

FRAMEWORK FINANCING AGREEMENT
(PAK: Sindh Cities Improvement Investment Program)

Parties This Framework Financing Agreement (the “Agreement”), dated 30 October 2008 is made between the Islamic Republic of Pakistan (Pakistan), and the Province of Sindh (Sindh) on the one part, and the Asian Development Bank (ADB) on the other part.

MFF Investment Program Pakistan is committed to and will implement the Sindh Cities Improvement Investment Program (the Investment Program), which is an integral part of Sindh’s Medium Term Urban Sector Revitalization Plan and Vision 2030. Both the Medium Term Urban Sector Revitalization Plan and Vision 2030 and the Investment Program are described in Schedule 1 hereto.

The total cost of Sindh's urban sector development plan and sector strategy up to year 2030 in the water supply, wastewater management and solid waste management is estimated at \$2.3 billion. The total cost of the Investment Program, from 2008 through 2018, is expected to be equivalent to \$400 million, of which this Facility would cover up to \$300 million.

Multitranche Financing Facility The Multitranche Financing Facility (the Facility) is intended to finance subprojects for institutional and operational support, the improvements in urban service delivery in Sindh in the water supply, wastewater management, and solid waste management sectors, and operational support funding for USCs (each a "subproject") under the Investment Program, provided that such subproject comply with the criteria set out in Schedule 4 hereto and that understandings set out in this FFA are complied with.

The Investment Program will comprise the following parts:

Part A: Urban Planning, Institutional Development and Program Implementation Support

Part B: Urban Water Supply and Wastewater Management Improvements

Part C: Solid Waste Management (SWM) Improvements

Part D: Operational and Transition Support Funding

The Investment Program is divided into five 5 tranches, with tranche 1 covering eight 8 subprojects. All of these subprojects meet the agreed selection criteria set out in Schedule 4 to this Agreement and have been reviewed and found acceptable by ADB. The subsequent tranches will finance the remaining subprojects.

This FFA does not constitute a legal obligation on the part of ADB to commit any financing. At its sole discretion, exercised reasonably (including, but without limitation, when ADB is of the view that Pakistan has been in material breach of their undertakings and covenants under this Agreement or misprocurement has occurred due to fraud and

corruption), ADB has the right to deny any financing request made by Pakistan, cancel the uncommitted portion of the Facility, and withdraw Pakistan's right to request any financing tranche under the Facility. Financing tranches may be made available by ADB provided matters continue to be in accordance with the general understandings and expectations on which the Facility is based and which are laid out in this FFA.

This FFA does not constitute a legal obligation on the part of Pakistan to request any financing. Pakistan has the right not to request any financing under the Facility. Pakistan also has the right to cancel any uncommitted portion of the Facility.

Pakistan and ADB may exercise their respective rights to cancel the Facility or any uncommitted portion thereof, and ADB may exercise its right to refuse a financing request, by giving written notice to such effect to the other parties. The written notice will provide an explanation for the cancellation or refusal, and in the case of cancellation, specify the date on which the cancellation takes effect.

Financing Plan

The financing plan for the Investment Program is summarized below. Details are set out in Schedule 1.

Source of Funds	Facility	
	Amount (\$ mn)	Share (%)
ADB Ordinary Capital Resources ^a	262.0	65.5
ADB Asian Development Fund	38.0	9.5
Government ^b	100.0	25.0
Total	400.0	100.0

ADB=Asian Development Bank

^a The Ordinary Capital Resources allocation will be reduced should ADB provide additional ADF financing, not to exceed \$112 million equivalent.

^b Includes local government share; private sector investment may supplement government funding over time.

Source: ADB estimates.

Financing Terms

ADB will provide loans to finance the subprojects under the Investment Program, as and when they are ready for financing; provided that Pakistan and Sindh are in compliance with the understandings hereunder, and the subprojects are in line with the same understandings.

Each tranche may be financed under terms different from the financing terms of previous or subsequent tranches. The choice of financing terms will depend on the subproject, capital market conditions, and ADB's financing policies that are prevailing on the date of signing the legal agreements for such tranche.

Tranches may be provided in sequence or simultaneously, and some may overlap in time with each other.

Commitment charges are not payable on the Facility. They are payable only on financing actually committed by ADB as a loan. ADB rules on commitment charges, which are in effect when a tranche is provided, will apply with respect to such tranche.

Amount

The maximum financing amount available under the Facility is \$300 million.

