Satisfactory	9.63
7	11/28/2009	Satisfactory	Moderately Satisfactory	10.13
8	05/26/2010	Satisfactory	Moderately Satisfactory	19.13
9	12/12/2010	Satisfactory	Moderately Satisfactory	20.13
10	07/11/2011	Satisfactory	Moderately Satisfactory	23.13
11	06/05/2012	Satisfactory	Satisfactory	39.83
12	12/14/2012	Satisfactory	Satisfactory	46.25
13	02/20/2013	Satisfactory	Satisfactory	46.25
14	07/16/2013	Satisfactory	Satisfactory	48.14
15	12/11/2013	Satisfactory	Satisfactory	48.86

[9] 56 TMAs are generating more than 9 reports per year (Refer Intermediate Outcome Indicator # 8).
81 TMAs are generating more than 6 reports per year.

H. Restructuring (if any)

Restructuring Date(s)	Board Approved PDO Change	ISR Ratings at Restructuring		Amount Disbursed at Restructuring in USD millions	Reason for Restructuring and Key Changes Made
		DO	IP		
08/31/2010	N	S	MS	20.13	i) Scaling up of Capacity Grants Sub-component to 105 TMAs in Punjab. ii) Strengthening the management of infrastructure investments under the Performance Grants Sub-component. iii) Addition of Intermediate Outcome Indicators to Results Framework.
11/13/2012	N	S	S	46.25	Extension of Project Closing Date.

I. Disbursement Profile



1. Project Context, Development Objectives and Design
1.1 Context at Appraisal

1. The rapid urban transition in Pakistan could contribute even more to the pace of the country's economic growth and poverty reduction, if cities did not suffer from severe infrastructure bottlenecks, service deficiencies, poor local governance, and inefficiencies in land and housing markets. Shortfalls in urban services are not merely an outcome of aggregate resource constraints, but are linked to constraints in the institutional, governance, and financial arrangements. Punjab has continued to recognize the potential role of cities in economic growth, and the need to make available adequate resources for investment in infrastructure and delivery of services.

2. ***Devolution and Local Governments:*** Government's 2001 Devolution of Power Program represented a unique opportunity to address key constraints in urban management and service delivery. It established new legal and administrative structures at the local level, and the framework for devolving service functions. The Punjab Local Government Ordinance (PLGO) 2001 resulted in establishing 144 Tehsil Municipal Administrations (TMAs) and 5 City District Governments (including 39 of the 144 TMAs under them). It gave the responsibility of municipal service provision to the TMAs, and of monitoring the TMAs in the provision of services to the provincial government. TMAs had to immediately acquire the technical and management expertise needed to deliver services, while the provincial government had to change its focus from service provision to monitoring and oversight. Critical issues that faced the urban sector in the Punjab, particularly in the backdrop of the devolution program, included:

a) *TMA Capacity and Systems:* TMAs, as new institutions, faced significant problems with respect to strategic, spatial, and investment planning.
b) *Service Delivery:* Many TMAs struggled to keep services going, and did not have the technical capacity or financial resources to plan for and implement new investments.
c) *Provincial Government Capacity:* While GoPunjab had been monitoring budget inputs and disbursements through financial and audit functions, formal systems and reporting mechanisms to evaluate TMA financial and service performance and outcomes were unavailable.

3. ***Cultural Heritage Management:*** There was a growing and widely shared recognition that Cultural Heritage (CH) assets had a rich economic potential that could contribute to reduce poverty and trigger economic activity through cultural tourism[10]. However, this was complicated by the multiplicity of institutional mandates at various levels of government and the legislative frameworks governing conservation, restoration, and maintenance of historic assets in Punjab.

[10] Italian Trust-funded, Bank-executed study on Sustainable Development of WCL had recently been completed.

4. ***Rationale for Bank's Assistance:*** Four years after the government's new devolution of powers program was initiated, the practical capacity constraints for the TMAs to deliver on their urban management and service delivery mandates were being recognized, and limitations on the provincial capacity to monitor and oversee TMA performance had become apparent. This represented an opportune time for the Bank to support the process underway in the Punjab through a focused operation.

5. The project set out to assist TMAs and the provincial government in implementing the concept of performance management in their operations. Eligible TMAs would be invited to participate in the project based on their performance since establishment, and their continued eligibility to participate in the project would be based on achieving agreed targets. By designing and implementing an effective monitoring and evaluation system, the project would contribute to the provincial government's ability to carry out its oversight and enabling role envisaged under PLGO.

1.2 Original Project Development Objectives (PDO) and Key Indicators

6. The objective of the project was to improve the viability and effectiveness of urban services provided by the participating TMAs, and to make such improvements sustainable and replicable in other TMAs through the creation of a performance-based management framework at both TMA and provincial levels[11].

7. ***Key Performance Indicators (KPIs)*** were:

a) Improved effectiveness and financial and technical viability of urban services provided by participating TMAs.
b) Rising levels of satisfaction among key stakeholder groups with respect to services targeted under the project and improvement in selected service delivery indicators.
c) GoPunjab's improved capacity to monitor TMA performance.
d) GoPunjab's improved capacity to manage cultural heritage assets.

1.3 Revised PDO (as approved by original approving authority) and Key Indicators, and reasons/justification

[11] There is a discrepancy in the wording of the PDO in the PAD and the legal documents. The PDO in the PAD has been used for the purposes of this ICRR following the ICRR Guidelines (updated on 10/05/2011), since it more closely reflects the tracked results and better describes stakeholders' perceptions of what the project set out to achieve.

8. Not Applicable.

1.4 Main Beneficiaries

9. The primary beneficiaries of the Project were:

a) An estimated 1.66 million[12] urban residents of 29 towns would benefit from improved municipal infrastructure and services provided through the performance grants.
b) Urban residents of towns where the Project contributed to improvements in TMA operational systems and business practices in areas such as participatory planning, complaint registration and tracking, effective monitoring of municipal services' coverage and quality, information dissemination through TMA websites, etc.
c) Residents of the area in the Walled City of Lahore where the pilot project would be implemented.

1.5 Original Components

10. The project consisted of two components: (a) capacity grants and development grants to TMAs; and (b) technical assistance to the Punjab Provincial Government.

11. ***Component One: Support for TMAs - Capacity and Development Grants:*** Capacity Grants would finance needed improvements in TMAs' systems and business procedures in the areas of urban planning, financial management (including budget management), investment planning for service delivery, and operation and maintenance. Development Grants would finance infrastructure investments ("sub-projects") in the TMAs, which would be awarded based on performance of the TMAs.

12. ***Component Two: Support for Other Institutions - Capacity Building and Other Activities:*** This component was to: (a) support capacity building of the Local Government and Rural Development Department (LG&RDD)[13]; (b) assist in capacity enhancement of the Planning and Development Department. (P&DD), including the newly established Urban Unit (UU)[14] responsible for implementing the Cultural Heritage component; and (c) support PMDFC in adding to its capacity through contracting consultant services on a need basis.

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[12] This estimate is based on a systematic determination of the coverage area of each infrastructure investment, using GIS maps of the urban center where the sub-projects were implemented.

[13] Later renamed as Local Government and Community Development Department (LG&CDD)

[14] The GoPunjab transferred implementation responsibility of the cultural heritage sub-component from the Urban Unit to the Sustainable Development of Walled City of Lahore (SDWCL) unit, also established under the P&DD.

1.6 Revised Components

13. Not Applicable

1.7 Other Significant Changes

14. The Project was restructured twice. In August 2010, following the Mid-Term Review (MTR), successful institutional development activities were extended to a broader set of TMAs to ensure consolidation of benefits, and sustainability of achievements. In addition, a number of interim outcome indicators[15] were added to support monitoring and evaluation of impacts at the TMA level. The loan closing date was extended by twenty three months from December 31, 2010 to November 30, 2012 to enable Institutional Development activities to be implemented over a larger universe of TMAs.

15. The Project was restructured again in November 2012 with the closing date extended from November 30, 2012 to November 30, 2013 primarily to ensure that the institutional reforms introduced in TMAs were embedded in their systems, particularly in the TMAs which became partners since late 2010.

2. Key Factors Affecting Implementation and Outcomes

2.1 Project Preparation, Design and Quality at Entry

16. ***Project Preparation:*** The Project was conceived as an incentive fund for TMAs willing to improve their performance. A variety of customized capacity building interventions were supported to enhance TMAs' ability to deliver on their mandates, and the provincial government's capacity to monitor TMA performance. High-performing TMAs were given the incentive of investment grants for municipal sector sub-projects prioritized through a planning process. The Project also aimed to assist the provincial government in instituting improved legislative and institutional frameworks to manage cultural heritage assets.

17. Project preparation used a participatory approach through extensive consultations with provincial agencies, as well as reform-minded mayors and officials of seven TMAs. The Bank engaged proactively with these stakeholders to understand and effectively address operational constraints, and optimally respond to their needs to reinforce ownership.

18. ***Project Design:*** Project design drew on a number of important lessons from similar operations elsewhere, in particular:

This, in the later years of the Project, was transformed into the Walled City of Lahore Authority (WCLA) established under the Walled City of Lahore Act (2012) which the Project assisted to develop.

[15] Refer discussion on Project Results for a complete listing of the added interim outcome indicators.

a) A key lesson was that *'greater borrower ownership and a longer term commitment of resources for technical assistance/training are required for making sustainable institutional improvements'*. Support provided to TMAs under the capacity grants sub-component pursued a comprehensive institutional development approach to enable TMAs to effectively deliver on their urban management and municipal service delivery mandates. This included introduction of systems and business processes that helped in making TMAs efficient and accountable, as well as training a large number of TMA staff from management and operational tiers, mainly through hands-on trainings on the improved systems and processes introduced, along with conventional classroom learning.

b) At the provincial level, a key lesson was that *'specific initiatives need to be supported by the introduction of performance-based incentive structures'*. Systems for performance management at TMAs were therefore designed to allow integration and vertical linkage to the provincial performance monitoring system. This has allowed PMDFC and LG&CDD to effectively receive and compare performance statistics across all partner TMAs. Better performing TMAs were to be rewarded through Development Grants for undertaking priority infrastructure investments. In the later years, when the time remaining to undertake full sub-projects was inadequate, better performing TMAs were given grants against submission of Service Improvement Plans (SIPs) for equipment to improve operations and maintenance of infrastructure and services.

c) At the Project level, *'effective project monitoring systems'* were mainstreamed by operationalizing performance management systems at the Provincial and TMA levels. As a result, province-wide statistics for agreed municipal service delivery indicators (such as volume of solid waste collected and percentage of street lights working in TMAs) are regularly being reported and made available for the first time in the country[16].

d) Other lessons related to support towards infrastructure sub-projects include: *'local governments have a comparative advantage over provincial governments in project identification, development, appraisal, and execution'; 'assistance to local governments should be demand-driven'; 'municipalities should also contribute to capital costs of their sub-projects'; and, 'local ownership of sub-projects through participation in identification and prioritization by key stakeholders is essential for success'*. The Project undertook the planning and execution of infrastructure development interventions through a devolved model, making TMAs responsible for the execution of physical works and contracts, with support from PMDFC. TMAs were required to make a 15% upfront contribution against the total cost of each infrastructure sub-project undertaken. Execution of physical works contracts was managed by the TMAs, thereby building their operational capacity and experience in project and contract management.

[16] In the Integration Cell operationalized with Project support in the LG&CD Department.

e) A key lesson incorporated in the Project design related to *'project size and complexity should be aligned with implementation, planning, and technical capacity.'* PMSIP's implementation model was based on the concept of starting small, learning lessons, and scaling up.

19. ***Risks and Mitigation Strategies:*** The detailed participatory process employed during Project preparation allowed better identification of major risks to implementation outcomes as well as appropriate mitigation measures.

a) *Low Procurement Capacity* in TMAs was identified as the primary concern at entry. Procurement responsibilities for the TMA component were therefore designed to facilitate capacity building and systems strengthening. Goods and services were procured by PMDFC on behalf of the TMAs, while works were procured by TMAs, with PMDFC assistance. Over the course of the project, TMAs became familiar with procurement requirements and gained confidence in carrying them out, as well as managing works contracts. PMSIP was instrumental in bringing about positive changes in the works procurement regime in Punjab, including building the capacity of TMAs, as well as contractors and consultants, in contract management and project implementation.
b) The Project initially faced *Contract Management Issues* on works contracts, as contractors were hired by respective TMAs while the supervision firm was hired by PMDFC. Standard Operations Procedures (SOPs) were developed at the MTR stage to streamline the management of civil works contracts, including adequate documentation of completion, payments, time extensions, variation orders, imposition of liquidated damages, and termination of contracts. The SOPs also addressed the management of consultancy contracts, including adjustments to staff allocation, time extensions etc.
c) Another key risk highlighted during project preparation was *low response from contractors due to market* conditions. The heightened construction activity and rapidly escalating and volatile prices of construction materials due to the post-earthquake reconstruction, which commenced during the early stages of the Project, resulted in this risk being realized. PMDFC organized a series of workshops with potential bidders, and reflected some of their concerns in contract documents, which resulted in increased numbers of bids. PMDFC continued to proactively assess the market, adjusted bidding documents to optimize competition, maintained a roster of participating contractors, and disseminated procurement information on PMDFC and TMAs' websites. It also took steps to debar non-performing contractors, which is unusual in Pakistan. As a result of these actions, while the first three rounds of bidding saw limited response, participation of bidders doubled during implementation.

20. ***Quality at Entry:*** Taking into account the Project context, design, risk identification and mitigation, and evidence of their appropriateness during implementation, Quality at Entry was satisfactory. However, in view of the discrepancy in the wording of the PDO in the PAD and the

legal documents, and the use of qualitative PDO–level indicators, Quality at Entry is rated *'Moderately Satisfactory'*.

21. The primary objective of the project i.e., *improving the viability and effectiveness of urban services provided by the participating TMAs* was clearly defined, and project design/components supported the achievement of the stated objective. Loan allocations to components allowed flexibility and the ability to respond to emerging needs, based on the demand-driven concept underpinning the Project. Involvement of communities through participatory demand based planning provided for greater beneficiary ownership. The weak capacity of new local government structures was addressed through a menu of capacity building interventions and through support for procurement and project management. Implementation of infrastructure investments through TMAs facilitated building their capacity for future investments. The use of standard monitoring mechanisms, implemented as integrated databases at all participating TMAs, enabled the regular collection of key service delivery statistics across TMAs.

22. The objective of making such improvements *sustainable and replicable in other TMAs through the creation of a performance-based management framework at both TMA and provincial levels* was achieved through capacity enhancements at the TMA and provincial levels, as well as by operationalizing a web-based performance monitoring system at both levels.

2.2 Implementation

23. Implementation Status and Results (ISRs) reports rated progress towards achieving the DO as satisfactory throughout. However, between end-2008 and mid-2011 implementation progress was rated moderately satisfactory, primarily due to lower disbursements against projected targets. However, the problem was overcome through focused attention to issues causing the lag, including concerted capacity building in contract and project management in PMDFC and TMAs. On completion, almost 98% of the loan was disbursed.

24. Key events which had a significant impact on implementation were:

a) ***Low Market Response:*** While a number of sub-projects were ready for bidding at Project Effectiveness, low market response to invitations to bid due to the massive post-2005 earthquake reconstruction in Pakistan, caused substantial implementation delays and low initial disbursements. Proactive measures from PMDFC (described above) resulted in significant improvements.

b) ***Frequent Staff Turnover in TMAs:*** Frequent staff turnover in TMAs resulted in the erosion of capacities painstakingly built in TMAs, particularly after the new government transferred key officials in every TMA after taking office in 2008. Capacity building of officials was thereafter expanded to also cover the non-transferable second tier TMA staff to ensure sustainable institution building.

c) ***Piloting of Institutional Development (ID) Interventions:*** The Project pioneered the development, operationalization, and testing of an innovative toolkit, customized to the needs of urban governance institutions. The toolkit was initially deployed at 19, and then a further 18, partner TMAs which enabled their fine-tuning and customization. At MTR, structured feedback gathered from TMA officials confirmed their value and efficacy. Both classroom and hands-on training was provided on the improved systems and processes introduced. The successful piloting of Institutional Development interventions generated enthusiastic demand, and provided a strong foundation for subsequent scaling up and integration.

d) ***Infrastructure Investments:*** Weak TMA capacity for procurement of works and project/contract management during the initial period impacted sub-project implementation, and resulted in disbursements under the performance grants component being severely behind target at the MTR stage.

e) ***Mid-Term Review (MTR):*** The Project MTR highlighted issues that resulted in low disbursements: US$13 million against the target US$45 million. A comprehensive assessment of institutional development interventions carried out for the MTR established that institutional development interventions were contributing to the achievement of the PDO, although (as discussed earlier) turnover of key TMA officials was a significant issue.

f) ***Project Restructuring:*** A Level-2 project restructuring was undertaken after the mid-term review (MTR) to build on the significant gains achieved and to address critical impediments by:

- *Scaling-up of Institutional Development (ID) interventions* to include 105 TMAs across the province (all TMAs in Punjab except those in the five City District Governments[17]) to:
  - Address frequent staff turnover, by making ID interventions universal across all TMAs.
  - Ensure full institutionalization of improved practices across all TMAs.
  - Enable the provincial government to utilize standardized and integrated oversight and accountability mechanisms deployed in all TMAs.
- *Initiatives to Improve Project- and Contract- Management Regime* at TMA level to:
  - Accelerate the pace of sub-project implementation.
  - Enhance capacities of TMAs by inculcating modern contract management standards and practices in the execution of development works.

25. While the Project had already scaled up the ID interventions from the original 19 to 37 TMAs, these measures aimed to fully harness available opportunities to enhance the scope of project interventions, accelerate disbursements, and ensure a broader impact. Weaknesses identified in the management of infrastructure investments were addressed through Contract Management SOPs, trainings, and technical. The above measures enabled:

[17] For the 39 TMAs in the City District Governments, another Bank-funded project (Punjab Cities Governance Improvement Project) was under preparation; and is currently being implemented.

a) ***Improved Pace of Infrastructure Investments post-MTR:*** The project successfully delivered an increasing number of investments over the remainder of the project period.
b) ***Integration of Institutional Development (ID) Interventions:*** The scaling up of capacity grants was aimed to achieve a standardized and integrated performance-management system across the province. Institutional development interventions (such as FMS, CTS, PMS, and TMA websites) aided in enhancing accountability of urban local governments to the citizens and the provincial government. The integrated suite of performance monitoring solutions allowed PMDFC and LG&CDD to effectively receive and compare performance statistics across all partner TMAs. Better performing TMAs were rewarded through investment grants, and in later years, Service Improvement Plan (SIP) grants were provided to TMAs that achieved agreed service improvement targets.

2.3 Monitoring and Evaluation (M&E) Design, Implementation, and Utilization

26. The Project helped develop M&E systems in the TMAs, LG&CDD, and PMDFC. Data collected for outcome and output indicators was reported through an agreed reporting format; and regular progress monitoring reports, quarterly financial management reports, progress against key performance indicators, and other requisite information was shared. These arrangements worked in a satisfactory manner as reflected in the ISRs. The Task Team periodically conducted site visits to monitor implementation progress, compliance with environmental and social safeguards, and engaged with all stakeholders on benefits achieved from interventions. Since visits during missions could cover only a few TMAs, the Bank team held detailed technical workshops with partner TMAs on benefits of Project interventions to them, challenges faced, and suggestions for improvement.

27. Project M&E systems took advantage of the extensive data gathering capability of the institutional development tools deployed at TMAs. In particular, data generated regularly by the Performance Management System (PMS) allowed the establishment of a set of intermediate outcome indicators related to municipal service delivery with consistent baselines. Target values for indicators were set for individual TMAs, in consultation with concerned TMA officials, taking into account these baseline values.

28. PMSIP was designed as a demand-driven project, and at the time of Appraisal, the type of investments that would accrue or the scope and depth of institutional development support that would be provided to TMAs was not entirely predictable. The PDO Indicators are therefore mostly qualitative. A number of intermediate outcome indicators were added to the Project's Results Framework through the post-MTR restructuring, to measure progress on the scaling up of institutional development activities. The scaling up of the capacity grants sub-component also enabled the regular collection of performance statistics related to municipal services, such as solid waste collection and street lights.