It will be provided through individual tranches, for an amount up to \$262 million from ADB's Ordinary Capital Resources, and the remaining amount will be from Asian Development Funds. Pakistan has also requested ADB to provide an additional \$112 million equivalent from its Special Fund resources for the second and subsequent tranches under the MFF with a corresponding reduction in the available amount from its Ordinary Capital Resources so that the total available amount under the MFF will not exceed \$300 million equivalent. This additional allocation will be subject to (i) the general availability of ADF resources, (ii) Pakistan's access to such resources pursuant to ADB's Graduation Policy and the requirements of the ADF donors, and (iii) the availability of such resources to Pakistan pursuant to ADB's Policy on Performance Based Allocation for Asian Development Fund Resources. In the event that ADB will provide additional Special Funds resources not exceeding the amount of \$112 million equivalent, with interest and other terms and conditions to be determined in accordance with the then ADB's applicable policies relating to its Special Fund resources, such resources will only be used to finance eligible expenditures.

Availability Period

The last date on which any disbursement under any tranche may be made will be 31 December 2018. The last financing tranche is expected to be executed no later than 31 December 2016.

Pakistan has agreed (a) to execute the Loan Agreement for the first tranche, and (b) to cause Sindh and NSUSC to execute the Project Agreement for first tranche, both within three months from the date of approval of the Facility by ADB Board of Directors. Pakistan has further agreed that the failure to achieve this, will cause the validity of the approval from ADB Board of Directors for the Facility to lapse unless the validity of such approval is extended by ADB.

Terms and Conditions

Pakistan will cause the proceeds of each tranche to be applied to the financing of expenditures of the Investment Program, in accordance with conditions set forth in this FFA and the legal agreements for each tranche.

Execution	<p>The Executing Agency (EA) for the Investment Program will be the Planning and Development Department of Sindh. The EA, through the Program Support Unit (PSU), will support the establishment of urban service corporations, as required for cluster of the urban settlements within the talukas in Sindh (the “towns”). The Urban Services Corporations (USCs) will be responsible for day to day provision of water supply, wastewater and SWM services, as well as the implementation of the subprojects related to water supply, wastewater and SWM under the Investment Program. The EA will also provide strategic urban planning and policy support for urban development in Sindh, including support for reform initiatives through the Urban Policy and Strategic Planning Unit (Urban Unit). The Urban Unit will be established by the EA. The subprojects under the Investment Program will be implemented in accordance with the principles set forth in Schedule 1, the implementation framework set forth in Schedule 3 and the selection criteria set forth in Schedule 4 to this Agreement.</p>
Periodic Financing Requests	<p>Pakistan may request, and ADB may agree, to provide loans, under the Facility to finance the Investment Program and its related subprojects upon the submission of a PFR. Each PFR should be submitted by Pakistan and confirmed by Sindh. Pakistan will make available to Sindh the proceeds of the tranche in accordance with the related PFR, and the legal agreements for the tranche.</p> <p>Each individual tranche will be for an amount of no less than twenty five million dollars (\$25 million). ADB will review the PFRs, and if found satisfactory, will prepare the related legal agreements.</p> <p>The subprojects to be financed will be subject to the selection criteria and approval process set out in Schedule 4 hereto, satisfactory due diligence, and preparation of relevant safeguards, fiduciary requirements and other documents. Pakistan, Sindh, the USC(s) and ADB will agree on a Facility Administration Memorandum and a schedule to initiate these activities as soon as possible after the date of this Agreement, but prior to the effective date of the legal agreements for the first tranche.</p> <p>Unless notice is otherwise given by Pakistan, the Secretary or Joint Secretary of Economic Affairs Division of the Ministry of Economic Affairs and Statistics of Pakistan will be Pakistan’s authorized representative for purposes of executing PFRs.</p>
General Implementation Framework	<p>The Facility will be implemented in accordance with the general framework set out in Schedule 3 hereto. Specific implementation details may be set out in the relevant loan and project agreements.</p>
Procedures	<p>Each tranche to be provided under the Facility will be subject to the following procedures and undertakings:</p> <ul style="list-style-type: none"> (i) Pakistan will have notified ADB of a forthcoming PFR at least 15 days in advance of the submission of the PFR;

- (ii) Pakistan will have submitted a PFR in the format agreed with ADB;
- (iii) ADB may, in its sole discretion, decline to authorize the negotiation and execution of any legal document for a tranche; and
- (iv) If ADB confirms acceptance of the PFR, the legal agreements will be negotiated and executed by the parties.