29. The Project also employed two instruments to comprehensively evaluate the achievement of PDO level results[18]. Institutional Development Assessment Surveys were administered to all relevant officials at the Tehsil level: in 19 TMAs before the MTR and 37 TMAs (including 19 of first round) in 2012. A Beneficiary Perception Survey on Infrastructure Investments was administered in 2012-13 by an external consulting firm, to gauge beneficiary satisfaction levels with completed infrastructure investments. These have generated evidence for the qualitative evaluation of the achievement of PDO-level and associated indicators.

2.4 Safeguard and Fiduciary Compliance

Safeguards: Satisfactory

30. The Project was assigned Environmental Category A due to potential investments in solid waste management, sewage disposal, and substantial resettlement in the cultural heritage sub-component. Social safeguards were implemented in a satisfactory manner through two major instruments – the Environmental and Social Management Framework (ESMF) which applied mainly to Development Grants under Component-1, and a Resettlement Framework for the cultural heritage-related interventions under Component-2. Both instruments played an important contributory role in achieving all four Key Performance Indicators, especially the fourth on management of cultural heritage assets.

31. The ESMF was used to screen all development grants for their anticipated environmental and social impacts, and included extensive public consultations with multiple categories of stakeholders (such as for a landfill site in Dunyapur, and a solid waste management project in Liaqatpur). This strengthened PMDFC's technical capacity to screen and apply social safeguards, and to include citizens' voices in project planning. TMA's capability was enhanced through training and capacity building measures. Under Component-2, a Resettlement Action Plan (RAP) was implemented in the Walled City pilot project area. The Sustainable Development of the Walled City (SDWCL) unit was able to successfully pilot resettlement planning and benefit sharing initiatives in a complex urban environment. Some 147 shops and 264 encroachments were removed, and 732 shops were provided temporary support. The scale of consultations was significant, with more than a thousand meetings conducted during RAP implementation. Through creating a replicable model of resettlement and citizen engagement in urban cultural heritage conservation, the project has created a demonstration effect and built staff capacity to manage social issues in a complex setting.

32. PMDFC had a robust environmental safeguards management system, exercised due diligence of Pakistan and Punjab environmental regulations, and implemented site specific mitigation measures identified and designed in environmental management plans. All 37 sub-projects that were subject to Punjab Environment Protection Department (EPD) environmental

[18] Please refer to Annex 5 and Annex 6 for a summary of findings.

permission processes received approvals. Environmental safeguards aspects of sub-projects were managed in compliance with relevant Bank environment policies. Moreover, PMDFC implemented a number of actions beyond the regulatory requirements, including strengthening of TMAs' environmental management capacity, public hearings for sub-projects, and training sessions on environmental management and occupational health and safety. PMDFC also institutionalized procedures for consultation with stakeholders, including vulnerable groups, on project activities. Compliance with environmental safeguards was demonstrated by improvements in water quality monitoring. Results from the Beneficiary Perception Survey confirm a significant improvement in water quality.

33. PMSIP also assisted in developing the capacity of Punjab EPD in a number of areas including: (a) developing checklists for, and conduct of, public hearings and consultations, now routinely followed by EPD; (b) developing Environment and Social Impact Assessment (ESIA) checklists for Category A infrastructure sub-projects e.g., solid waste management and waste water disposal; and (c) conducting ESIAs for Category A sub-projects.

Financial Management: Satisfactory

34. Financial management arrangements in the two implementing agencies remained satisfactory throughout the life of the project. Relevant staff, including for internal audit, remained in place during life of the project. Financial management systems of 102 TMAs were computerized, which has contributed to efficient budgeting and accounting, as well as streamlined reporting to the provincial level. The two implementing agencies complied with the financial covenants, and submitted acceptable quarterly interim financial reports and annual audited financial statements (mostly) by the due dates. Auditors' performance was satisfactory.

Procurement: Satisfactory

35. Major procurement risks had been identified during project preparation: TMAs' low procurement capacity; weak market response; issues of contract implementation; delays due to implementation design (PMDFC hiring design and supervision consultancy, and TMAs hiring works contractors); and transparency. Market response became prominent owing to the market skew witnessed during the post-earthquake reconstruction period. Country readiness filters had to be revisited at the negotiation stage as two rounds of bidding concluded without success. After two workshops with potential bidders, the following changes were made to the bidding documents:

a) Qualification requirements were relaxed by equating annual turnover to the annual cost, and by lowering liquid asset requirements.
b) Performance guarantee was reduced to 5%.
c) Price adjustment clause was introduced in all contracts.

36. The use of insurance bonds instead of bank guarantees as performance guarantee, which was recommended by some of the TMAs, did not prove successful as the contractors defaulted

and TMAs could not encash performance guarantees. Market interest in bidding for project contracts increased over time. The first three NCB contracts were subject to prior review, while the rest were subject to ex-post review. The reviews found that project procurements complied with Bank requirements and were efficient.

37. The slow pace of implementation during the initial period (discussed earlier) was addressed by providing technical assistance and capacity building support to TMAs as well as contractors. Contract management SOPs provided guidance to all stakeholders on roles and responsibilities as well as service standards. Implementation of the SOPs was quick and improved both the pace of work as well as documentation.

38. While the anticipated limited capacity of contractors was mitigated, capacity constraints of some of the consulting firms was not foreseen. Performance of an established firm hired by PMDFC for design and supervision was inadequate, and PMDFC had to seek the intervention of the firm's senior management to bring about improvements. SOPs supported PMDFC in improving capacity to manage consultant contracts. Contract amendments and time extensions were handled professionally after the SOPs was in place post MTR.

39. PMDFC and TMAs maintained procurement data (IFBs, bidding documents, bid evaluation reports, and contract status) on their websites. Another good practice under the project was that two of the non-performing firms were debarred, which is a rare occurrence in the province.

40. Procurement under the Cultural Heritage component was satisfactory; however there were contract management issues throughout the project. These were due to: uniqueness of restoration works; site constraints; involvement of multiple agencies in the area; and lack of experience of contractors. Contract management capacity of WCLA, as well as professional constrains of the consulting firm, were also contributing factors.

2.5 Post-completion Operation/Next Phase

41. PMDFC was established under the Companies Ordinance as the Implementing Agency (IA) for PMSIP to ensure continuity after Project closure. PMDFC has developed expertise in designing, planning, coordinating, and delivering a variety of institutional development interventions, as well as investment sub-projects. It is positioned as a specialized entity, whose expertise can be utilized across the province and beyond. GoPunjab has started to use it as an integral technical arm of LG&CDD and is committed to supporting it to assist LGs. PMDFC is currently developing knowledge management tools and case studies to document and disseminate systems and processes developed through the Project.

42. LG&CDD, the parent department of all LGs, has recently established with PMSIP's assistance, an Integration Cell housing a monitoring and evaluation (M&E) system. This is linked to PMDFC's M&E system, through which TMAs report on agreed municipal service

indicators. This has enabled LG&CDD to undertake performance monitoring of TMAs for results against investments made in their jurisdictions.

43. Systems operationalized in the TMAs have resulted in improved performance, including operations and maintenance of assets created through the investment grants. O&M Frameworks and standard procedures have been developed for routine and periodic maintenance of infrastructure assets, and training has been provided to TMA officials on O&M procedures. While developing the subordinate legislation and rules of business under the PLGA 2013, LG&CDD is mandating all municipalities across the Province to adopt the project interventions, which will help ensure their sustainability.

44. On 12 March, 2014, the Punjab Chief Minister (CM) approved a Summary directing LG&CDD to seek continuation of Bank support to LGs through PMDFC. A Concept Paper for a repeater project is under preparation. The CM has also notified a high level Committee on 21 March, 2014, to review municipal service delivery in the Punjab, and the institutional structures responsible for it. The Committee has requested the Bank's help to undertake the diagnostics, and develop recommendations for institutional and policy reforms. This work is already underway.

45. PMSIP has assisted GoPunjab in promulgating an Act and establishing WCLA as a dedicated agency responsible for the historic core of Lahore. Capacity developed through successfully piloting methods and processes in the rehabilitation of urban built environment in the Walled City of Lahore (WCL) will continue to be utilized in scaling up the restoration of historic assets and the urban environment, and in the adaptive reuse of the historic buildings and urban spaces in WCL. The pilot project in the WCL, included to showcase methods and benefits of conservation of cultural assets and their productive re/use remained incomplete at Project closure. This resulted in non-utilization of around US $1.2 million of project funds. The pilot project has since been substantially completed using GoPunjab funds.

3. Assessment of Outcomes

3.1 Relevance of Objectives, Design and Implementation

Rating: High

46. ***Relevance of Objectives:*** The project has contributed directly to the achievement of outcomes in the urban sector stated in the Bank's Country Partnership Strategy (CPS) 2010-14, including the aims to foster livability, economic growth, and dynamism within Pakistan's major cities and rapidly growing urban settlements (Executive Summary, page iii). It has contributed to Pillar III of the CPS, related to improving infrastructure to support growth (Page 13), as well as to 'improved urban planning and management frameworks implemented in select municipalities' (Annex 1, page 7).

47. PMSIP has helped TMAs operationalize systems for better governance and improved transparency, accountability, and service delivery; as well as assisted the provincial government to transition to monitoring and oversight functions. Infrastructure investments have resulted in direct service delivery improvements as demonstrated by the Beneficiary Perception Survey[19] and the service delivery performance data collected through the PMS[20]. The introduction of a participatory Planning Process, and development of Structure Plans[21] and GIS maps[22] for all small and medium towns across Punjab, has allowed TMAs to use these for planning for future growth and investments. It has thus directly responded to some of the critical issues that have plagued the urban sector over time[23] and the relevance of objectives is rated high.

48. ***Relevance of Design and Implementation:*** The objectives and interventions supported by the Project have continued to remain relevant to the officials and mandates of urban local governments in the Punjab, as well as to the urban residents served by them. Feedback from TMAs during the first round of the ID Assessment survey[24] conducted in 2009, served as the basis for project restructuring undertaken after the Mid-Term Review. The Project has consistently used the approach of piloting, learning, and scaling up for its interventions, seeking constant feedback from participating TMA officials in a bid to customize and improve initiatives to better address user requirements. This model has ensured that project activities remain responsive to the needs of TMA officials and end-users. The relevance of design and implementation is therefore rated high.

49. ***Relevance to Context:*** The project was originally designed to support TMAs established under PLGO 2001, with elected local representatives at their helm. In end-2009, after completion of two terms of elected local governments, they were disbanded and local government elections are yet to be held. Provincial government officials have been posted as 'administrators' in lieu of elected mayors. The Project has nevertheless continued to benefit the TMAs in delivering on their mandates. More recently, the Punjab Local Government Act (PLGA) 2013 requires urban LGs to undertake some of the initiatives for which PMSIP has already built LG capacity. The relevance to context is therefore rated high.

3.2 Achievement of Project Development Objectives
Rating: Satisfactory

50. In terms of efficacy, the Project has resulted in demonstrable improvements in the governance, management, and accountability of TMAs, and in turn their provision of municipal services per the PDO. These achievements have led to a discernible increase in the satisfaction

[19] Refer Annex 5 for a discussion of survey results. The full survey findings are available in the public domain at: http://pmdfc.org.pk/docs/infrastructure-reports
[20] Refer intermediate outcome indicators.
[21] Available in the public domain at: http://pmdfc.org.pk/Docs/Planning-reports#
[22] Available in the public domain at: http://pmdfc.org.pk/docs/gis-map
[23] Refer section 1.1.
[24] Refer Annex 6 for a discussion of findings from ID Assessment Surveys.

among key stakeholder groups with respect to systems established under the Project, as well as improvements achieved in service delivery indicators[25]. Moreover, the Project has built Government of Punjab's capacity to monitor TMA performance, as well as to manage cultural heritage assets within the Walled City of Lahore. As a result, a culture of performance management is taking root at the municipal level; a culture of performance oversight is emerging at the provincial level; and a robust local government capacity building vehicle has been established in the Punjab.

51. A summary of relevant results is provided below:

a) ***Coverage and Quality of Municipal Services:*** The intermediate outcome indicators[26] reflect improvements in coverage of water supply, operation of street lights, and collection and disposal of solid waste. The solid waste service has surpassed the target: 74% (vs. 70%) of solid waste generated is being collected and disposed of at landfill sites[27]. For water supply, the average percentage of households connected increased from 40% (baseline value) to 53% against a target of 59%. For street lights, percentage of operational street lights, averaged across all 105 TMAs, increased from 70% to 73%, against a target of 75%.

Table-2: PMSIP Sub-projects by Sector

Sector	Number of sub-projects	Expenditure (PKR million)	Expenditure Share	Physical Outputs
Water Supply	17	1,501	51%	• Number of current beneficiaries[28]=617,610
Roads	13	809	27%	• Total length of municipal roads[29] constructed/ rehabilitated=30.3 Km • Estimated number of direct beneficiaries[30]=546,252

[25] As evidenced by the Beneficiary Perception Survey and the two ID assessment Surveys

[26] Based on data collected through integrated Performance Management System (PMS).

[27] Against a baseline value of 0 (no landfill sites operational).

[28] Current water supply consumers based on TMA water supply consumer records. . Total number of potential beneficiaries of water supply investments is expected to be around 1,491,842, reflecting consumers likely to connect to the network over time (provided for in technical design).

[29] Reported length is for municipal roads only (10 completed sub-projects). It does not include length of streets paved.

[30] For roads sub-projects in urban areas, citizens living within 500 meters of the roads are taken as beneficiary population. Estimated number of direct beneficiaries has been calculated from GIS maps and average population densities. Secondary beneficiaries of improved roads are expected to be the entire population of the towns involved, currently projected to be around 1.87 million.

Sector	Number of sub-projects	Expenditure (PKR million)	Expenditure Share	Physical Outputs
Solid Waste Management	6	376	13%	• Total solid waste collected and disposed off at landfill sites monthly[31]=196.4 Tons • Estimated number of beneficiaries[32]=547,473
Sewerage	1	188	6%	• Estimated number of beneficiaries[33]=52,138
Parks	1	75	3%	• Area of parks developed=15 Acres • Estimated number of beneficiaries[34]=15,826
Fire Fighting	1	8	<1%	
Total	39	2,957	100%	Estimated number of beneficiaries=1.66 million

b) ***Increasing Beneficiary Satisfaction:*** The BPS[35] has provided conclusive evidence that a very high majority of beneficiaries: (i) reported satisfaction that investments in roads had improved access, travel times, vehicle maintenance costs, fuel consumption, and business opportunities; and (ii) confirmed improvement in primary collection, transportation, and disposal of solid waste as well as overall cleanliness of their neighborhoods. A majority of beneficiaries reported that both quantity and quality of water supplied by TMAs had improved or significantly improved; however, satisfaction levels for quantity of water supplied by TMAs were relatively modest. The below-par results for quantity of water are attributable to the energy crisis in the country, which impacted on TMA ability to adequately pump and supply water.

c) ***Complaint Resolution:*** At project closure, 81 (of 105) partner TMAs were resolving more than 90% of complaints against service delivery[36]. ID Assessment surveys reported an increasing number of complaints registered over time, showing enhanced public confidence in, and the increased use of, the complaint redress system introduced under PMSIP.

d) ***Mechanisms for Monitoring Service Delivery:*** Performance management tools provided by the project have enabled TMAs to systematically monitor staff performance on municipal services' delivery, as confirmed by the second round of ID Assessment. TMAs with a more

[31] Based on Performance Management System's data from 6 TMAs where landfill sites developed under PMSIP are operational. The figure equates to 74% of the estimated solid waste generated by the urban population.

[32] Estimated beneficiary population calculated by mapping the placement of SWM sub-project equipment using GIS to determine the areas under SWM coverage. Current local population densities have been used to calculate number of beneficiaries.

[33] Universe of beneficiary population calculated by mapping the sub-project pipelines using GIS to determine the areas under sewerage sub-project coverage, and using local population densities projected from town populations.

[34] Population living within 500 meters radius of parks is taken as beneficiaries.

[35] For details, please refer to Annex-5.

[36] Evidenced by integrated statistics from Complaint Tracking System (CTS), and relevant intermediate outcome indicator.

extended exposure to these tools have started to utilize them better for objectives such as decision making on service delivery needs, and identification of repair and maintenance requirements.

e) ***Capacity for Managing Investments:*** TMA capacity for project and contract management has been enhanced as a result of the Project, and will facilitate TMAs in implementing future investments.

f) ***Financial Management and Accounting:*** The automated accounting and financial management system introduced under the project has greatly improved financial reporting, reconciliation of accounts, and maintenance of a ledger of receipts and expenditures n all 105 TMAs. Electronic databases of own-source revenues, such as water consumers' records, shops/tenants and lease contracts have been created in 37 TMAs, enabling them to effectively monitor and manage revenue collection performance.

g) ***Replication and Sustainability:*** Project interventions have proved highly replicable, as demonstrated by their successful scaling up from the original 37 TMAs to 68 additional TMAs after the mid-term review in 2010. Institutional development interventions have covered all municipal governments, except the five largest cities[37]. PMDFC capacity has been increased substantially for scaling up the program and will ensure sustainability of Project interventions in TMAs. The majority of the local government staff across the province has either received training or has benefitted from the operational improvements introduced under PMSIP, resulting in an 'effective mass' within the local government officials for ensuring sustainability of PMSIP's interventions.

h) ***Performance Management*** tools introduced by the Project have enabled TMAs to quantify municipal services' coverage, evaluate municipal services' quality, and monitor staff performance. The integration of systems across the province has led to the development of a consolidated web-based tool for performance management. The monitoring cell established in LG&CDD has built the department's capacity to fully respond to its oversight function of TMAs.

3.3 Efficiency
Rating: Satisfactory

52. The Project encompassed a wide portfolio of activities encompassing innovative institutional strengthening initiatives, more routine investments in municipal infrastructure, as well as capacity building of provincial government entities.

53. ***Investments in Municipal Infrastructure:*** The project was designed to be demand driven, with the nature and scope of each sub-project determined through a participatory planning exercise. Only a few investments were identified at appraisal. An ex-ante economic analysis of

[37] For these another Bank-funded project (Punjab Cities Governance Improvement Project) was under preparation; and is currently being implemented.

two infrastructure sub-projects (water supply in Jhelum and roads in Pind Dadan Khan) was included in the PAD. For subsequent sub-projects, the Economic Rate of Return (ERR) was required to be calculated with their feasibility study[38], and was a part of the screening criteria for selection of sub-projects.

54. At project completion, ex-post analyses have been repeated for the two sub-projects reviewed at appraisal, as well as one additional water supply and roads[39] sub-project each. These sectors together comprised 80% of infrastructure investments financed by the project. Economic and financial analyses carried out at both appraisal and closure show positive results, supporting the efficiency rating for the Project:

a) ***Water supply Sub-projects*:** The estimated ERR at appraisal ranged between 12% and 24% depending on parameters assumed for the analysis. *Ex-post* analysis at completion indicates the ERR to be around 13%. The estimated ERR for Liaquatpur Water Supply investments is around 5%. ERRs of these sub-projects would have been much higher, but for lower than expected tariff rates which GoPunjab approved.
b) ***Roads Sub-projects:*** The ERR for the PD Khan Roads sub-project at completion is 14.9% against the estimated 17% at appraisal. The ERR for the road sub-project in Chichawatni is 15% at completion.

55. ***Capacity Grants:*** The overall economic impact of capacity grants is difficult to quantify, as expected outcomes from areas such as performance management, financial management, and procurement are hard to monetize. However, the supported activities have proved central to the development impact of the Project: enhanced project and contract management capacities at TMAs and improved O&M processes contributed to the effective implementation of infrastructure investments; and improved human resources, additional computer equipment, and new tools for performance- and financial management are directly contributing to enhanced viability and efficiencies in municipal service delivery[40]. This also represents the key area where the knowledge and global experience available with the Bank has directly added value to the improvement of systems and increased capacity of institutions. In terms of costs, 6.5% (US $3.2 million) of the total budget allocation was earmarked at appraisal for the implementation of the institutional building activities. Considering that this was a 7 year operation that eventually supported 105 TMAs against the originally envisaged 37 TMAs, the average yearly allocation for the capacity building activities comes to less than a modest US$ 8,500[41] per year per TMA, reflecting high cost efficiency.

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[38] Ex-ante economic analysis of all selected sub-projects are available on Project Files
[39] Water supply and roads represent the largest subsectors amongst the Project's infrastructure investment portfolio, accounting for 51% and 27% of the overall expenditure on infrastructure investments respectively.
[40] As evidenced by results from the Institutional Development Assessment Surveys.
[41] Based on actual expenditure and effective exchange rate at the Project closing.

56. Based on the above analysis, detailed in Annex 3, the Efficiency of the project has been assessed as *Satisfactory* despite the delay in project implementation of just less than three years.

3.4 Justification of Overall Outcome Rating
Rating: Satisfactory

57. The project outcome is rated satisfactory, taking into account the high relevance of objectives, design and implementation, and the satisfactory achievement of the PDO in an efficient manner.

3.5 Overarching Themes, Other Outcomes and Impacts

(a) Poverty Impacts, Gender Aspects, and Social Development

58. The urban poor in Punjab, as elsewhere in the world, are disproportionately affected by the poor quality of municipal services compared to the middle and upper income populations. The Project contributed directly to poverty alleviation through equitable access to municipal services as a result of the inclusive and broad-based process used to identify development priorities. Information generated through the Performance Management and Complaint Tracking Systems, as well as the GIS-based service maps, is assisting TMAs in identifying deficiencies in municipal services, and in more rational decision making on maintenance needs and for new investments.

59. Moreover, the Project's contribution to better management of urban services as well as investments in improving coverage and quality is generating significant benefits for beneficiary populations. Such benefits include improvement in living standards and public health, as well as economic benefits for the small and medium cities in Punjab. In particular, women benefited from the improvements resulting from investments in water supply.

(b) Institutional Change/Strengthening

60. As discussed in earlier sections, the Project achieved important results in strengthening existing institutions, including the provincial LG&CDD as well as 105 TMAs across Punjab province. This has led to their improved ability to deliver on their mandates. PMSIP also helped set-up, and operationalize on a sustainable basis, two specialized agencies in the Punjab, i.e., PMDFC and the Walled City of Lahore Authority.

3.6 Summary of Findings of Beneficiary Survey and/or Stakeholder Workshops

61. A Beneficiary Perception Survey, undertaken by an independent third party, covered beneficiaries of 14 completed sub-projects: eight for water supply, four roads/streets, and two for solid waste management. The results are generally positive[42]:

Water Supply:

- *Quality of water used for household usage has improved* reported by 61% of respondents.
- *TMA water supply is primary source of drinking water* reported by 70% of respondents. 49% used private-bore/hand pump as primary source before sub-project: of these, 71% now use TMA water supply as the primary source.
- *Quantity and pressure of household water supply has improved* reported by 54% and 56% of respondents respectively.

Roads:

- *Access and travel times have improved* for 66% and 87% of respondents respectively.
- *Value of property along the roads has increased* reported by 83% of respondents.
- *Improved business opportunities* reported by 75% of respondents.
- *Reduction in repair and maintenance cost*s of vehicles reported by 70% of drivers.
- *Reduction in fuel consumption* reported by 74% of drivers.

Solid Waste Management:

- *Primary collection of solid waste and cleanliness of neighborhoods improvement* reported by 72% of respondents.
- *More households are disposing waste in a container/bin placed by the TMA* in 33% of cases, compared to only 7% before the project.
- *Regularity in collection from containers/bins has also improved*, with 56% of all respondents stating that it is collected on a daily or weekly basis.
- *Transportation of solid waste improved* reported by 71% of respondents.
- *Informal dumping as the major source of environmental pollution is decreasing*. Only a quarter of respondents stated this was a problem after the sub-projects, compared to half the respondents saying that this was a problem before the sub-projects.

4. Assessment of Risk to Development Outcome
Rating: Substantial

62. Key risks to development outcomes are summarized below.

63. ***Transition to Punjab Local Government Act (PLGA) 2013:*** Significant changes in the structure of urban local governments in Punjab are underway following enactment of the Punjab Local Government Act 2013. Once LG elections are held, TMAs participating in the Project will be reorganized as Municipal Corporations or Municipal Committees. Provincial LG Department will need to enable the revamped local government structures to fully benefit from, and sustain

[42] More details are provided in Annex-5

Project-provided interventions. In view of the on-going revisions to the PLGA, there is a risk in the level of devolution from the province to the local governments that will be implemented, and whether institutions created under the project will be sustained.

64. ***Improved Asset Management:*** Continued weaknesses at the local level for routine and periodic maintenance of infrastructure and equipment, and large maintenance backlogs created by years of deferred maintenance will require allocation of requisite resources for optimal operation and maintenance. Frameworks for operations and maintenance (preventive and routine) for all municipal service infrastructure, successfully piloted under PMSIP, will need to be scaled up.

65. ***Scaling-up Urban Regeneration and Heritage Restoration:*** Adequate technical and management capacity at WCLA is critical to maintaining the significant cultural heritage under its mandate. WCLA needs to strengthen its regulation, enforcement, and technical capacity as soon as possible.

5. Assessment of Bank and Borrower Performance

5.1 Bank Performance

(a) Bank Performance in Ensuring Quality at Entry
Rating: Satisfactory

66. Bank performance for ensuring quality at entry during identification, preparation, and appraisal of the project was satisfactory. As discussed in section 3.1, project objectives were highly relevant to the sectoral context and needs, and were strongly aligned with provincial and local government priorities, as well as the Bank CPS for Pakistan.

67. The project was designed in a context where relatively new legal and administrative structures under the 2001 local government legislation had resulted in a significant revision of roles and mandates of the provincial and local governments. Engagement with stakeholders, particularly active participation of the TMA leadership during project preparation, was instrumental in ensuring that envisaged interventions under the project were customized to TMA needs. Close dialogue with the provincial government ensured that project design effectively addressed its requirements, as well and included dedicated interventions to assist provincial entities fulfill their mandates within the new legislative framework.

68. These consultations and analyses undertaken during preparation and appraisal ensured that the Project design was well grounded and responded to sectoral and contextual issues. Project design was also informed by lessons from previous projects and urban sector operations elsewhere. Implementation arrangements were appropriate to the PDO and project design, and the M&E arrangements were appropriate and integrated in the design. The identification and

assessment of risks was grounded in the country and sectoral context, and envisaged mitigation strategies responded well when the risks were triggered.

(b) Quality of Supervision
Rating: Satisfactory

69. A multi-disciplinary Bank team, with the requisite skill mix (urban, cultural heritage revitalization, financial management, procurement and contract management, social development, environmental safeguards, municipal engineering) supervised project implementation. The team carried out 15 full implementation support missions, which included TMA visits, wrap-up meetings with counterpart leadership, and documentation in Aide Memoires. These were interspersed with frequent shorter technical missions and TMA visits. Sufficient budget and staff resources were allocated for supervision. There was close collaboration between the Bank team, provincial counterparts (LG&CD and P&D Departments), and the implementing agencies throughout implementation.

70. The Bank team's engagement included guidance on matters such as:

a) developing project management and contract management processes/SOPs;
b) designing institutional development initiatives;
c) assuring quality of engineering designs of infrastructure investments;
d) piloting heritage asset interventions;
e) developing operations and maintenance (O&M) manuals, based on international best practices;
f) developing and implementing safeguards management, social mobilization, and resettlement plans; and
g) designing and implementing data collection, M&E instruments, and feedback mechanisms such as the structured institutional assessment.

71. Implementation support documentation (ISRs and aide memoires) provided adequate information on project status and agreed actions to address issues identified, especially in areas relating to technical matters, institutional development and capacity building, procurement, safeguards, financial management, disbursement, and compliance with covenants.

72. The Mid-Term-Review was carried out in early-2010, and its findings led to a project restructuring. Subsequently, the need for a second restructuring was identified and was completed in a timely manner.

(c) Justification of Rating for Overall Bank Performance
Rating: Satisfactory

73. The Bank's overall performance was satisfactory, based on the ratings for quality at entry (satisfactory) and quality of supervision (satisfactory).

5.2 Borrower Performance

(a) Government Performance
Rating: Satisfactory

74. Government of Punjab's ownership of the Project remained strong throughout and commitment to achieve the PDO was high. It was rooted in the awareness of the changed roles of the local and provincial government entities under the new LG system and the consequent need for strong monitoring and oversight of LG performance. Government therefore welcomed the operationalization of a monitoring cell, using integrated performance management, financial management, and complaint tracking systems. It also supported implementation of performance management interventions through the issuance of required instructions to TMAs, and resolution of any operational bottlenecks. More recently LG&CDD has established an effective partnership with PMDFC as a specialized entity, providing technical assistance and capacity support to LGs.

75. GoPunjab enacted the Walled City of Lahore Act 2012, established the Walled City of Lahore Authority as a dedicated agency, and rationalized institutional mandates regarding heritage assets between various agencies. However, the provincial government could have done better in the timely engagement of critical technical skill sets at the Walled City of Lahore Authority.

76. The provincial government was less successful in coordinating with the provincial audit agencies to formally endorse the computerized financial management system operationalized in TMAs. However, the Auditor General office has given an assurance to shortly evaluate the CFMS, and sign off on it to enable it to replace the manual system.

(b) Implementing Agency or Agencies Performance
Rating: Satisfactory

77. The overall performance of the two implementing agencies – PMDFC and WCLA - was satisfactory.

78. The employment of PMDFC - a government-sponsored, not-for-profit company limited by guarantee – as an implementing agency represented a paradigm shift in the mode of allocation of public resources for urban development in Punjab. This model enabled bringing the efficiencies of the corporate sector into implementing a public sector project. PMDFC was successful in engaging the required competencies and technical skill sets to develop and implement the requisite institutional development tools. Moreover, expertise and technical support provided by

PMDFC contributed strongly to improving procurement and contract management capacities at TMAs, where infrastructure investments were undertaken.

79. Financial management arrangements at PMDFC and WCLA were satisfactory and provided reasonable assurance that project funds were used for intended purposes. Regular submission of progress reports and other information allowed effective tracking of implementation progress and initiating corrective actions when needed. Effective monitoring and evaluation (M&E) systems were developed and used to assess progress against indicator targets. In particular, the use of project interventions to directly capture M&E data on TMA indicators ensured regular collection and reporting of information by PMDFC.

80. A robust Environmental and Social Management Framework (ESMF) and a Resettlement Action Framework (RAF) were developed and satisfactorily applied to specific sub-projects through Environmental and Social Impact Assessments (ESIAs) and Resettlement Action Plans (RAPs). The ESIAs had a high degree of social consultation. RAP implementation in the Walled City of Lahore not only addressed resettlement issues, but also presented a highly successful model of social mobilization, benefit-sharing, and citizen-led regeneration.

(c) Justification of Rating for Overall Borrower Performance
Rating: Satisfactory

81. The overall performance of the Borrower was satisfactory, based on the above assessments of the performance of the Government of Punjab (satisfactory), and the Implementing Agencies (satisfactory).

6. Lessons Learned

82. Implementation experience of this ambitious and transformative project, while providing many lessons of wider applicability, reaffirms that institutional change and reform is a slow and painstaking process. It requires patience and sustained Bank and Borrower commitment over the longer term, despite occasional setbacks and often seemingly slow execution and disbursement flows. It also shows that public sector institutions such as PMDFC and WCLA, established for the longer-term beyond immediate requirements of the project, provide a stronger base for sustaining project outcomes, especially in the face of political uncertainty and risk. This project was conceived as a high risk, high reward operation and has delivered richly on its promise. The lessons learned are summarized below.

Project-Specific

a) Project implementation through a semi-autonomous public sector company (with public/private Board) brought efficiencies and curtailed undue political interference.

b) Hands on capacity building for systems and process improvements, with continuous post implementation follow-up and support, can bring about sustainable institutional development.
c) Decentralized implementation through TMAs, while slowing progress, ensured local ownership and sustainable results.
d) Consultative planning process for investment plans ensured demand-driven priorities.
e) Development of service delivery indicators by TMA officials led to regular data acquisition and transmission from TMAs to PMDFC to LG Department.
f) Delegating procurement of works to TMAs initially posed challenges, but helped develop their capacity on a sustainable basis.
g) Good procurement and contract management practices in TMAs and IAs over time facilitated robust competition and efficient contract completion.
h) Expanding training to lower level non-transferrable technical officials helped mitigate erosion of capacity built due to high staff turnover of officials.
i) Community support increases manifold when resettlement was accompanied by wider social mobilization and benefit-sharing efforts (forming CBOs, implementing a range of training initiatives, and creating widespread public awareness on benefits of heritage-based tourism).

General

a) Creating a culture of performance management is time and effort intensive.
b) Institutions take strong ownership of institutional development activities if interventions are aligned to their mandates and assist in responding to them.
c) Institutional development requires persistence and diligence to unfold and achieve sustainable results.
d) Careful balance and sequencing between institutional development and investment initiatives can ensure success in both.
e) Continuity of key staff in the IA (PMDFC) and Bank Task Team benefits project implementation and ensures institutional memory. Moreover country office led initiatives can ensure just-in-time responsiveness to emerging issues.
f) Continuity of financial management staff, and requisite capacity building at operational as well as management tiers, helps in effective financial management.
g) Use of beneficiary surveys to gauge Borrower Performance integrated in PDO indicators, can lead to citizen-centered measurement of Borrower and IA performance.
h) Urban regeneration in historic contexts entails tackling issues on multiple fronts, and requires substantial preparatory work. It also needs to focus on both tangible & intangible heritage assets.
i) Urban regeneration and heritage restoration need patience and perseverance.

7. Comments on Issues Raised by Borrower/Implementing Agencies/Partners

Comments Received from:

83. ***Secretary, LG&CDD:*** "The ICR adequately captures the major achievements of PMSIP in the context of improvement and viability of the urban services, and rationale of the World Bank for provision of assistance. At the outset, I would like to appreciate the strenuous efforts of the World Bank, partner TMAs, and PMDFC for successfully implementing PMSIP. Assessment of the project outcomes along with the assessment of Bank and Borrower performance makes objective and insightful reflections on the performance of different partners of the Project.

84. The Institutional Development and Infrastructure Development components of PMSIP have been carried out to the satisfaction of the LG&CDD, whereby significant improvement can be witnessed in the performance of TMAs over the life of the project. The improved delivery of municipal services achieved under PMSIP and its components speaks for the aptness of strategically designed and well executed interventions. Another achievement of PMSIP is the enhanced capacity of PMDFC as technical support agency of the LG&CDD. PMDFC is now well poised to assist LG&CDD in its endeavors to improve urban services in the province. Likewise, policy implementation by the LG&CDD and its oversight has significantly improved due to interventions by PMSIP. LG&CDD is institutionalizing PMSIP interventions like Computerized Financial Management, Performance Management, and Complaint Tracking Systems. The Department has also included the adoption of Computerized Financial Management System (CFMS) in Town Municipal Administrations in its sectoral plan. In the light of the achievements and learnings of PMSIP, LG&CDD has already initiated the concept paper for second round of PMSIP in close collaboration with the Planning and Development Department".

85. ***MD, PMDFC:*** "The Project was a great opportunity for building the capacity of PMDFC team during the formulation of plans and while implementing them. The ICRR has comprehensively documented the achievements and lessons leant during the currency of the project. It is a fine blend of desk review and field appraisals of project activities and achievements. The report gives a balanced view on key findings and lessons learnt for further synthesis and systematization exercises for upcoming similar assignments in keeping with the regional context and local government system. These results shall definitely contribute to institutional learning for designing and implementing similar municipal service delivery projects. I must take this opportunity to express my appreciation for all those who put a lot of efforts for penning down this report".

86. A detailed Implementation Completion Review report has been prepared and shared by the Punjab Municipal Development Funds Company (PMDFC). The contents of the report (refer Annex 7) reinforce and corroborate findings presented above.

87. ***WCLA:*** **"**Refer last paragraph under Pilot Heritage Conservation Sub-project, Annex 10. The point of "weak contract management" is contested and it is elaborated here that "being the

one of the most complex project, whose execution of work encountered multiple, severe complications from the community and even the firearms used to hit WCLA's Contractor. Working in densely populated area, having influx of the traffic and pedestrians as well as the commercial activates round the clock, and the fact of convincing the community remained among the biggest constraints of the project, which was dealt amicably by the Social Mobilization Team, WCLA and executing agencies of the WCLA. Proof of which is narrated later in the said paragraph".

(b) Co-financiers

88. Not Applicable

(c) Other partners and stakeholders

89. Not Applicable.

Annex 1. Project Costs and Financing

(a) Project Cost by Component (in USD Million equivalent)

Components	Appraisal Estimate (USD millions)	Actual/Latest Estimate (USD millions)	Percentage of Appraisal
Total Baseline Cost	47.28	44.09	93.25
Physical Contingencies	2.60	1.52	58.46
Price Contingencies	-	3.12	-
Total Project Costs	49.88	48.73	97.69
Front-end fee PPF	-	-	-
Front-end fee IBRD	0.13	0.13	100.00
Total Financing Required	50.00	48.85	97.70

(b) Financing

Source of Funds	Type of Cofinancing	Appraisal Estimate (USD millions)	Actual/Latest Estimate (USD millions)	Percentage of Appraisal
Borrower		8.90	5.74	64.51[43]
International Bank for Reconstruction and Development		50.00	48.85*	97.70

(c) Project Cost by Activities

Sr. #	Descriptions	Local (million PKR)	W.B (million PKR)	Total (million PKR)
1	Infrastructure development of TMAs	333.25	2,505.02	**2,838.28**
2	Capacity building of TMA	40.30	620.96	**661.26**
3	Capacity building of LG&CDD	-	4.77	**4.77**
4	Capacity building of PMDFC	11.36	35.59	**46.95**
5	PMDFC Management Costs	86.25	112.72	**198.98**
6	Cultural Heritage Activities	-	549.95	**549.95**
Grand Total		**471.16**	**3,829.01**	**4,300.19**

(d) Costs of Infrastructure Investment Sub-projects as on March 31, 2014

[43] Nine TMAs provided land in lieu of their 15% upfront contribution, mainly for landfill sites.

Sr. No.	Name of TMA Sub-Project	Final Cost (Civil Work incl. Contingency) Rs.	Bank Share @ 85% Rs.	TMA Share @ 15% Rs.
1	Improvement & Extension of Water Supply - Mailsi	110,680,882	94,078,749	16,602,132
2	Construction of Circular Road - P.D Khan	5,596,626	4,757,132	839,494
3	Improvement & Widening of Roads - P.D Khan	5,716,243	4,858,807	857,436
4	Improvement & Extension of Water Supply Scheme - P.D Khan	65,703,101	55,847,636	9,855,465
5	Improvement & Extension of Water Supply Scheme - Jhelum	97,492,215	82,868,383	14,623,832
6	Rehabilitation of Water Supply Scheme - Bhalwal	29,831,573	25,356,837	4,474,736
7	Improvement & Extension of Water Supply Scheme - Toba Tek Singh	66,508,606	56,532,315	9,976,291
8	Improvement & Extension of Water Supply Scheme - Chakwal	112,710,342	95,803,791	16,906,551
9	Improvement of Streets - Dunyapur	23,335,458	19,835,139	3,500,319
10	Improvement of Main Bazar Roads - Lodhran	6,169,595	5,244,156	925,439
11	Widening & Improvement of Roads - Daska	110,372,342	93,816,491	16,555,851
12	Improvement of Fire Fighting System (Equipment) - Attock	7,607,477	6,466,355	1,141,122
13	Improvement of Roads - Shorkot	47,729,003	40,569,652	7,159,350
14	Improvement & Extension of Water Supply Scheme - Khudian	61,842,709	52,566,303	9,276,406
15	Improvement & Extension of Water Supply Scheme - Kot Radha Kishan	123,977,125	105,380,556	18,596,569
16	Improvement & Extension of Water Supply Scheme - Mustafabad	100,949,860	85,807,381	15,142,479
17	Improvement & Extension of Water Supply Scheme - Raja Jang	64,915,754	55,178,391	9,737,363
18	Improvement & Extension of Water Supply Scheme - Kasur	136,606,566	116,115,581	20,490,985
19	Improvement & Extension of Water Supply Scheme - Liaqatpur	268,188,151	227,959,928	40,228,223
20	Rehabilitation and Improvement of Roads - Chichawatni	97,328,286	82,729,043	14,599,243
21	Rehabilitation and Improvement of Roads - Khanpur	89,667,147	76,217,075	13,450,072
22	Rehabilitation & Improvement of Roads - Malakwal	65,546,560	55,714,576	9,831,984
23	Improvement & Extension of Water Supply Scheme - Sillanwali	50,086,543	42,573,562	7,512,981
24	Rehabilitation and Improvement of Roads - Mandi Bahauddin	114,605,152	97,414,379	17,190,773
25	Improvement of Roads in Ghallah Mandi	62,767,584		9,415,138

	Area - Lodhran		53,352,447	
26	Rehabitation Improved of Roads - Noor Pur Thal	72,193,456	61,364,464	10,828,992
27	Rehabilitation & Improvement of Roads - Chiniot	14,043,460	11,936,941	2,106,519
28	Rehabilitation of Water Supply Scheme - Bhalwal	100,943,767	85,802,202	15,141,565
29	Construction of Concrete Pavers in Mohallah Kot Fareed - Sargodha	10,917,083	9,279,521	1,637,562
30	Rehabilitation of Canal Source Water Works - Sargodha	25,745,500	21,883,675	3,861,825
31	Rehabilitation & Improvement of Roads - Renala Khurd	33,502,306	28,476,960	5,025,346
32	Replacement of Pumping Machinery & Equipment in WS Scheme - Kasur	11,085,153	9,422,380	1,662,773
33	Replacement of Machi. & Installation of Hypochlo I - Fateh Jang	6,940,476	5,899,405	1,041,071
34	Laying of Concrete Pavers - Kot Momin	3,712,018	3,155,215	556,803
35	Replacement of Pumping Machinery in Water Supply Scheme - Sargodha	16,670,797	14,170,177	2,500,620
	Sub-Total (a)	**2,221,688,916**	**1,888,435,605**	**333,253,311**
36	Improvement of Solid Waste Management System - Mailsi	27,030,618	27,030,618	As per funding agreement TMA has only to provide land as its counterpart share.
37	Improvement of Solid Waste Management System - Chiniot	53,440,248	53,440,248	
38	Improvement & Extension of Sewerage System - Sambrial	187,310,894	187,310,894	
39	Improvement of Solid Waste Management System - Bahawalnagar	80,259,111	80,259,111	
40	Improvement of Solid Waste Management System - Malakwal	47,030,102	47,030,102	
41	Development of Bahoo & Chandni Parks - Shorkot City	58,471,512	58,471,512	
42	Improvement of Solid Waste Management System - Hassanabdal	56,664,460	56,664,460	
43	Improvement of Solid Waste Management System - Dunyapur	66,191,267	66,191,267	
44	Improvement of Solid Waste Management System - Liaqatpur	40,188,056	40,188,056	
	Sub-Total (b)	**616,586,268**	**616,586,268**	**-**
	Grand Total (a+b)	**2,838,275,184**	**2,505,021,873**	**333,253,311**

Annex 2. Outputs by Component

Project Components

1. The project consisted of two components: (a) capacity grants and development grants to TMAs; and (b) capacity building of the Punjab Provincial Government and PMDFC. The Project was conceived as an incentive fund for TMAs willing to improve their performance, to be implemented through a public sector sponsored company with a public/private Board. It included a variety of customized institutional development interventions to enhance TMAs' ability to deliver on their mandates (the capacity grants sub-component), and the provincial government's capacity to monitor TMA performance. High performing TMAs were given the incentive of investment grants for sub-projects in municipal sectors prioritized through a planning process (the performance grants sub-component).

Performance towards Achievement of Project Development Objectives

2. The Project has resulted in demonstrable improvements in the governance, management, and accountability of TMAs, and in turn their provision of municipal services per the PDO. These achievements have led to a discernible increase in the satisfaction among key stakeholder groups with respect to systems established under the Project, as well as improvements achieved in service delivery indicators. Moreover, the Project has built Government of Punjab's capacity to monitor TMA performance, as well as to manage cultural heritage assets within the Walled City of Lahore.

3. A culture of performance management is thus taking root at the municipal level; a culture of performance oversight is emerging at the provincial level; and a robust LG capacity building vehicle has been established in the Punjab. Outputs from various interventions are discussed below.

Component One: Support for Tehsil Municipal Administrations - Capacity and Development Grants

Component-1.a) Capacity Grants

4. The support provided to TMAs under the capacity grants sub-component went far beyond conventional capacity building and pursued a comprehensive institutional development approach to enable TMAs to effectively deliver on their urban management and municipal service delivery mandates. The Institutional Development (ID) initiatives in TMAs undertaken through PMSIP have proved central to: (a) establishing systems of performance management and monitoring at both the provincial and TMA levels; (b) providing a platform for ensuring scalability, replicability, and sustainability of institutional improvements; and (c) improving governance and accountability of TMAs.

5. The ***Performance Management System (PMS)*** has enabled TMAs to quantify municipal services' coverage, evaluate municipal services' quality, and monitor staff performance. The development of a consolidated web-based tool for performance oversight has helped integrate performance management systems across the TMAs. A monitoring cell has been established in the provincial Local Government and Community Development Department (LG&CDD), which is the parent institution for all local governments in the province. This cell is assisting the LG&CDD oversee TMA performance on municipal service delivery through all sources of funding, including from PMSIP.

6. The ***Complaint Tracking System (CTS)*** has helped TMAs become responsive to issues in service delivery faced by their citizens. Complaints received are not only tracked until resolved, but analysis of complaint data is undertaken to identify systemic issues in service delivery. The CTS is thus helping TMA management take appropriate development and asset management decisions.

7. The computerized ***Financial Management System (FMS)*** developed and operationalized in all TMAs across the province is assisting them with efficient and transparent budgeting, accounting, and financial management as well as streamlined reporting to the provincial level. It has also encouraged the more reform-minded TMAs to request for addition of modules for water consumer records; and shops, tenancy, and lease contract records.

8. The introduction of a participatory ***Planning Process*** and development of Structure Plans and GIS maps for all small and medium towns across Punjab, has allowed TMAs to use these for planning for future growth and investments. Moreover, the overlays developed for each service infrastructure provides detailed information on service coverage, and is assisting TMA management to take rational development decisions. The GIS maps (Base Map, Land Use Map, and Maps for Water Supply, Sewerage, Roads, and Solid Waste Management) have been placed on PMDFC's website. This is for the first time that such information on towns in Punjab has been developed and made available in the public domain.

9. ***Websites*** developed for all TMAs have helped improve public disclosure and access to information. These are also helping improve the perception of TMAs by the citizens. More recently, TMAs have been assisted in uploading their PMS data on web-based software, facilitating reporting to PMDFC and LG&CDD concurrently.

10. A variety of ***Trainings*** have been conducted for TMA officials under PMSIP, with the objective of imparting skills in the optimal use of systems and business processes introduced in the TMAs. These have ranged from basic computer literacy to data collection, compilation, and reporting; website launching and updation; conducting road rating surveys; contract and project management; procurement; and use of engineering equipment provided to TMAs. The over 3000 officials trained across 105 TMAs have helped introduce an IT culture in them.

11. ***Operations and Maintenance (O&M)*** Frameworks and standard procedures for various aspects of routine and periodic maintenance of infrastructure assets have also been developed. These have been piloted in Jhelum and Kasur for water supply; Chiniot and Bhawalnagar for solid waste management; and in Shorlot for roads. Training on O&M procedures has also been provided to other TMAs. The piloting has indicated a clear need to scale up these efforts, and to explore options of institutional arrangements for improved asset management beyond Project closure.

12. The overall progress and benefits achieved through ID interventions is summarized below:

Table 2.1: Institutional Development Interventions – Progress and Benefits

Intervention	Status and Results
Performance Management System (PMS)	• Database developed; Service coverage data collected and analyzed • Targets set and indicators agreed • PMS system designed and operationalized in 105 partner TMAs • Web-based PMS introduced in 105 TMAs, collecting municipal service data on standardized indicators

Intervention	Status and Results
	Results: Municipal service baselines, targets, and indicators available for key service delivery sectors (Water Supply, Sewerage, Solid Waste Collection, Street Lights, and Roads).
Complaint Tracking System (CTS)	• Standardized complaint registers developed • SOPs for complaint registers developed and operationalized • TMA staff provided with hands-on training • Complaint cell established in 105 TMAs • Computerized CTS operationalized in 105 TMAs • Web-based CTS introduced in 105 TMAs **Results**: • Greater transparency and accountability of TMAs • Growing public trust in TMAs • Complaints being tracked and monitored centrally • Assisting in development and asset management decisions
Computerized Financial Management System (CFMS)	• Integrated CFMS developed with modules on: o Book-keeping o Cash Book and Bank Reconciliation o Budget allocation • CFMS operationalized in 102 partner TMAs • Water consumers, shops, tenancy, and lease contract databases operationalized in 102 partner TMAs • Water bill generated in 2 partner TMAs **Results**: • Robust TMA budgeting, accounting, and financial management fully compatible with the PIFRA system
Participatory Planning Process and GIS-based Maps	• Consultative Planning process including Prioritization workshops completed in 104 TMAs[44]. • Structural Plans prepared for 104 TMAs • GIS-based municipal service maps developed for 104 TMAs • Infrastructure assets mapped on overlays of base maps • Hands-on training provided to relevant TMA staff in use and updation of maps **Results:** • Investment planning in TMAs increasingly based on Plans • Inventory of infrastructure assets available, facilitating informed decision-making in planning, investments, and O&M
TMA Websites	• Standard website template developed • Websites developed and launched for 105 TMAs • TMA staff trained in website management and updation • Central PMS software linked with TMA websites for sharing of data **Results:** • Improved Public Disclosure and Access to Information
Trainings	• Hands-on training in data collection, compilation, and reporting • Hands-on training on systems implemented (PMS; FMS: CTS) • Trainings in: o Basic and advanced computer; website launching and updation; and web refresher training o Conducting Road Rating Surveys o Use of engineering equipment o Procurement o Contract and Project management

[44] Bahawalpur Saddar TMA not included in Planning process, as it primarily includes rural and cantonment areas only.

Intervention	Status and Results
	Results: • Smooth operationalization and ensured usage of systems and business processes introduced • Optimal use ensured of equipment provided • IT culture introduced • Skills of 3000+ TMA staff improved in 105 TMAs

Component-1.b) Performance Grants

13. Performance grants to TMAs have financed investments (sub-projects) in selected TMAs.

Performance Criteria for TMAs

Eligibility Criteria for Partnering with PMSIP: In keeping with the emphasis on performance management under PMSIP, the eligibility criteria for the selection of partner TMAs in years 1 and 2 was: (a) ratio of own source revenue to total recurrent revenue (showing revenue generation effort); and (b) ratio of expenditure of development funds to total development funds available (showing implementation capacity). Top ranked TMAs were invited to partner with PMSIP. Interested TMAs were required to sign an MOU confirming willingness to reform, fully implement ID initiatives, and report on agreed indicators.

Criterion for Performance Grants was good performance on ID initiatives funded through the capacity grants. If eligible, a TMA could request a performance grant for a priority infrastructure investment identified through a participatory planning process. It also had to agree to upfront contribute 15% of the sub-project cost; fund subsequent O&M costs; and submit a detailed application including a service improvement plan, and performance indicators and targets.

Post-MTR in 2010 and project restructuring, the capacity grants were scaled up and offered to all urban TMAs in the Punjab (accept those in the 5 largest cities). However, the dispensation of infrastructure development grants continued to be subject to the performance, demand, and implementation criteria outlined above. Thus while ID support served as the 'equity window' for all TMAs, the infrastructure investments remained a purely 'performance window'.

14. The infrastructure development grants have enabled TMAs to invest in enhanced municipal service delivery in a managed and sustainable manner. Investments for completed sub-projects include rehabilitation, improvement, and coverage expansion in water supply (17 sub-projects), roads and streets (13 sub-projects), solid waste management (6 sub-projects), sewerage and sewage treatment (1 sub-project), parks (1 sub-project) and firefighting (1 sub-project). The status of PMSIP sub-projects is summarized below:

Table 2.2: Status of PMSIP sub-projects

Status	Number of sub-projects
Completed	39
In process of closing	2
Terminated (later completed by TMA and GoPunjab funds)	3
Total	44

15. The 39 completed sub-projects have been implemented in 29 different urban centers. *The number of estimated beneficiaries or population served from the 39 completed PMSIP sub-projects currently amount to more than 1.66 million.* This estimate is based on a systematic determination of the coverage area of each sub-project, using GIS maps of the urban center where the sub-project was implemented. The quality of PMSIP-funded civil works is also superior to regular TMA investments due to strong oversight

provided, and capacity building in project and contract management. TMAs were made responsible for project management, as well as provided training, which enhanced their exposure to and experience in implementing FIDIC-based contracts. They were also assisted in conducting National Competitive Bidding for sub-projects.

16. ***Improvements in Sub-project Controls and Contract Management:*** Through PMSIP, TMAs have been able to deliver sub-projects which were much larger in size and scope compared to those previously managed by them. Their implementation was closely monitored by PMDFC, through continuous support in areas including engineering design and project management; contract management; and post-completion operations and maintenance for sustainable service delivery. An enhanced contract management regime has been implemented for PMSIP-funded infrastructure schemes at TMA level, leading to the emergence of ***a culture of greater contractual compliance*** among the various parties responsible for ensuring timely project completion of requisite quality.

17. More recently, smaller contracts focusing on specific operational issues were implemented. These have included investments such as replacing mechanical and electrical equipment in waterworks and tube wells, and rehabilitating water treatment works. This mix of larger and smaller contracts has funded major infrastructure improvements, as well as upgrading of existing facilities, and in turn enhanced TMA operational performance.

18. ***Robust Monitoring through Contract Management SOPs and Checklists:*** In order to address widespread delays in sub-project completions that were becoming a norm until the 2010 MTR, PMDFC with Bank assistance developed Standard Operating Procedures (SOPs) and checklists for contract management. The objective was to lay down clearly defined roles and responsibilities for the parties associated with sub-project execution, for efficient and effective contract management. These have over time found increasing acceptance and implementation by contractors and supervision consultant in sub-projects subsequently initiated. The SOPs were made a major part of the contract management training curriculum developed by PMDFC. Periodic contract management audits were also carried out by PMDFC. Analyses show that the enhanced project and contract management efforts have led to marked improvement in performance vis-à-vis timeliness of physical completion of sub-projects.

Figure-1: Declining Delays in Sub-project Completion over Time

(% delay in completion for 39 completed sub-projects, in order of commencement date)

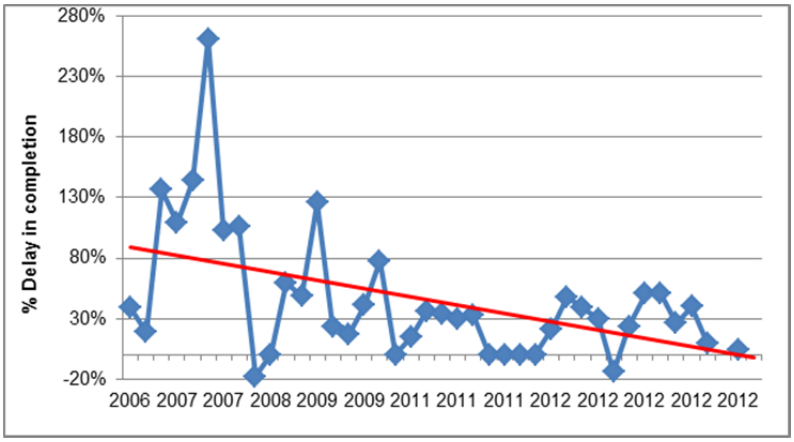
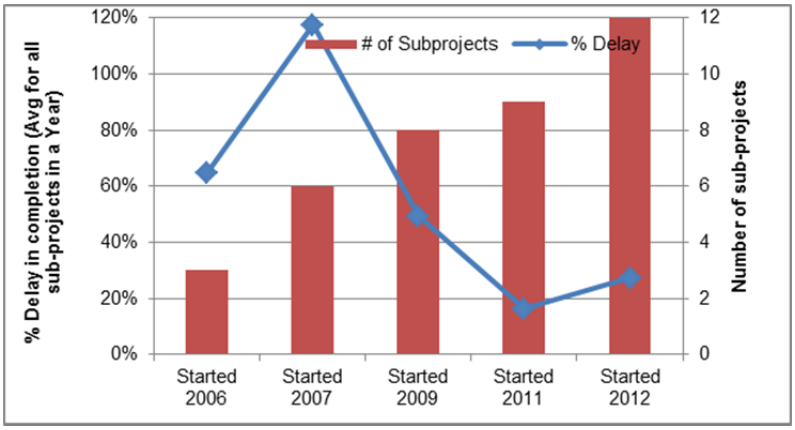


Figure-2: Declining Delays in Sub-project Completion over Time

(% delay in completion – average for all sub-projects started in a year)



19. Figures 1 and 2 above are based on data for the 39 infrastructure sub-projects completed to date, and show how delays in sub-project completion have substantially reduced. This can be attributed to the enhanced contract management regime implemented.

Table 2.3: Average Delay of PMSIP Sub-projects over Time

	% Delay	Delay (Months)	Number of Sub-projects
Average for all sub-projects	45%	5	39
Median for all sub-projects	33%	3	
Sub-projects started in 2006	65%	12	3
Sub-projects started in 2007	117%	16	6
Sub-projects started in 2009	49%	6	8
Sub-projects started in 2011	16%	1	9
Sub-projects started in 2012	27%	2	12
Average after Contract Management SOPs	23%, compared to 72% before	2 months, compared to 10 before	21 sub-projects, compared to 18 before
Median after Contract Management SOPs	26%, compared to 54% before	2 months, compared to 7 before	

20. The table above shows a comparison of averages over time, as well as before and after the implementation of the enhanced contract management regime. The average delay for all 39 completed sub-projects has been 45% in terms of percentage delay over original duration (median delay 33%), and 5 months in terms of absolute time (median delay 3 months), with delays substantially reduced after implementation of contract management SOPs. The average delay for 18 sub-projects before these SOPs was 72% over original duration (median delay 54%) and 10 months (median delay 7 months). This fell down drastically after the SOPs were implemented, to 23% (median delay 26%) and 2 months (median delay also 2 months).

Component Two: Support for Other Institutions - Capacity Building and Other Activities

Component-2.a) Support to Local Government and Rural Development Department

21. ***Vertical linkages of M&E System:*** LG&CDD being the parent department of all local governments (LGs) has the mandate of oversight and monitoring of LG performance. However, only recently with PMSIP's assistance, has the Department been able to put in place the requisite systems for

effective monitoring and oversight. An Integration Cell has been established, housing the monitoring and evaluation (M&E) system linked to PMDFC's M&E system, through which TMAs report on agreed municipal service indicators. This has enabled LG&CDD to undertake performance monitoring of TMAs for results of investments made in their jurisdictions against coverage and quality of municipal services. In future, LG&CDD can begin to seek data on required service coverage and quality indicators from the district and union levels as well.

Component-2.b) Support to Planning and Development Department – Cultural Heritage Subcomponent

22. The Cultural Heritage (CH) subcomponent was added to the Project with the objective to undertake the detailed preparatory activities that a CH initiative requires, as well as to fund a pilot. It focused on: (a) Amendments to the existing legislative frameworks; (b) Rationalization of institutional mandates for management of heritage assets; and (c) Implementation of a pilot project in the Walled City of Lahore. The pilot project included the creation of a *Heritage Trail*, to showcase methods and benefits of conservation of cultural assets and their productive re/use. Outputs under the cultural heritage subcomponent include:

23. ***Amendments to the Existing Legislative Frameworks:*** There are multiple legislative frameworks that govern the conservation, restoration, and maintenance of historic assets in the Punjab[45]. Their contents are at times contradictory to each other, while many clauses are outdated and no longer relevant. GoPunjab undertook a review of these and enacted the Walled City of Lahore Act 2011 through the Punjab legislature, thus rationalizing and updating the legal framework operating in the Walled City of Lahore (WCL). This is a major achievement, as the Act establishes the regulative mechanisms for conserving and restoring the historic core of Lahore and helps resolve conflicts in the multiple laws that had earlier governed interventions in the WCL.

24. ***Rationalization of Institutional Mandates for Management of Heritage Assets:*** There are numerous institutions with mandates for heritage assets and provision of infrastructure and services in areas like the WCL. These are at the federal, provincial, and local levels[46] leading to difficult issues of coordination and accountability. Within these agencies there is a significant lack of specific historic core management capacities. Thus a key step towards the success of any CH initiative was to rationalize the institutional mandates. This, for Lahore, has been achieved through the establishment and operationalization of the *Walled City of Lahore Authority (WCLA)*. It is currently in the process of assuming responsibilities for the WCL, being transferred from other institutions at various levels of government.

25. ***Implementation of a Pilot Project:*** The Shahi Guzargah (the Royal Route) was selected as the pilot for implementation, to showcase methods and benefits of conservation of cultural assets and their productive re/use. It is the route that the Mughal emperors followed to reach the royal fort palace, when

[45] Like the Punjab Heritage Foundation Act 2005, the Punjab Special Premises (Preservation) Ordinance 1985, Antiquities Act of 1975, and the Evacuee Trust Property Management and Disposal Act 1975.

[46] For example the federal and provincial Archaeology Departments, the federal Auqaf Department, the federal Evacuee Trust Property Board, the federal Ministry of Culture and provincial Department of Culture, and the relevant District and Town local governments, their agencies, and authorities.

returning from Delhi to Lahore or vice versa. The initiative includes: (i) provision of new municipal infrastructure and services (below ground as far as possible) including electrical, communication, water supply, storm drainage, sewerage, and gas supply networks which were obsolete, inadequate, or completely absent; and (ii) rehabilitation of the urban fabric through facade and street improvements.

26. The overall scope of physical works under the pilot project included, in addition to infrastructure rehabilitation works:

Number of streets to be paved:	57
Number of facades to be improved:	773
Number of buildings in project area:	1028 (including buildings without facade work)

27. Due to a variety of reasons including the nature of works involved which could not be fully estimated upfront; weak contract management capacity at WCLA; and time and effort needed to undertake preparatory activities before implementation could begin, the Works Contract remained incomplete at project closing. The status of implementation was completion of 72% of façade improvement work and 52% of street surfacing work. Similarly, for the infrastructure rehabilitation, 75% of general works, 70% of water supply system, 70% of sewerage, 80% of storm water drainage, and 60% of electrical network works had been completed. The remaining works are being completed using GoPunjab funds.

28. ***Social Mobilization:*** Over time, public space in the WCL has been massively encroached upon. Detailed surveys of the pilot project area identified the need to remove *147 shops completely*, *with another 732 shops being affected on a temporary basis* along the Shahi Guzargah. Moreover, *264 encroachments* onto the public realm (mainly kitchens and washrooms) were identified in the 47 residential streets emanating from the Shahi Guzargah. Thus the initiative has had to ensure the careful community-centered implementation of its Resettlement Action Plan (RAP). Activities included widely held consultations; baseline development of the Project Area; impact assessment and mitigation; mechanism to address the grievances of the affectees during implementation; and adequate institutional capacity to implement the RAP.

29. WCLAs Social Mobilization Team (SMT) has, among other activities, conducted over 1000 meetings to create awareness among the shopkeepers, traders, and residents; helped form 10 CBOs; and helped train 48 youth of the area in technical skills, many of whom have found sustainable employment. As a result, the Project has been able to undertake successful relocation of shops and residences that had encroached on the public domain. Robust social mobilization ensured that the work was not just restricted to resettlement, but also included residents in benefit sharing through trainings and community organization. The Project has left in place a living model of citizen engagement in heritage restoration, which can serve as a platform for citizen led regeneration and tourism in the area.

30. ***Other Key Outputs*** include: (i) topographic survey of the WCL to serve as the GIS base map and for design of infrastructure; (ii) an inventory of all historic buildings in the WCL, including record of land use, ownership, age, and historic value; (iii) a Strategic Plan for the WCL; (iv) detailed physical documentation of all buildings in the pilot area; and (iv) a socio-economic survey in the project area.

Annex 3. Economic and Financial Analysis

1. Analysis of Economic Benefits from Performance Grants (Infrastructure Investments)

1. Infrastructure investments in TMA service delivery were expected to yield significant economic benefits. PMDFC conducted a preliminary field appraisal for each sub-project, followed by a detailed feasibility study by Engineering Consultants. The feasibility studies include Economic Rates of Returns (ERR) for investments. The field appraisal reports include a review of the sub-project affordability, both in terms of investment and operation and maintenance. Field appraisal reports as well as detailed feasibility reports are available in the Project Files.

2. Ex-ante economic analyses of infrastructure investments were included in the Project Appraisal Document for a water supply in Jhelum and a roads sub-project in Pind Dadan Khan. For this ICR, ex-post analyses have been performed using information collected during implementation to update the economic analyses developed at appraisal stage. Economic rates of return have been calculated for infrastructure sub-projects analyzed at appraisal to facilitate comparison between estimated and end of project economic results. A similar ex-post economic analysis has been performed for two additional water supply and road sub-projects. Overall expenditure on Water Supply and Roads/Streets sub-sectors collectively accounts for almost 80% of all expenditure on infrastructure investments under the Project.

2. Economic Analysis of Water Supply Investments

3. Water Supply is the largest sub-sector amongst infrastructure investments, accounting for more than 50% of expenditure. Economic analysis at completion has been carried out for the following two sub-projects: (i) Extension and Improvement of the Water Supply Scheme in TMA Jhelum; and (ii) Extension and Improvement of the Water Supply Scheme in TMA Liaqatpur.

4. The Water Supply sub-project in Jhelum was appraised in the PAD, and a repeat Economic Analysis has been conducted. The Water Supply sub-project in Liaqatpur has been chosen for an ex-post Economic Analysis as it is the largest sub-project funded by PMSIP in terms of monetary value, equaling about 9% of the total cost of the Project's Infrastructure Component and 19% of the Project's Infrastructure investments in the water supply sector. Summary findings from these analyses are presented below, while detailed analyses are available in Project Files.

2.1. Estimation of Health Benefits for Water Supply Sub-Projects

5. Although several approaches to economic analysis were explored during project preparation (such as quantification of time savings, health benefits, or assessing the willingness to pay) lack of data did not allow for a meaningful analysis of these important benefits. Economic benefits have been estimated by considering potential health benefits from improved access to adequate quantity of water for water consumers.

6. For both water supply sub-projects, the main economic benefits considered are the potential health benefits from improved access to adequate quantity of water for water consumers. These benefits have

been quantified by using a national-level analysis recently conducted by the Water and Sanitation Program, a trust fund managed by the World Bank[47]. It estimated the annual per capita economic cost of inadequate sanitation (PKR 2,163), and then estimated the impact of various health (water and sanitation) interventions in reducing these costs. Two such impacts are improved access to an adequate quantity of water and improved access to improved quality of water which, according to the analysis, can reduce the economic cost of poor sanitation by 30% and 36% (estimated at PKR 650 and PKR 779 per capita per year) respectively.

2.2. Economic Analysis of Jehlum Water Supply Sub-Project

2.2.1. Calculation of Economic Benefits for Jehlum Water Supply Sub-Project

7. ***Change in Consumer Surplus:*** At the time of Appraisal, economic benefits for this sub-project were calculated by estimating the additional surplus for water consumers due to increased water supply. This method was used at Appraisal because of unavailability of data to estimate health benefits, and the benefits from time savings due to increased piped water supply. However, this method has not been followed in the ex-post evaluation done at ICR stage, as data is now available to estimate health benefits. The quantification of health impact thus seems a more appropriate indication of the sub-project's benefits instead of changes in consumer surplus, since it is difficult to assess consumer surplus when exceptionally low tariffs have distorted consumer's willingness to pay, and there is no recent data to provide revealed preferences of consumers for adequate water supply.

8. ***Quantification of Health Benefits:*** The sub-project improved the quantity of water supplied through the construction of new tube wells for groundwater pumping, rehabilitation of existing tube wells, rehabilitation and expansion of the water supply distribution network, and the construction of overhead reservoirs for storage. It is assumed that health benefits from improved quantity of water (at PKR 54 per capita per month) will accrue to low income and middle income population in the sub-project target area, estimated to be 85% of beneficiary households. The estimated economic impact has not been increased for inflation, and has been kept constant.

9. ***Revenue from Water User Fees:*** Other benefits considered include revenue from water user fees for the municipal government. However, due to lower than expected collection rates and expected water tariff increases that did not materialize, financial and economic gains from water user fees are not substantial. The water tariff is approved by the Provincial Government, and the TMA does not have control over it. The Provincial Government increased the water tariff in Jehlum in 2011, which is still considerably below the tariff estimated at appraisal.

2.2.2. Calculation of Economic Costs for Jehlum Water Supply Sub-Project

10. ***Increased Operations and Maintenance Expenditure:*** Besides the capital investment costs, major economic costs include increased expenditure for operations and maintenance of the sub-project. This includes electricity, staff costs, and repairs and maintenance. Among these, electricity remained the

[47] Water and Sanitation Program (2012), "The Economic Impacts of Inadequate Sanitation in Pakistan". Available at: <http://www.wsp.org/wsp/sites/wsp.org/files/publications/WSP-esi-pakistan.pdf>

largest item, and led to substantial recurrent costs, exacerbated by steadily rising energy prices. A general inflation rate of 8% has been applied to all costs, and it is assumed that electricity prices will increase by 3% in real terms going forward, which is the assumption used at appraisal. Costs incurred have been used, where possible, for the period 2005-2012.

11. ***Other Assumptions Considered:*** Three assumptions have been revised downward from Appraisal: i) expected increase in water tariff; ii) expected increase in collection efficiency of water revenues; and iii) expected rate at which households connect to the water supply system. Other assumptions remain the same, with actual values used, wherever possible.

2.2.3. Calculation of Economic Internal Rate of Return

Table 3.1: Economic Analysis of Jehlum Water Supply Sub-Project

Year #	Year	Beneficiary population (registered WS connections only)	Capital Cost (at economic prices) (PKR mill)	Impact of access to adequate quantity of water (PKR mill)*	Increase in O&M Costs due to sub-project (at economic prices) (PKR mill)	Increase in Water Revenue due to sub-project (PKR mill)	Total stream of Benefits / Costs (PKR mill)
1	2005	66,064		0.0	0.0	-0.2	-0.2
2	2006	59,758	-16.2	0.0	0.7	-0.4	-15.9
3	2007	59,758	-32.4	0.0	0.6	-0.6	-32.4
4	2008	59,758	-25.2	0.0	0.4	-0.9	-25.6
5	2009	59,758	-18.0	0.0	1.3	-1.1	-17.8
6	2010	59,758		33.0	-8.1	-1.4	23.5
7	2011	59,758		33.0	-8.9	-0.3	23.8
8	2012	59,758		33.0	-9.8	-0.4	22.8
9	2013	63,845		35.2	-12.6	-0.3	22.3
10	2014	66,078		36.5	-15.0	1.9	23.4
11	2015	68,376		37.7	-17.8	2.4	22.3
12	2016	70,739	-18.4	39.0	-21.1	3.0	2.5
13	2017	73,170		40.4	-25.0	3.6	19.0
14	2018	75,669		41.7	-29.5	4.3	16.6
15	2019	78,239		43.2	-34.7	5.1	13.5
16	2020	80,881		44.6	-40.9	6.0	9.8
17	2021	83,598		46.1	-48.0	7.0	5.2
18	2022	86,391		47.7	-56.3	8.2	-0.5
19	2023	89,263		49.2	-64.6	9.5	-5.9
20	2024	92,214		50.9	-71.5	10.9	-9.7
21	2025	95,248		52.5	-79.1	12.6	-14.0
	Total		**-110.2**	**663.7**	**-539.6**	**69.0**	**82.9**
	Economic Internal Rate of Return EIRR						**13%**
* Benefits accrue to Low income and Middle income population, which is expected to be 85% of total							

12. The Economic IRR has been determined at 13%, compared to the IRR determined at Project Appraisal which ranged between 12% and 24%, depending on the method used. The Economic IRR at the time of project closure would have been higher, but for the much lower than expected water tariff rate as a result of the provincial government's decision to disallow an increase.

2.3. Economic Analysis of Liaqatpur Water Supply Sub-Project

2.3.1. Calculation of Benefits for Liaqatpur Water Supply Sub-Project

13. ***Quantification of Health Benefits:*** Economic benefits have been determined using the same methodology as for the Jehlum sub-project, except for one addition: health benefits include the impact of improved quality of water, in addition to adequate quantity. This is because the Liaqatpur water supply sub-project included the rehabilitation of the town's water treatment plant, which provides cleaner water for drinking and other household use. It is assumed that this additional benefit will only accrue to the low income population in the sub-project target area, estimated at 50% of the beneficiary households.

14. ***Change in Consumer Surplus:*** Change in Consumer surplus has not been calculated due to similar reasons as for the Jehlum sub-project.

15. ***Revenue from Water User Fees:*** Other economic benefits considered include revenue from water user fees for the municipal government. However, due to lower than expected collection rates, and no water tariff increases since 2001, the financial and economic gains from water user fees are not substantial.

2.3.2. Calculation of Economic Costs for Liaqatpur Water Supply Sub-Project:

16. Economic costs for the Liaqatpur water supply sub-project have been determined in the same manner as for the Jehlum sub-project, except for one difference: the electricity cost for pumping and treating per gallon of water in Liaqatpur water supply system is double that in Jehlum per the feasibility reports. This is possibly because of the additional element of water treatment in Liaqatpur.

2.3.3. Calculation of Economic Internal Rate of Return:

Table 3.2: Economic Analysis of Liaqatpur Water Supply Sub-Project

Year #	Year	Beneficiary population (registered WS connections only)	Capital Cost (at economic prices) (PKR mill)	Impact of access to adequate quantity of water (PKR mill)*	Impact of access to improved quality of water (PKR mill)**	Increase in O&M Costs due to sub-project (at economic prices) (PKR mill)	Increase in Water Revenue due to sub-project (PKR mill)	Total stream of Benefits / Costs (PKR mill)
1	2009	28,470	-118.8	0.0	0.0	0.0	0.0	-118.8
2	2010	28,470	-131.4	0.0	0.0	0.0	0.0	-131.4
3	2011	28,813	-4.5	0.0	0.0	0.0	0.0	-4.5
4	2012	31,929		16.6	12.4	0.0	0.0	29.0
5	2013	35,045		18.2	13.6	-3.7	0.6	28.7
6	2014	37,303		19.4	14.5	-4.1	0.8	30.5
7	2015	39,660		20.6	15.4	-4.6	0.9	32.4
8	2016	42,120		21.9	16.4	-4.5	1.1	34.9
9	2017	44,687		23.2	17.4	-6.2	1.3	35.6
10	2018	47,364		24.6	18.4	-8.4	1.5	36.2
11	2019	50,156		26.0	19.5	-11.0	1.8	36.4
12	2020	53,067		27.6	20.7	-14.1	2.0	36.2
13	2021	56,102	-50.9	29.1	21.8	-17.9	2.4	-15.5
14	2022	59,265		30.8	23.1	-22.4	2.7	34.2

15	2023	62,562		32.5	24.4	-27.9	3.1	32.1
16	2024	65,996		34.3	25.7	-34.4	3.6	29.2
17	2025	69,574		36.1	27.1	-42.2	4.1	25.1
18	2026	73,301		38.1	28.5	-51.4	4.7	19.9
19	2027	77,181		40.1	30.1	-62.4	5.3	13.0
20	2028	81,222		42.2	31.6	-75.5	6.0	4.4
21	2029	85,428		44.4	33.3	-90.9	6.9	-6.4
22	2030	89,806		46.6	35.0	-118.9	7.8	-29.5
23	2031	94,362		49.0	36.7	-132.0	8.8	-37.4
	Total		**-305.6**	**621.1**	**465.8**	**-732.4**	**65.3**	**114.1**
	Economic Internal Rate of Return EIRR							**5%**
* Benefits accrue to Low income and Middle income population, which is expected to be 80% of total ** Benefits accrue to Low income population, which is expected to be 50% of total								

17. The Economic IRR has been determined at 5%. The Economic IRR of this sub-project would have been higher but for tariff rates being much lower than expected.

18. One factor however, that may help improve revenue from water users is the establishment of a computerized water consumer database for partner TMAs. The database, which has been piloted in a few TMAs, can help improve collection efficiency and arrears recovery in the medium term.

3. Economic Analysis of Roads Sub-projects

19. Roads and streets was the second largest sub-sector among the Project's infrastructure investments portfolio, accounting for 28% of overall expenditure. Economic analysis at completion was undertaken for two sub-projects involving improvement of road networks in TMAs Pind Dadan Khan (PD Khan) and Chichawatni. At Appraisal, the ERR for a roads sub-project in Pind Dadan Khan were estimated at 17%. The analysis has been repeated at completion in order to assess and validate the findings of the ex-ante analysis. In addition, detailed ex-post economic analysis for another roads sub-project in TMA Chichawatni has been conducted, to facilitate a wider comparison of results with later investments. The ex-post economic analysis of the two roads sub-projects (Pind Dadan Khan and Chichawatni) is summarized below with key results. The detailed analyses are available in Project Files.

3.1. Methodology

20. The methodology used follows standard practice of comparing life cycle road agency and user costs with and without project, using Net Present Value (NPV) and EIRR at 12% discount rate as decision criteria. The Highway Development and Management (HDM) Model-4 of the World Bank, has been used for analysis. The main assumptions on maintenance and improvement strategies "with" and "without" project are summarized below.

21. The current roughness level of the existing road is taken as 9 IRI, and only routine maintenance/do nothing is provided for in the "without project" case. In recognition of the prevailing maintenance standards in urban areas, roughness levels are allowed to deteriorate up to the maximum value. For improvement strategy (with project case), one treatment has been tested with improvement and rehabilitation of roads with improved drainage provisions. Periodic maintenance has been assumed to be

scheduled at every 4-5 years by the Municipal Authorities. The initial treatment will give IRI (roughness) levels of 3 with Asphalt wearing Course/TST. It is assumed that after improvement, routine maintenance will be carried out.

22. In the absence of historical traffic count data for these roads, traffic growth rates were estimated based on national averages. These follow analysis of historical growth rate factors such as population, GDP, value added in agriculture, transport and commercial fuel consumption, vehicle registration, and various studies previously done by other institutions in Pakistan. Furthermore, a series of studies by JICA[48] has been referenced to estimate traffic growth rates and elasticity of traffic growth. The current analysis assumes an overall growth rate of 5.0%, which has an elasticity of 1.0 with respect to historical GDP.

3.2. Costs

3.2.1. Vehicle Operating Costs

Vehicle operating costs depend upon road conditions, as well as vehicle characteristics, utilization, and prices. For vehicle characteristics, default values of HDM model have been used. Other input data, namely, prices of vehicles and other inputs, and utilization of vehicles are given below.

Table 3.3: Vehicle Utilization

					Trucks		
Item/unit	M/cycle	Car	Wagon	Bus	2 axle	3 axle	> 3 axle
Vehicle Utilization							
Service Life years	10	12	10	10	10	12	12
Hours driven per year	400	500	2500	2500	2920	2920	2920
Interest rate %	12	12	12	12	12	12	12
Economic Unit Costs							
New Vehicle price (PKR mill)	.042	.983	5.5	9.55	8.554	9.39	9.39
New Tire price	2,500	6,330	10,970	41,320	43,688	46,688	46,688
Maintenance labour per hour	100	100	100	100	100	100	100
Crew cost per hour	0	0	120	130	130	130	130

23. The estimated cost composition and adjustment factor is given in the following table:

Table 3.4: Conversion Factor for Civil Works (inclusive of tax in financial costs)

		Conversion Factor	Cost Composition (%)	Adjustment Factor	
Materials					
	Tradable	SERF	15	1.1	0.165
	Non-tradable		20	1	0.2
Equipment (non-tradable)			25	1	0.25
Labour					
	Skilled	Skilled SWR	10	0.9	0.09
	Unskilled	Unskilled SWR	20	0.75	0.15
Tax			10	0	0
			100		0.855

[48] The Study on National Transport Plan in Islamic Republic of Pakistan, JICA, May, 1983 – second in March 1988, third in February 1995.

3.2.2. Road Improvement and Maintenance Costs

24. Improvement costs for the rehabilitation and improvement of municipal roads have been established based on engineering design and completion cost of contracts. Cost per km of road sections is given in Table A3.5. Residual value of the asset at the end of the operation and maintenance period has been taken for analysis as 10%. Maintenance costs based on unit rates for various maintenance operations are given in Table A3.6

Table 3.5: Cost of Improvement (Rs/Km)

TMA	Financial	Economic
Chichawatni	36,378,207	30,291,476
P D Khan	33,183,180	28,205,703

Table 3.6: Unit Maintenance and Operations Costs

Work	Economic	Financial[49]
Patching	52.16	61.37
Edge Repair	19.29	22.69
Reseal	64.00	75.30
DST	177.92	209.32
TST	207.60	244.23
AC 50mm	493.44	580.52

3.3. Economic Benefits

25. The main quantifiable benefits of the investment are: (i) savings in Vehicle Operating Costs (VOCs) for existing traffic after improvement; (ii) VOC savings to generated traffic where applicable; and (iii) savings in travel time. Economic benefits from generated traffic or diverted traffic (traffic which is attracted from an alternative route to the project roads), and other non-tangible benefits which may occur, including increase in the rents or prices of shops, less time consumed by commuters for shopping etc., have not been considered.

26. The value of time has been estimated conservatively by estimating the value of working time for bus and wagon passengers by dividing per capita national income of Rs.89,165[50] by 360 days and 8 working hours a day. Considering the labor force statistics in the country, the figure is multiplied by a factor of 1.67. The value of time of motorcycle and car passengers was taken as 1.5 and 3.0 times higher than that of bus passengers. The value of non-working time was taken at 1/3rd of working time. The resulting value of time used in vehicle operating costs is given below. Time savings have also been taken for passenger vehicles.

Table 3.7: Value of time (Rs./ hour)

Passenger Category	Working	Non Working
Bus Passenger	61	20
Wagon passenger	91	30
Motor cycle passengers	122	41
Car Passengers	182	61

[49] A factor of 0.85 has been used to convert the Financial Costs to Economic Costs
[50] Federal Bureau of Statistics

27. Other likely benefits will be: savings in periodic maintenance costs to be incurred by TMAs; savings in VOC generated through better road surface conditions; improved access to markets, which includes agricultural benefits, and greater economic activity. However, these benefits have not been quantified.

3.4. Results of Economic Evaluation and Sensitivity Analysis

28. Economic internal rates of return (EIRRs) have been computed using Highway Development and Management (HDM) Model - 4 of the World Bank for VOC values. One improvement strategy has been evaluated. The sensitivity of results has also been tested with respect to 10% increase in costs, decrease in benefits, both together, and one year's delay in implementation. Moreover, switching values have also been calculated for costs and benefits. They indicate the extent of variation in costs or benefits that will turn EIRR below 12%. The summary of the results is shown in tables 7, 8 and 9 in terms of EIRR, Switching Values, NPV and B/C ratio.

Table 3.8: Summary of EIRRs with Sensitivity Analysis

Road Section	EIRR Proposed Strategy %	10% Reduction on VoC	10% Increase in Capital Cost	10% Increase in Capital Cost and 10% reduction of VoC	One year Delay in Construction
Chichawatni	14.9%	13.3%	13.5%	12.0%	**14.2%**
PD Khan	**15.0%**	**13.7%**	**13.5%**	**12.3%**	**14.3%**

Table 3.9: Switching Values

	Increase in Costs	Decrease in Benefits
Chichawatni	1.24	0.81
PD Khan	1.25	0.80

Switching Value – factor that will reduce the EIRR to 12%

Table 3.10: NPV & B/C Ratios

	NPV (Rs. Million)	B/C Ratio
Chichawatni	18.75	1.21
PD Khan	11.40	1.04

4. Qualitative Assessment of Economic Benefits from Capacity Grants

29. The overall economic impact of capacity grants is difficult to quantify. Improvements in institutional performance do not easily translate into monetary terms. Moreover, the transverse nature of reforms in the areas of performance management, financial management, and procurement among others, makes it difficult to attribute the expected outcomes to a single reform initiative. However, based on certain assumptions, expected benefits from proposed interventions were analyzed qualitatively and the results are encouraging. There is reasonable qualitative evidence to suggest that the overall economic impact from the interventions is positive. The probable qualitative economic outcomes based on the broad objectives of the interventions are summarized below.

30. ***Transparency and Accountability:*** Empirical literature demonstrates that transparency and trust are highly correlated, and that as institutions become more transparent they will also become more trusted (Rawlins 2007). The Complaint Tracking System has helped in increasing transparency and accountability of TMAs. Urban residents benefit from quicker and responsive resolution of defects or failures in service delivery, while TMA staff benefit from enhanced job satisfaction and motivation. This has not only helped in developing the trust of stakeholders in TMAs, but has also helped TMAs to better plan, monitor, and manage municipal services.

31. ***Improved Management Systems:*** Efficient and effective monitoring through the Performance Management System (PMS) is expected to translate into more efficient service delivery, as evidenced by the qualitative results from the Institutional Development (ID) Assessment Surveys. Similarly, the Computerized Financial Management System (CFMS) has also enabled TMAs to maintain electronic record keeping practices, making financial management and accounting data convenient to use and more accessible. Therefore, the overall economic returns from these interventions are based on the efficiency of public service delivery provided through public/ tax money. As with similar technological innovations in governance, electronic monitoring of urban management and service delivery agencies is strongly expected to have a spillover effect to related sectors and agencies in urban areas.

32. Moreover, the Participatory Planning Process and GIS based Maps are expected to improve the joint ownership of stake holders and the government. The use of modern technology not only helps in investment planning, but also increases the effective management of public assets thus created. In addition, available evidence from the ID assessment surveys strongly points to an improved capacity for local economic and investment planning in the participating TMAs.

33. ***Human Capital Development at TMAs:*** Finally, interventions involving human capital enhancement of TMAs have resulted in smooth operationalization of systems and improved interaction between TMAs and stakeholders. Training provided under the project has encompassed optimal use of resources, improved management capacity, and the introduction of an IT-based culture. The new paradigm is expected to result in improved service delivery, as well as simultaneous accruing of very significant dividends in terms of increased productivity and operational capacity of TMA staff and officials. This may be a key area of value addition under the project.

Annex 4. Bank Lending and Implementation Support/Supervision Processes

(a) Task Team Members

(b) Names	Title	Unit	Responsibility/ Specialty
Lending			
Jaehyang So	Director	CPFVP	TTL
Shahnaz Arshad	Senior Urban Specialist	SASDU	Co-TTL
Anthony Graeme Lee	Senior Municipal Finance Specialist	SASDU	Ex-TTL
Ahsan Ali	Lead Procurement Specialist	EASR1	Procurement
Anwar Ali Bhatti	Financial Analyst	SACPK	Disbursement
Soraya Goga	Lead Urban Specialist	ECSUW	Urban Planner
Hasan Saqib	Sr Financial Management Specialist	SARFM	FM
David C. Hanrahan	Consultant	SASDI	Capacity Building
Alain R. Locussol	Consultant	SASDU	Water Supply
Supervision/ICR			
Shahnaz Arshad	Senior Urban Specialist	SASDU	TTL
Raja Rehan Arshad	Lead Disaster Risk Management	GFDRR	Co-TTL
Ayaz Parvez	Technical Specialist	GFDRR	Contract/Project Management
Uzma Sadaf	Senior Procurement Specialist	SARPS	Procurement
Zia Al Jalaly	Senior Social Development Specialist	SARDE	Social Development
Ernesto Sanchez-Triana	Lead Environmental Specialist	LCSEN	Environment
Anwar Ali Bhatti	Financial Analyst	SACPK	Disbursement
Hasan Saqib	Senior Financial Management Specialist	SARFM	FM
Salma Omar	Senior Social Development Specialist	SASDC	Social Development
Isfandyar Zaman Khan	Private Sector Development	ECSPF	PSD
Tahir Akbar	Research Analyst	SASDU	Urban Analyst
Kevin Tayler	Consultant	SASDU	Municipal Engineer
Mihaly Kopanyi	Consultant	ECSUW	Municipal Finance
Suhaib Rasheed	Consultant	SASDU	Urban Analyst
Sohaib Athar	Consultant	SASDU	Urban Analyst
Abid Hussain Chaudhry	Senior Program Assistant	SASDO	
Ghulam Farid	Senior Program Assistant	SASDO	
Shabir Ahmad	Senior Program Assistant	SASDO	
Shaukat Javed	Senior Program Assistant	SASDO	
Lilian MacArthur	Senior Program Assistant	SASDO	
Asif Faiz	ICR Advisor	SACPK	Advisor
Sylvie Debomy	ICR Peer Reviewer	LCSDU	Peer Reviewer
Uri Raich	ICR Peer Reviewer	AFTU1	Peer Reviewer

(c) Staff Time and Cost

Stage of Project Cycle	Staff Time and Cost (Bank Budget Only)	
	No. of staff weeks	USD Thousands (including travel and consultant costs)
Lending		
FY04		137.51
FY05		138.71
FY06		331.21
FY07		16.00
FY08		0.00
Total:		623.43
Supervision/ICR		
FY04		0.00
FY05		0.00
FY06		2.41
FY07		133.63
FY08		62.68
Total:		198.72

Annex 5. Beneficiary Survey Results

1. A Beneficiary Perception Survey was undertaken by an independent competitively selected firm, for assessing perceptions of service delivery improvements and their effectiveness. It covered beneficiaries of 14 completed sub-projects, selected on the basis of the criterion that they were fully functional for at least six months at the commencement of the survey. These included 8 water supply, 4 roads/streets, and 2 solid waste management sub-projects. The results are generally positive, showing that these PMSIP-funded sub-projects have responded to service delivery needs of the citizens. Key findings are:

2. ***Key Findings for Water Supply Sector:*** The survey sample included households connected to TMA water supply, as well as those that had not. 54% of respondents said that ***quantity of water*** has improved or significantly improved after the sub-projects, and 56% said ***that pressure of water supply*** has improved or significantly improved. Moreover, there has been a reduction in the use of private motors/pumps after the commissioning of the water supply sub-projects. About 20% of those respondents having groundwater pump said that they have very little use of it after sub-project completion. 70% of respondents stated that the TMA water supply is the primary source of drinking water for them.

3. 61% of respondents said that the ***quality of water used for household usage*** has improved or significantly improved after the sub-project completion. In a very encouraging result, there has been ***significant switching to TMA supply as primary source of water for household use*** after the sub-project: 64% of all respondents used private-bore/hand pump as primary source for household use before sub-projects. Now, 74% of all respondents use TMA water supply as primary source for household use.

4. There has also been ***significant switching to TMA water supply as a primary source of drinking water*** after the sub-project - 49% used private-bore/hand pump as primary source before sub-project, and out of these 71% now use TMA water supply as the primary source. Moreover, the perception of improvement in drinking water quality is higher for those using TMA water as a primary source of drinking water - with perception of improvement increasing to 71% of respondents compared to 50% overall.

5. ***Key Findings for Roads and Streets Sector:*** 66% of beneficiaries said that access had improved after the sub-project, and 87% said that travel time has reduced. 70% of drivers felt that there has been a reduction in repair and maintenance cost of vehicles after the sub-project, while 74% of drivers felt that there has been a reduction in fuel consumption cost. 83% of beneficiaries said that there had been an increase in value of property along the roads, and 75% indicated improved business opportunities along roads. Broadly similar results were seen for the one street pavement sub-project which this survey included.

6. ***Key Findings for Solid Waste Management Sector:*** 72% of respondents confirmed improvement in primary collection of solid waste and cleanliness of their neighborhoods after sub-project completion. 52% of respondents reported door to door collection of solid waste after the project, compared to 35% saying this also happened before the sub-project. 33% of households are disposing waste in a container/bin placed by the TMA, compared to only 7% before the project. Regularity in collection from containers/bins has also improved, with 56% of all respondents stating that it is collected on daily and/or

weekly basis. 71% of respondents stated that there is an improvement in transportation of solid waste. After the sub-projects, only a quarter of respondents have said that informal dumping is a major source of environmental pollution, compared to half the respondents saying that this was a problem before the sub-projects. Finally, results suggest improved efficiency of TMA staff in complaint resolution, due to the combined effects of sub-projects and the Complaint Tracking System.

Annex 6. Stakeholder Workshop Report and Results

1. Tehsil Municipal Administrations (TMAs) represented the most important stakeholders for the interventions under the project, owing to their centrality to urban local governance, and the provision of municipal services in the small and medium cities in Punjab. The Project has strived to closely engage with the TMAs during preparation through the active participation of the leadership of seven TMAs, and subsequently throughout implementation and completion. This engagement has allowed PMSIP to consistently use the approach of piloting, learning, and scaling up for its interventions, and use feedback from participating TMA officials to customize and improve initiatives to better address user requirements.

2. As part of the Project completion phase, two main instruments were used to capture the views from stakeholders and record the experiences and lessons learned during Project Implementation. These included:

a) Experience Sharing Workshops with TMA Officials;
b) Structured recording of feedback from TMA officials at all levels through the Second Round of the Institutional Development Assessment

Experience Sharing Workshops with TMA Officials

3. Experience-sharing workshops were held with key TMA officials during missions throughout project implementation. Four such half-day workshops were organized during one of the last missions before project completion. Four key TMA officials were invited from each of the 37 partner TMAs that were project beneficiaries till the scaling up in 2010. The participants included Tehsil Municipal Officers, Tehsil Officers (Finance), Tehsil Officers (Implementation and Services) and Tehsil Officers (Planning and Coordination). The objective was to hear their views on the performance of PMIP; where they found its support useful, and where it could have done better. A summary of the discussions from these are presented below:

4. TMA officials overwhelmingly enumerated ***the benefits of PMSIP's ID interventions***. They opined that due to the ID initiatives, both municipal service delivery and TMA performance management had considerably improved.

5. ***The Complaint Tracking System (CTS)*** has improved citizen complaint resolution as TMAs now have full information on the status of each complaint. The establishment of a complaints cell and regular reporting of complaints data has been helpful in standardized complaint tracking, resolution, and analysis by nature and type of complaints.

6. ***The Performance Management System (PMS)*** has helped in the systematic monitoring and tracking of data on the status of various municipal services, which can now be used to guide manager-level development decisions.

7. ***Municipal Planning and GIS-based Mapping*** of services assists TMAs in the development of their Annual Development Plans by providing an input into the process of allocation of resources to various municipal service sectors. These maps not only assist in investment planning and prioritization of new infrastructure investments, but have also become the basis for land use classification and surveys.

8. The development of ***TMA Websites*** has also been hailed as public disclosure of information has been facilitated. Moreover, while staff was initially illiterate in the use of computers, that has now changed and they are maintaining technology-based systems themselves. In essence, they admit that the ID interventions have led to a change in the culture of TMA staff and its approach.

9. ***Operations and Maintenance of Infrastructure Assets*****:** The option of management contracts for capital assets was discussed with TMAs. TMA Bhalwal mentioned that it is considering contracting the management of some of its water supply schemes to an NGO. This would involve long term contracts on no profit no loss basis. The other TMAs present were keen to learn from this experience. It was also suggested that regular trainings of TMA staff specifically focusing on O&M of capital assets can be used in lieu of management contracts or new staff hiring, to better maintain these assets. PMDFC can be a strong vehicle for such trainings, given its past record.

10. TMA officials were also strongly in favor of other agencies and entities undertaking infrastructure investments in TMAs' jurisdiction being required to coordinate better with the TMAs, since they had to shoulder the O&M responsibilities of the assets created. This could be done via signing an MOU with the TMA, or even requiring an NOC from the TMA before beginning capital projects in TMA jurisdiction.

11. TMA officials were also of the opinion that the inclusion of the planning staff (TO-Planning) in infrastructure development process will be fruitful. This will ensure that new capital asset creation aligns with the overall TMA plans, as planning staff were best suited to give holistic information on the status of assets and service infrastructure in the TMA.

12. ***Own-Source Revenue Generation:*** The level of financial self-sufficiency of TMAs and options to improve it were also discussed. TMA officials mentioned the need for higher level support (from the Province) in raising taxes (such as on transfer of property, rates, and user charges (such as for water supply). This support is not always forthcoming, thus keeping TMA resources low. Beyond this, TMA officials expressed interest in working with PMDFC to explore ways to enhance own source revenue generation using better utilization of existing sources. The database of water consumers developed and computerized billing of water connections supported through the CFMS can further assist in generation of OSR.

13. ***Improvements in Planning and the Role of Town Officer (Planning):*** The TOs Planning suggested that since data was now available through GIS-based mapping, it could be used for more sophisticated purposes like Land Value mapping within the urban area limits. This would assist in efficient collection of commercialization fees, property tax revenue and other receipts. Moreover, they strongly supported provision of GIS training to TMA staff and the housing of GIS-based data at the TMA level, so that TMA staff can update the maps and data as needed. A number of TOs (P) volunteered to train TMA staff as well as update maps themselves.

14. ***Procurement Procedures and Sub-Project Implementation*****:** In general there was positive feedback on the project implementation model which made TMAs responsible for civil works contract, with supervision support from a firm hired by PMDFC. This provided management support to TOs I&S. However, in some TMAs where the multiple contracts were running, the need to bring in more resources

to support in contract management was highlighted. Similarly**, t**he project did not allow pre-registration of firms but the TMA's own processes required reference to the list of pre-registration firms. TMAs supported the idea of having a transparent and disseminated system of pre-registration.

Results from the Second Round of the Institutional Development (ID) Assessment

15. The ID Assessment, including a detailed survey and follow-up analysis work was completed by PMDFC in early 2013, with assistance from the Bank Task Team to systematically assess the impact of ID initiatives implemented. The first round conducted in 2009 at the MTR stage, covered 19 partner TMAs of the first phase, while the second one focused on 37 (including the 19 original ones) partner TMAs. The data collected provides detailed feedback on the extent of usage and utility of each ID intervention, as well as possible future directions that these interventions could take.

16. Results from the second round of the Assessment[51] suggest that extending the scope to a larger number of TMAs resulted in the intended replication of key benefits to the newer TMAs. Moreover, a greater level of satisfaction and achievement of higher level benefits in older partner TMAs demonstrates a successful deepening of ID interventions. The results provide strong evidence to suggest that TMAs are increasingly using these tools in more sophisticated ways for planning, O&M, and decision making.

17. ***Complaint Tracking System (CTS):*** Adoption of the Complaint Tracking System (CTS) has made possible *the* systematic organization of complaint information, standardization and reduction of resolution time, efficient redressal of individual complaints, and has in turn resulted in enhanced public confidence in the complaint resolution systems. TMAs are also using CTS for identification of problem areas and Rehabilitation and Maintenance (R&M) needs.

18. ***Performance Management System (PMS):*** Introduction of the Performance Management System (PMS) has enabled TMA officials to quantify municipal services' coverage, evaluate municipal services' quality, and monitor TMA staff performance. Moreover, survey results indicate that TMAs are beginning to utilize PMS for more sophisticated objectives such as identification of R&M requirements, and decision making on service delivery needs. This has formed a firm base to move on areas such as budget allocations, identification of capital investments, and O&M allocations.

19. ***Computerized Financial Management System (CFMS):*** The Financial Management System (FMS) has successfully provided an automated accounting and financial management system in partner TMAs, and has improved generation of financial reports, reconciliation of accounts, and maintenance of a ledger of receipts and expenditures. Subsequent additions to CFMS have facilitated TMAs towards the recovery of arrears, and increasingly employ electronic record-keeping and bill generation for water supply consumers. However, a full transition to CFMS will only be achieved if the use of CFMS reports is allowed as valid audit documents.

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[51] The results from the Second Round of ID Assessment are available in full in the public domain at: http://pmdfc.org.pk/Content/Uploads/assessment_report1.pdf

20. ***Computer Trainings and Websites:*** IT trainings conducted in TMAs have made a major contribution towards developing an IT culture. TMAs are increasingly aware of the significance of *Websites* for disseminating information regarding upcoming and ongoing projects, tenders, major events, budgets, etc. to the citizens. While websites are still being updated less frequently than intended, greater ownership and focus from TMA management demonstrates improvements in this regard. TMA officials have found IT trainings to be very useful in developing an IT culture.

21. ***Participatory Planning:*** The Planning Process under PMSIP included the development of GIS maps; preparation of spatial plans; and a demand-based prioritization of sub-projects. TMA management is successfully using GIS Maps for planning infrastructure investments. An important benefit of the planning exercise conducted in partner TMAs has been the subsequent availability of GIS-based maps for infrastructure investment planning, and the growing awareness amongst the planning staff and TMA management regarding the utility of these maps. An increasing number of TMAs are selecting projects from the Prioritized List of Investments for their development decision making and more TMA staff is finding value in the demand-based planning exercise now.

Annex 7. Summary of Borrower's ICR and/or Comments on Draft ICR

The current section includes key sections from the Implementation Completion Report shared by the Punjab Municipal Development Funds Company (PMDFC) which is the principle implementation agency for the TMA Component.

Key Sections of Implementation Completion Report from Punjab Municipal Development Funds Company

1. Project Development Objectives

1. The objective of the project was to improve the viability and effectiveness of urban services provided by the participating TMAs, and to make such improvements sustainable and replicable in other TMAs through the creation of a performance based management framework at both TMA and provincial levels.

2. The objective was quite relevant as TMAs were newly created under PLGO 2013 and were assigned *specific* functions relating with municipal services. Therefore Banks interventions were timely and objectively planned. The objective was successfully achieved by introducing institutional and infrastructural initiatives in municipal bodies. Initially, 19 TMAs were selected and the scope was finally extended to 105 TMAs.

2. Implementation

3. **Infrastructure Development:** PMSIP's infrastructure development grants have financed investments (sub-projects) in selected TMAs. TMAs were ranked on the basis of performance criteria. The top ranked ones were eligible to *access* PMSIP funding subject to their agreement to fully implement the Institutional Development initiatives, demonstrate a service delivery need, and agree to adequately fund the subsequent O&M of the service infrastructure so developed.

4. The infrastructure development grants have enabled TMAs to invest in enhanced municipal service delivery in a managed and sustainable manner. Performance criteria were used to provide funds to better performing TMAs for demand-based investments in service delivery infrastructure. Investments for completed sub-projects include rehabilitation, improvement, and coverage expansion in water supply (17 sub-projects), roads and streets (14 sub-projects), solid waste management (7 sub-projects), sewerage and sewage treatment (1 sub-project), parks (1 sub-project) and firefighting (1 sub-project). The status of all PMSIP sub-projects is summarized below:

Status of PMSIP Sub-projects

Status	**No. of sub-projects**
Completed	39
In Process of Closing	2
Terminated (later completed by TMA and GoPunjab funds)	3
Total	**44**

5. These 39 completed sub-projects have taken place in 29 different urban centers. Out of a total of almost PKR 3 billion in expenditure, approximately half has been spent on water supply sub-projects. This includes extension and improvement of networks, as well as replacement of worn-out equipment. There has also been a growing focus on sub-projects in the solid waste management sector.

6. **Institutional Development:** PMSIP introduced a number of Institutional Development activities for enhancing TMAs ability in municipal services delivery to the public. An epigrammatic view of PMSIP Institutional Development interventions is as under:

7. ***Citizen Complaint Tracking and Redressal Systems (CTS):*** It was designed and implemented in 105 TMAs to comply with the requirements of PLGO 2001 and was in line with the practices of good governance where active feedback of citizens in the form of complaints is received and acted upon by the urban local government. PMSIP devised a comprehensive complaint resolution and redressal *system* with standard operating procedures for the TMA staff. Citizens were provided the opportunity to log their complaints through telephone as well as through email. CTS helped in allocating funds for the repair and maintenance of municipal services in areas which required immediate and long term improvement.

8. ***Centralized Province-wide Performance Management System (PMS):*** Performance Management System designed with the technical assistance of the experts from the World Bank helped in developing a baseline of the performance of TMAs. Subsequently, realistic performance *improvement* plans were made to achieve targets set for improving access and coverage to municipal services. PMS has now been automated in 105 TMAs and the partner TMAs submits their reports on KPIs through an online database.

9. ***Computerization of Financial Management Systems (CFMS):*** CFMS was introduced in 102 TMAs to streamline the budgetary data of the TMAs of Punjab so that issues related to manual book keeping and financial planning could be avoided. This objective was successfully achieved by PMSIP and financial data of the partner TMAs of Punjab has been properly automated which has increased the transparency and accountability manifolds. CFMS uses the New Accounting Model (NAM) and is fully compatible with the World Bank funded PIFRA system.

10. ***Participatory Planning for prioritization of Investments:*** Urban *planning* was a big challenge for the nascent local urban governments whereby they were required to plan for the entire cities with meager resources. PMSIP, with the use of GIS technology to map the status of municipal services and to classify cities into different zones, assisted the 104 TMAs in developing Plans for urban development whereby development projects were identified with the technical assistance of PMSIP and the same were prioritized by adopting a participatory approach in the light of the wishes of local citizens.

11. ***Creation and Implementation of Operations and Maintenance (O&M) Framework:*** Infrastructure developed by successive governments in general and urban local governments in particular was deteriorating due to the absence of operation and maintenance. PMSIP realized the need to provide the urban local governments with an "Operation and maintenance Framework" that could guide them *towards* taking the necessary and timely steps for O&M of infrastructure. The framework provided by PMSIP will enhance both the performance and life of infrastructure of urban local governments.

12. ***Creation and Optimal Use of Up-to-date and User-friendly Websites:*** PMSIP provided the TMAs with an opportunity to benefit from the use of information technology whereby TMAs could share and disseminate information about their working with the citizens. Websites developed for 103 TMAs under PMSIP also fulfilled the transparency and accountability *requirements* laid down by the governing statute of PLGO 2001 which required all local governments to share their financial and administrative information with the citizens.

13. ***IT Training and Support for TMA Staff:*** PMSIP bridged the capacity gap of officials of TMAs with respect to office working and IT training through the provision of necessary trainings to 1136 staff members of partner TMAs while taking care of the much needed hardware support as well. The trained staff worked for successful implementation of PMSIP interventions like TMA websites

14. PMDFC also provided support in the capacity enhancement of the Local Government Department in Punjab, which helped in developing a culture of accountability, transparency, good governance and informed decision-making.

15. Summarized Implementation Process for Institutional Development Interventions

a) Performance Management System (PMS)

Stage 1	Stage 2	Stage 3
1. Core performance indicators (PIs) selected 2. Data collected / reporting plan developed on PIs on municipal services 3. Sources of data on PIs identified 4. Various classroom and hands-on trainings provided, with refreshers for different tiers of TMAs 5. Data collection / reporting on PIs 6. Data cleaning 7. Baseline information / values on PIs set	1. Data analysis 2. Performance improvement measures 3. Service Improvement Plans introduced 4. Target setting 5. Performance grants by PMDFC	1. Web-based data consolidation software developed 2. Trainings on web-based software provided 3. Test run at PMDFC and in partner TMAs 4. Web-based system operationalized. 5. Data Integration & Analysis Cell established at LG&CD department (Provincial Level). 6. Strengthened software on the basis 7. of feedback received from TMAs 8. Data Consolidation Software housed 9. at LG&CDD with on-going trainings /hand holding sessions.

b) Complaint Tracking System (CTS)

Introduction of Manual CTS	Transforming Manual CTS into Computerized CTS	Strengthening / Deepening of CTS	Usage of CTS data for Service Improvement Plans
1. Standardized central complaint cell established 2. Standardized SOPs for CTS developed 3. Classroom and hands-on trainings provided, with refreshers for 4. different tiers of TMAs 5. Standardized complaint registers developed and provided 6. Complaint cell in charge designated, with separate space, telephone lines etc.	1. Desktop software for computerized CTS developed 2. Computers, printers, and UPS provided to TMAs 3. Training on complaint software provided 4. Continuous trouble shooting on the basis of feedback	1. Integrated web-based software developed 2. Training on web-based software provided 3. Test run of web-based software at PMDFC and in partner TMAs 4. Web based system operationalized 5. Strengthened software on the basis of feedback received from TMAs 6. Data Consolidation Software housed at LG&CD department with on-going trainings /hand holding sessions.	1. Data analysis 2. Performance improvement measures 3. Improved registration / redressal mechanism enables TMAs to better identify the problem areas

c) TMA Websites

1. Domain registration and hosting of TMA websites
2. Standardized templates for websites developed
3. Data as per standardized templates collected / compiled
4. Class room, refresher, and hands on trainings provided
5. TMA websites launched
6. Linkages of PMS and CTS software developed with TMA websites

d) PMSIP Planning

Stage 1	Stage 2	Stage 3
For 37 TMAs following tasks were completed: 1. Secondary Data Collection 2. Orientation Workshops /Meetings with TMAs 3. Field Data Collection & Analysis for planning and infrastructure information 4. Geographic Information Systems (GIS) based Maps for municipal services 5. Prioritization Workshop in TMAs for infrastructure projects 6. Structure and Action Plans of Towns 7. PMSIP Planning Reports	For 68 scale-up TMAs following tasks were completed: 1. Secondary Data Collection 2. Orientation Workshops /Meetings with TMAs 3. Field Data Collection & Analysis for planning and infrastructure information 4. Geographic Information Systems (GIS) based Maps for municipal services 5. Prioritization Workshop in TMAs for infrastructure projects 6. Structure and Action Plans of Towns 7. PMSIP Planning Reports	1. GIS training provided to 7 pilot TMAs 2. GIS Map Viewer developed and placed at PMDFC website for 104 TMAs 3. Conversion of Planning Report Data into GUI based Database TMA developed and placed in PMDFC Website for 104 TMAs

e) Computerized Financial Management System (CFMS)

Introduction of CFMS	Start of Data entry into CFMS	Strengthening / Deepening of CFMS	Usage of CFMS data for Service Improvement Plans
1. Delivery of hardware dedicated for CFMS (computers, ups, and printers). 2. Hands on training for the CFMS users. 3. During the training accountants were also trained to use CFMS. 4. Classroom and hands-on trainings provided, with refreshers for different tiers of TMAs. 5. Proper space was created for CFMS users.	1. Start of parallel data entry into CFMS. 2. 3,6,9, and 12 months data was entered and reconciled with manual records 3. Training continued during the data entry phase for CFMS 4. Continuous trouble shooting on the basis of feedback provided by TMA staff	1. Integrated web-based software developed 2. Training on web-based software provided 3. Test run of web-based software at PMDFC and in partner TMAs	1. Data analysis 2. Performance improvement measures / identification of problem areas

16. **Monitoring and Evaluation:** A comprehensive M&E system was developed for monitoring of infrastructure and institutional development components of PMSIP. This included steps for:

a) Implementation monitoring
b) Process monitoring
c) Output and Outcome monitoring

17. For institutional development activities, an implementation monitoring system was developed that recorded the procedures and steps followed in the introduction of all Institutional Development activities in 105 partner TMAs.

18. For infrastructure schemes, a more rigorous system for implementation monitoring was developed, given the scale of financial involvement:

a) ***At PMDFC level:*** Separate full-time highly qualified Consultants were hired from the private sector responsible for: Planning and Scheduling; and Contract Management.
b) ***At Scheme level:*** a Resident Supervision contract was given out to qualified engineering consultancy firms to provide quality assurance and support at the field level

c) ***At TMA level:*** constant support and hand-holding was provided to TMA on following best practices and reporting progress on financial and physical status of schemes.

19. For institutional development activities, a comprehensive process monitoring system was developed that tracked the procedures and systems being followed for each Institutional Development activity at the TMA level. This was centrally monitored by PMDFC and closely tracked the processes at the TMA level that have been introduced due to these Institutional Development interventions.

20. ***Result Management System Approach:*** M&E matrices for Institutional Development interventions using a result management system approach were developed and actual data was entered in these matrices periodically to evaluate the impact created by Institutional Development interventions. For infrastructure schemes, contract management SOPs were developed to systematically track the performance of TMAs in managing these schemes from project start to completion stage. These SOPs were introduced in partner TMAs by PMDFC and then tracked centrally throughout the length of the scheme.

21. ***Quarterly Status Report on Improvements/actions for Adjustments in Contract Management:*** Require monthly report from consultants on delays, the reports from the consultants were demanded on periodic based to monitor the delays of activities affecting the progress of sub project. These reports were certified and accepted by contractor, with proposed mitigation actions taken from contractor's side.

22. ***Delay Analyses of PMSIP Infrastructure Sub-projects:*** These analyses were conducted to evaluate the factors causing delay in the infrastructure sub projects.

23. ***Safeguard and Fiduciary Compliance:*** PMDFC has employed a robust environmental safeguards management system. Below is a synopsis of environmental safeguard adopted by PMDFC.

Sr. No.	Detail	Numbers
1	Sub-projects completed	39
2	Sub-projects in Progress	02
3	Environmental Approvals Granted by Punjab EPA	37
4	Review in Progress (04 sub-projects of Water Supply Machinery replacement do not need environmental approach)	0
5	Sub Projects designed but not executed	06
6	Public Hearing conducted	39
7	Field Visit for Environmental Compliance / Monitoring (total-to-date) by consultants / PMDFC	71
8	Training sessions /workshops with TMA Staff	09
9	Training Session on Occupational Health and Safety with Contractors	14
10	Sewer Cleaning Equipment provided in 26 TMAs	61
11	Supply of Spray Pumps with Safety Gears / Protection Kits to 105 TMAs	1,625
12	Supply of Carry-over Shoulder Foggers with Safety Gears to 105 TMAs	520
13	Supply of Vehicle Mounted Foggers with 124 Safety Gears provided to 31 District Headquarters.	31

3. Assessment of Outcome

3.1 Relevance of Objectives

24. The objective was quite relevant as TMAs were newly created under PLGO 2001 and were assigned specific functions relating with municipal services. Therefore Banks interventions were timely

and objectively planned and were such that future changes could easily be incorporated at any time. The objective was successfully achieved by introducing institutional and infrastructural initiatives in municipal bodies. Earlier 37 TMAs were selected and then the scope was extended to 105 TMAs.

3.2 Achievement of Objectives

25. The Project has significantly achieved its development objectives. This is demonstrated by the performance against the agreed outcome and intermediate outcome indicators.

Indicator Name	Baseline	Actual	End Target
1. % of households connected with water supply system	40% (average of 11 TMAs with PMSIP water supply sub-projects)	53% (average of 11 TMAs with PMSIP water supply sub-projects)	63%
2. % of street lights working	70% (average of 105 TMAs)	73% (average of 105 TMAs)	75%
3. % of solid waste disposed per day at landfill site	0% (No landfill sites operational)	74% (average of 6 TMAs with Landfill sites developed under PMSIP sub-projects)	70%
4. Number of TMAs staff trained in IT, planning, O&M etc.	1,000	3,137	2300
5. Number of TMAs having updated GIS-based service maps	30	104	100
6. Number of TMAs using FMS generated reports for the annual local fund audit.	0	0	10
7. Number of TMAs having updated plans	20	104	75
8. Number of TMAs generating monthly PMS reports (at least 9 reports in a year)	12	56	40
9. Number of TMAs Having 90% complaint resolution efficiency	20	81	75

26. Moreover, the results from the independent Beneficiary Perception Survey show high level of satisfaction among beneficiaries from infrastructure investments. Similarly, the findings from the Institutional Development Assessments provide significant evidence that the intended results have been achieved.

4. Assessment of Bank and Borrower Performance

4.1 Bank's Performance

Rating: Satisfactory

27. The Bank's performance is rated as Satisfactory, based on a cumulative analysis as listed below.

Criteria	Rating	Justification

Strategic Relevance and Approach	Satisfactory	The objectives of the PMSIP were quite relevant to Pakistan context where relatively new legal and administrative structures such as PLGO 2001 had resulted in a significant revision of roles and mandates at the local government level in the Punjab province and designed in consultation with all stakeholders especially Government of Punjab. The preparation of the project was flexible in design, which improved implementation readiness. Municipal services are considered as a vital need for improving the quality of living and well-being. Therefore, the Bank's intervention in the urban sector through PMSIP was both timely and objectively planned.
Technical, Financial, and Economic Aspects	Satisfactory	The project was prepared after thorough consultation with all stakeholders and appropriate interventions were designed in supporting the urban sector in the Punjab province. At the plenary stage, the baseline information collected was quite adequate. A proper evaluation was conducted to assess the capacity of the borrower and implementing agency in implementing the project which used in the project planning, design and implementation. Technical guidelines regarding processes, procurement of services and tools for infrastructure as well as implementation of Institutional and infrastructure development interventions and contract management were provided.
Policy and Institutional Aspects	Satisfactory	The project's institutional framework was practical enough to cater to the challenges faced during implementation. Framework. The Bank's Task Team conducted various consultative meetings with the provincial government and included customized interventions to assist Local Government in fulfilling its mandated responsibilities within the new legislative framework developed under PLGO 2001.
Stakeholder Consultation	Highly Satisfactory	The close coordination among stakeholders helped the implementation process significantly. The Bank regularly held consultations with all relevant stakeholders of the project particularly during the project design with the government counterparts and the active participation of the TMAs during project preparation. In other aspects, Bank continuously held discussions with LG&CDD, PMDFC, P&D and the TMA officials from time to time during the implementation and evaluation stages. Various visits of TMAs were conducted along with implementing agency during the initial implementing phase of the project to analyze and access the progress of components so that any error found could be removed and interventions may be replicated in other TMAs with a solid base and outputs.
Implementation Arrangement	Satisfactory	Bank was keenly involved in assisting the implementing agency of PMSIP in various aspects. Through support missions, Bank conducted meetings with stakeholders, discussions, issuance of various supportive documentation and visits on project sites. Infrastructure and Institutional Development related technical inputs were provided from time to time. Obstacles related to the implementation of certain project components were discussed with the GoPb and solutions were recommended.
Monitoring & Evaluation Arrangements	Highly satisfactory	The project activities was effectively monitored by the Bank through various missions visiting the sites and taking thorough briefings from the stakeholders such as; officials of TMAs, consultants and especially from the implementing agency. Periodic reports were fetched from implementing agency on infrastructure and Institutional Development components indicating the progress of the project. Moreover, it was also required by the WB to conduct Beneficiary Perception Survey for completed infrastructure sub projects, Institutional Development assessment exercises as well as various analyses such as result chain and delay analysis etc. to track the issues faced by implementing agency. For the purpose, intensive guidelines and technical support were provided.

28. The Bank's overall performance is considered satisfactory. The Project Development Objective was significantly achieved. One of the components of the PDO was institutional development of TMAs which not only strengthened the municipal service delivery institution but also set many valuable examples. For infrastructure projects, the Bank provided both technical and financial support. It is understood that during the design and development of the project, some of the decisions made were very relevant and in harmony with the realities of country's background. However, if any gaps existed during the implementation phase, the Bank realized and provided timely support to PMDFC in particular and all other stakeholders in general. The Bank was well-informed about the major constraints during the implementation of the project that were beyond the PMDFC control. Therefore, the Bank approved extension requests twice for around three years beyond the originally planned completion date.

4.2 Borrower Performance

Rating: **Satisfactory**

29. The *Borrower's* performance rating is based on the below analysis.

Criteria	**Rating**	**Justification**
Government Ownership and Commitment to achieve the Development Objective	Satisfactory	The LG&CDD, Government of Punjab has been highly committed to achieve the Project Development Objective by utilizing all kinds of resources at its disposal. It showed strong ownership of the project during the design, preparation, and implementation.
Provision of Enabling Policy Environment, sectoral and institutional policies (legislation, regulatory etc.)	Satisfactory	At start of the project, having low level of technical capacity in the urban municipal sector, LG&CDD has gradually been building up on its capacity and has taken some important steps to establish a framework and mechanism for the using performance data from TMAs. It is to be noted that the LG&CDD has provided its relevant support to PMDFC wherever a policy level input was required. However, after completion of the project on November 30, 2013 the interventions introduced under PMSIP require appropriate legal cover for sustenance and TMA ownership.
Adequacy of Stakeholders Consultation	Satisfactory	The LG&CDD has made every possible effort to ensure that adequate coordination is maintained among various stakeholders. Its beneficiary and stakeholder consultations were adequate. LG&CDD provided support to the donor and to the implementing agency in holding a proper dialogue with the stakeholder's through workshops and understanding the issues pertaining to the PMSIP interventions not only in the first primary cycle but also in the middle part when it needed to be extended for further two years.
Readiness for Implementation/ implementation arrangements	Satisfactory	LG&CDD supported PMDFC (Implementing agency) in all aspects of implementation of PMSIP. It delegated the overall implementation of the project to the PMDFC and provided subsequent guidelines time to time. During the mid part of PMSIP implementation, continuing ambiguity on the future of the local government system affected decision-making by TMA leadership, reduced the pace of sub-project implementation, and in turn disbursements.
Timely resolution of implementation issues	Satisfactory	The LG&CDD made substantial efforts to resolve the PMSIP implementation issues timely. However, the LG&CDD remained less successful in coordinating with Auditor General of Pakistan to provide the legal cover to CFMS.

Utilization of M&E data, HR in decision-making and resource allocation	Satisfactory	The LG&CDD being the parent department of all municipal bodies has the mandate of oversight and monitoring of LG performance. An integration cell has been housed at LG&CDD for robust monitoring and evaluation (M&E) system. This is linked to PMDFC's M&E system, through which TMAs report on agreed municipal service indicators. Through this LG&CDD is able to undertake performance monitoring of LGs. In future, LG&CDD can begin to seek data on required key performance indicators from the TMAs. Due to the scaling up of Institutional Development interventions across all TMAs in Punjab, majority of the LG staff across the province has benefitted from the operational improvements introduced under PMSIP. This has resulted in the creation of an 'effective mass' within the entire LG cadre for ensuring sustainability of PMSIP's interventions introduced in TMAs. Moreover, Institutional data provided substantial immediate benefits and the setting-in of tangible longer term help for the government in utilizing the resources in true manner.

4.3 PMDFC Performance (Self-Assessment)

30. PMDFC has adopted systematic approach to design and implement PMSIP both Institutional Development and Infrastructure Development components keeping in view the field challenges such as; capacity constraints at TMAs level, lack of relevant information, commitments and target oriented approach. Technical support throughout the project period was extended by PMDFC as it had selected skilled human resource according to the scale and requirement of the project interventions. PMDFC teams conducted thorough field visits to suggest practical measures within the given constraints for suggesting improvements for both institutional and infrastructure development initiatives.

31. The implementation of the Standard Operating Procedures (SOPs) for contract management in the various infrastructure sub-projects was monitored by PMDFC, particularly in respect of time extensions, variations, performance guarantees, payment certificates, and completion certificates etc. Periodic contract management audits were also carried out by PMDFC. During the infrastructure development initiatives and investments at TMAs, PMDFC *contributed* strongly in improving procurement and contract management capacities by providing expertise and technical support. Required hands-on trainings to relevant TMA staff were also provided in areas of project designing, project planning, contract administration and O&M.

32. Further, all project-funded infrastructure schemes have followed the PMDFC-developed Environmental and Social Framework to ensure that their design and implementation adheres to highest standards and do not leave any significant negative impact. All sub-projects that were subject to Punjab EPA environmental permission processes have received approvals. Environmental safeguards aspects for sub-projects have been managed in compliance with relevant Bank environment policies. Furthermore, PDFMC has implemented a number of actions beyond the regulatory requirements, including strengthening of TMAs' environmental management capacity, public hearings for sub-projects, and training sessions on environmental management and occupational health and safety.

33. Institutional Development section of PMDFC provided the required technical support to TMAs, in terms of ensuring effective municipal service delivery through capacity building initiatives in accordance with scope defined under Project Development Objective. PMDFC teams conducted thorough field visits to suggest practical measures within the given constraints for improving the delivery of municipal services. Intensive trainings, both class room and hands-on, were given to the staff of partner TMAs for optimization of results. Results determined through detailed assessment exercise of Institutional Development component provided basis to enhance the scope of the institutional

development subcomponent to another 68 TMAs. PMDFC has also provided support in the capacity enhancement of the Local Government department in Punjab leading in developing a culture of accountability, transparency, good governance and informed decision making.

5. Lessons Learnt

34. **Giving TMAs More Responsibility:** The project gave TMAs far more responsibility than they were used to, by making them lead the process of large infrastructure development schemes that were funded by PMSIP. This was new for them, and enhanced their capacity over the life of the project, in project management, contract management and operations and maintenance.

35. **Testing Pilots and then Scaling-Up Across Province:** The project introduced a set of institutional development interventions in a gradual piloting process – first in 17 and then 18 TMAs. Once these had been successfully tested over a few years, they were replicated and scaled up to 68 additional TMAs across Punjab. This strategy worked very well as now 105 TMAs are beneficiaries of these well-designed and much-needed interventions.

36. **Incentives and Rewards are Vital in Maintaining LG Interest in Performance Improvements:** The best performing TMAs, ranked based on their performance in adoption of institutional development activities, were provided grants for large-scale infrastructure schemes. This incentive system allowed TMAs to compete amongst each other on high performance, and will be a key feature of PMDFC's future work.

37. **Sustainable Improvements in Service Delivery Require Robust O&M Systems:** Instead of solely providing TMAs with fully-developed large-scale infrastructure schemes to manage, the project helped build their capacity in operations and maintenance of these schemes. O&M manuals were developed and implemented at the TMA level, enhancing their capacity to manage their newly acquired systems in a sustainable manner.

38. **More TMA Ownership Needed for Some Aspects, Requiring Province-Level Guidance:** TMAs did not show enough ownership initially for some aspects of the project, both for institutional development interventions and infrastructure schemes. In the earlier stages, TMAs viewed these as requirements imposed by PMDFC, an outside entity not part of their official reporting structure. This was especially true for engineering consultancy arrangements for infrastructure schemes, which were needed for many quality assurance aspects of these schemes. The situation significantly improved in the later stages as TMAs became adequately aware of benefits from these interventions.

39. **Adequacy of Staffing and Requisite Skills Essential to Maintain and Update Systems Introduced:** In the initial phases of the project, many gains were compromised when TMA staff left or *were* transferred to other entities. This was resolved when the activities were scaled up to 105 TMAs across the province. Now, we are beginning to see the creation of a cadre of trained staff that is fully acquainted with project interventions.

40. **Documentation and Communications of Project Achievements and Good Practices Weak:** The implementing agencies could have further strengthened the systematic documentation and communication of results and achievements that were done over the last six years. This may have been an opportunity not entirely exploited in increasing the profile of the project amongst stakeholders, and developing strong champions of its interventions and results.

41. **Sustainability of achievements requires enabling environment and oversight from higher levels:** While the project has introduced a whole suite of institutional development interventions that have built the capacity of TMAs, as well as helped them design, develop, operate and maintain large scale infrastructure projects, these activities need to be further institutionalized as they require more support at the Provincial level. Mandating municipal entities across the province to adopt these interventions is the easiest way to consolidate gains and institutionalize these activities.

Annex 8. Comments of Cofinanciers and Other Partners/Stakeholders

Not Applicable.

Annex 9. List of Supporting Documents

1. Beneficiary Perception Survey for Municipal Service Investments available at: http://pmdfc.org.pk/docs/infrastructure-reports

2. Institutional Development Assessment (Volumes I and II) available at: http://pmdfc.org.pk/Content/Uploads/assessment_report1.pdf

In Project Files:

1. Resettlement Action Plan.

2. Addendum to the Resettlement Action Plan.

3. Environmental and Social Management Framework.

4. Detailed Economic Analysis for Roads Sub-projects at Pind Dadan Khan and Chichawatni.

5. Detailed Economic Analysis for Water Supply Investments at Jhelum and Liaquatpur.

6. Qualitative Economic Assessment of Institutional Development Activities.

7. Project Aide Memoires.

8. Project Implementation Status Reviews (ISRs).

9. Response of Implementing Entities (LG&CDD, PMDFC, and WCLA) with comments on the shared draft of Implementation Completion and Review Report

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Annex 10. Implementation of the Cultural Heritage Sub-component

1. The cultural heritage (CH) subcomponent was added to the Project with the objective to undertake the detailed preparatory activities that a CH initiative requires, as well as to fund a pilot. Its focus was on: (a) appropriate amendments to the existing legislative frameworks; (b) undertaking studies to recommend rationalization of institutional mandates for management of heritage assets; and (c) implementing a pilot project, which included the creation of a *Heritage Trail*, to showcase methods and benefits of conservation of cultural assets and their productive re/use. The key highlights of implementation experience of this component are discussed below.

2. ***Implementing Arrangements:*** The overall implementing agency for this subcomponent under Component-2 of the Project was Government of Punjab's Planning and Development Department (P&DD). During Project preparation, it was envisaged that the already established Urban Unit would be responsible for its management and implementation. However, soon after in September 2006, P&DD set up a dedicated agency – the Sustainable Development of the Walled City of Lahore (SDWCL) unit under the P&DD. During implementation, this has transitioned into the Walled City of Lahore Authority (WCLA) following the enactment of the Walled City of Lahore Act 2012.

3. The engagement of specialist skills required for heritage restoration activities at SDWCL Unit, and later the WCLA, was undertaken very slowly over time. This had negative consequences on the pace of implementation, particularly with regard to the pilot heritage restoration sub-project which had required stronger capacity at the implementation agency in terms of project and contract management expertise.

4. ***Legislative and Institutional Aspects:*** There are multiple legislative frameworks that govern the conservation, restoration, and maintenance of historic assets in the Punjab[52]. Their contents are at times contradictory to each other, while many clauses are outdated and no longer relevant. While progress to enact adequate legislation was slow, the promulgation of Punjab Historic Areas Planning, Development, and Regulation Ordinance 2007 represented an early success in this regard. However, the ordinance lapsed during the political transition in the country. Subsequently, the Government of Punjab enacted the Walled City of Lahore Act 2011 through the Punjab parliament, thus rationalizing and updating the legal framework operating in the Walled City of Lahore (WCL). Moreover, the legislation proved to be a key step towards supporting rationalization of institutional mandates with the establishment and operationalization of the WCLA. The Authority is currently in the process of assuming multiple responsibilities for the Walled City of Lahore, being transferred from other institutions at various levels of government.

5. The need to establish formal partnerships with relevant utility agencies such as Lahore Electric Supply Company (LESCO), Water and Sanitation Authority (WASA), Sui Northern Gas Pipelines Limited (SNGPL), and Pakistan Telecommunication Limited (PTCL) was critical to the undertaking of envisaged infrastructure improvement works. The former SDWCL unit engaged with the agencies early on with the aim to expeditiously establish Memorandum of Partnerships (MoPs). However, the signing of

[52] Like the Punjab Heritage Foundation Act 2005, the Punjab Special Premises (Preservation) Ordinance 1985, Antiquities Act of 1975, and the Evacuee Trust Property Management and Disposal Act 1975.

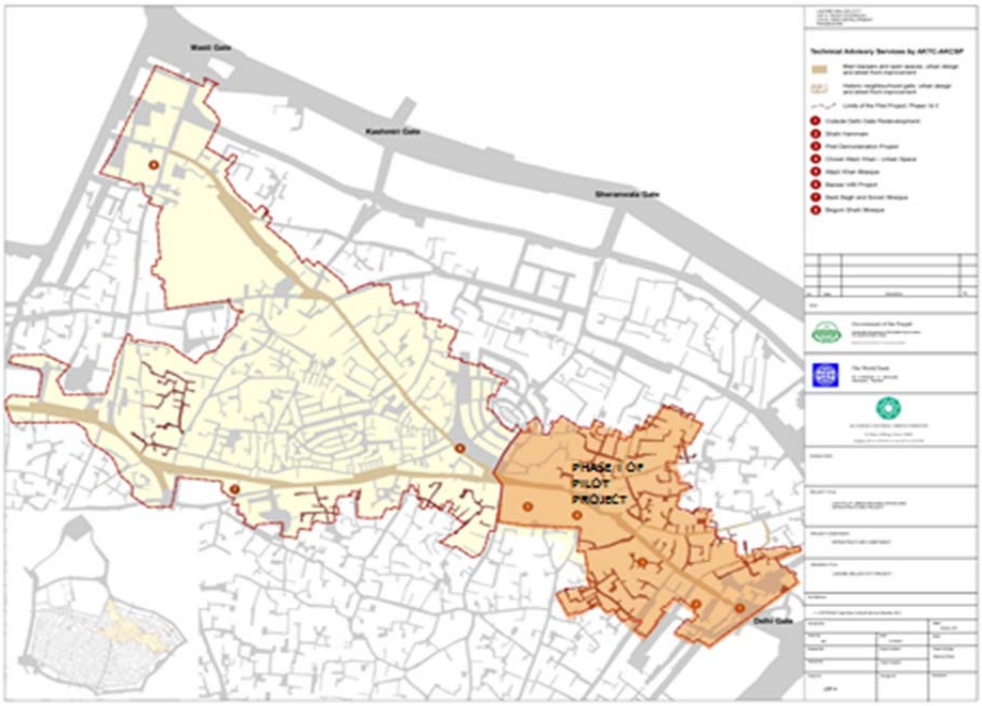
the required MoPs suffered from substantial delays due to several factors, which in turn impacted the commencement of physical works on the pilot project.

6. ***Partnership with the Aga Khan Trust for Culture:*** The CH initiative was instrumental in attracting the interest of the Aga Khan Trust for Culture (AKTC) as a development partner in 2008. The technical support from AKTC, and later its subsidiary the Aga Khan Cultural Services Program (AKCSP), led to an effective collaboration with the GoPunjab. AKTC-AKCSP provided invaluable guidance and technical assistance on the detailed preparatory activities for the Pilot Project, as well as identification of potential demonstration sub-projects along the Shahi Guzargah. Key areas that benefitted from their technical assistance included:

a) Completion of an inventory of all buildings in the entire WCL, including inventory of land use, ownership, age, and historic value, and the setting up of an operational GIS system in the AKCSP premises;
b) Completion of the detailed physical documentation of buildings along the Shahi Guzargah (SG), including the preparation of a complete inventory with detailed attributes;
c) Completion of the socio-economic survey of the pilot area;
d) Development of conceptual frameworks and detailed designs of the building facades, as well as appropriate street paving proposals. These ensured that all aspects of building asset restoration and infrastructure upgrading were designed and implemented in an integrated fashion; and
e) Preparation of a comprehensive logical framework analysis (LFA) for the sustainable development of the entire WCL over a 10 year period, as well as a more focused LFA for the Bank-funded CH component.

7. ***Neighborhood Demonstration Initiative:*** Prior to the commencement of the pilot heritage restoration sub-project, work on two streets on a sub-pilot basis was undertaken to test methods and specifications, and streamline processes. AKTC-AKCSP undertook work on Gali Surjan Singh while the SDWCL unit carried out work on Mohammadi Mohalla. Work on the latter was delayed due to termination of the original contract, with the remaining works undertaken by another contractor through rebidding. The sub-pilots resulted in the accumulation of critical technical capacity and supervision experience at the implementing agency, which informed the implementation of the main pilot heritage restoration sub-project.

8. ***Pilot Heritage Conservation Sub-project:*** The Shahi Guzargah (the Royal Route) was selected as the pilot for implementation, to showcase methods and benefits of conservation of cultural assets and their productive re/use. It is the route that the Mughal emperors followed to reach the royal fort palace, when returning from Delhi to Lahore or vice versa. The initiative includes: (i) provision of new municipal infrastructure and services (below ground as far as possible) including electrical, communication, water supply, storm drainage, sewerage, and gas supply networks which were obsolete, inadequate, or completely absent; and (ii) rehabilitation of the urban fabric through facade and street improvements.



9. The overall scope of physical works under the pilot project included, in addition to infrastructure rehabilitation works:

Number of streets to be paved:	57
Number of facades to be improved:	773
Number of buildings in the project area:	1028 (including buildings without façade work)

10. Due to a variety of reasons including the nature of works involved which could not be fully estimated upfront; weak contract management capacity at WCLA; and time and effort needed to undertake preparatory activities before implementation could begin the Works Contract remained incomplete at project closing. The status of implementation was completion of 72% of façade improvement work and 52% of street surfacing work. Similarly, for the infrastructure rehabilitation, 75% of general works, 70% of water supply system, 70% of sewerage, 80% of storm water drainage, and 60% of electrical network works had been completed. The remaining works are being completed using GoPunjab funds.

11. ***Restoration of Shahi Hammam.*** The removal of encroachments from the periphery of the *Shahi Hammam* under the Project had a seminal impact in revealing the glory of this historic jewel. The AKTC has more recently been able to secure bilateral funding for its restoration. Detailed physical documentation and measured drawings are currently being developed; careful excavation to reveal the original construction and details, buried well below the current finished floor levels is underway; and research in the historic use of the spaces revealed is in progress. In view of its invaluable historic and monumental value, as well as potential to attract visitors, it is heartening to see this precious monument being scientifically restored for posterity.

12. ***Social Mobilization:*** Over time, public space in the WCL has been massively encroached upon. Detailed surveys of the pilot project area identified the need to remove *147 shops completely, with another 732 shops being affected on a temporary basis* along the Shahi Guzargah. Moreover, *264 encroachments* onto the public realm (mainly kitchens and washrooms) were identified in the 47 residential streets emanating from the Shahi Guzargah.

13. The scale of encroachment was a significant challenge to the implementation of the pilot project. The initiative has had to undertake a large scale social mobilization effort to ensure the careful community-centered implementation of its Resettlement Action Plan (RAP) and its subsequent updation. Activities included widely held consultations; baseline development of the Project Area; impact assessment and mitigation; mechanism to address grievances of the affectees during implementation; and adequate institutional capacity to implement the RAP.

14. WCLAs Social Mobilization Team (SMT) has, among other activities, conducted over 1000 meetings to create awareness among the shopkeepers, traders, and residents; helped form 10 CBOs; and helped train 48 youth of the area in technical skills, many of whom have found sustainable employment. As a result, the Project has been able to undertake successful relocation of shops and residences that had encroached on the public domain. Robust social mobilization ensured that the work was not just restricted to resettlement, but also included residents in benefit sharing through trainings and community organization. The Project has left in place a living model of citizen engagement in heritage restoration, which can serve as a platform for citizen led regeneration and tourism in the area.

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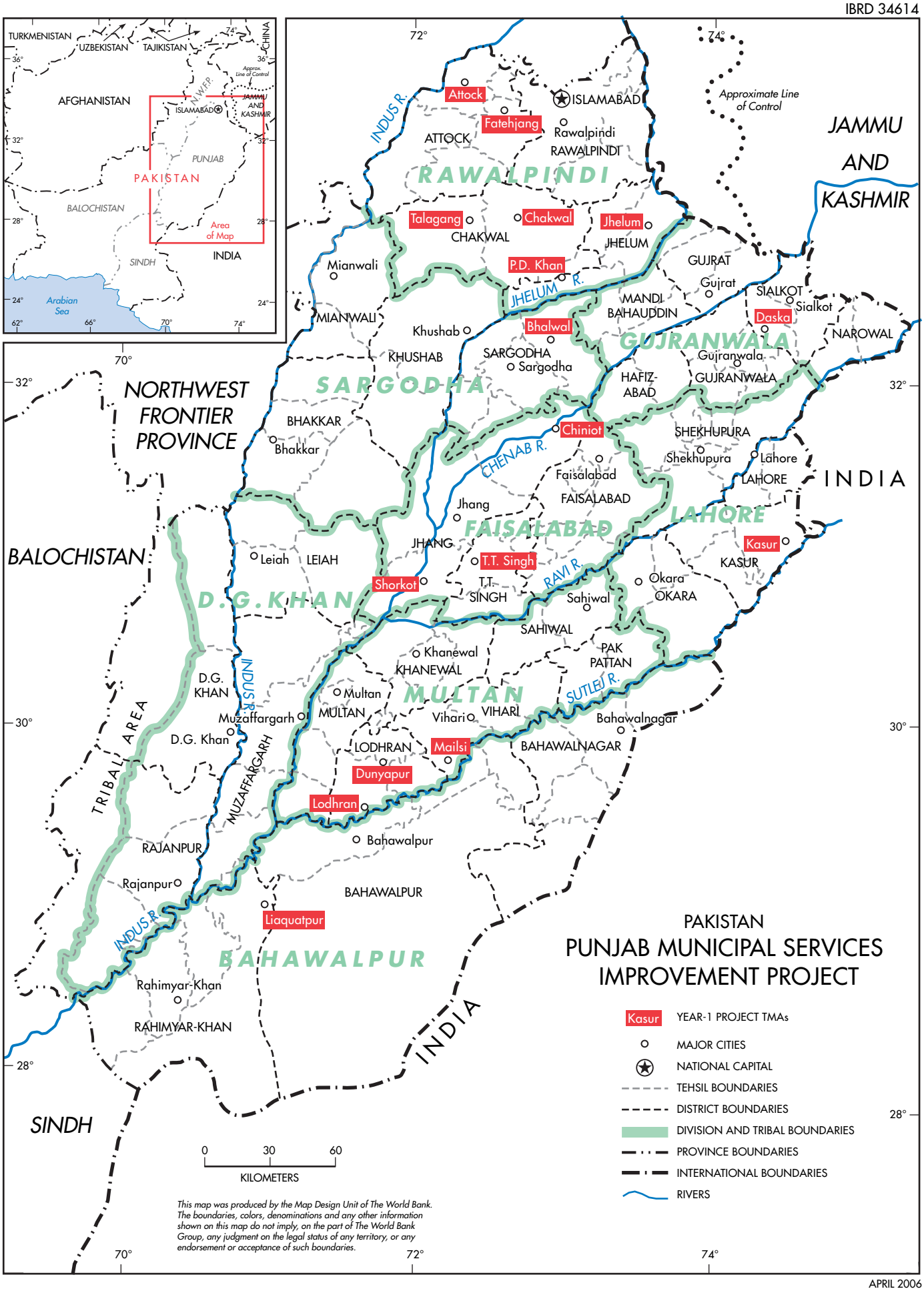

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