PFR information The PFR will be submitted substantially as in the form attached hereto, and will contain the following details:

- (i) Loan amount;
- (ii) Description of subprojects/part to be financed;
- (iii) Cost estimates and financing plan;
- (iv) Implementation arrangements specific to the subprojects or parts;
- (v) Confirmation of the continuing validity of, and adherence to, the provisions of this Agreement;
- (vi) Confirmation of compliance with the provisions under previous legal agreements, as appropriate; and
- (vii) Other information as may be required under the Facility Administration Memorandum.

Safeguards. Attached as Schedule 5 are references to the Safeguard Frameworks that will be complied with during the implementation of the Facility.

ADB's Safeguard Policies in effect as of the date of signing of legal agreements for a tranche will be applied with respect to the subprojects financed under such financing tranche.

Procurement All goods, civil works and services to be financed under the Facility will be procured in accordance with ADB's *Procurement Guidelines* (2007, as amended from time to time).

Consulting Services All consulting services to be financed under the Facility will be procured in accordance with ADB's *Guidelines on the Use of Consultants* (2007, as amended from time to time).

Advance Contracting and Retroactive Financing Under each tranche, ADB may, subject to its policies and procedures, allow on request (a) advance contracting of civil works, equipment and consultancy and (b) retroactive financing for goods, civil works and consulting services up to 20% of proposed individual loan, incurred prior to loan effectiveness but not earlier than 12 months before the date of signing of the related legal agreement. Pakistan acknowledges that any approval of advance contracting and/or retroactive financing will not constitute a commitment by ADB to finance the related project.

Disbursements Loan proceeds will be disbursed in accordance with ADB's *Loan Disbursement Handbook* (January, 2007, as amended from time to time).

**Monitoring,
Evaluation, and
Reporting
Arrangements**

The EA through the PSU will establish Investment Program Performance Monitoring System (IPPMS) in form and substance acceptable to ADB. The IPPMS will first select a set of performance monitoring indicators relating to service delivery, institutional reform, physical implementation, and capacity-development milestones, including those in the Design and Monitoring Frameworks (Schedule 2). The EA, through the PSU, will establish baseline data for each of the selected indicators and will conduct annual surveys with the assistance of consultants and update ADB on the progress against each indicator. The EA, through the PSU, will also prepare and submit quarterly progress reports for the Investment Program, including information on the implementation progress of each subproject under the Facility.

Sindh, the USC(s), and ADB will conduct quarterly review of the progress in the implementation of (i) reform and (ii) physical elements of the Investment Program. In addition to the quarterly review missions, a midterm review of the Facility will be conducted within the fifth year of the approval of the Facility. Midterm review missions will also be conducted for each individual loan within eighteen months of loan approval of the individual loan. The reviews will include a summary of service delivery performance of the USC(s) and/or management contractors, and contracts awards and disbursement, implementation progress, including progress against reform, institutional development and capacity development milestones. The midterm review will also identify problems or weaknesses in implementation arrangements, and agree on changes needed.

Within three (3) months of physical completion of each subprogram under the Facility, the EA will submit to ADB a subprogram completion report. An Investment Program completion report will be submitted within three months following the completion of the Investment Program. These reports shall provide detailed evaluation of the subprograms and the Investment Program, respectively, covering service delivery performance of the USC(s) and/or management contractors, and the design, costs, contractors' and consultants' performance, social, environmental and economic impact, economic rate of return, and other details for each subproject and the Investment Program as may be requested by ADB.

Undertakings

Attached as Schedule 6 are the undertakings provided by Pakistan and Sindh.

ISLAMIC REPUBLIC OF PAKISTAN

ASIAN DEVELOPMENT BANK

By /sgd/ Mr. Zafar Hasan Reza
Authorized Representative

By /sgd/ Mr. Sean O'Sullivan
Authorized Representative

PROVINCE OF SINDH

By /sgd/ Mr. Nazar Hussain Mahar
Authorized Representative

SCHEDULE 1

MULTITRANCHE FINANCING FACILITY (MFF) CONSTITUENTS

A. Strategic Context

1. Pakistan is the most urbanized country in South Asia with an urban population expected to be half of the total population by 2015. There is an urgent need to revamp and upgrade major cities and towns in Pakistan to improve living standards and provide more competitive platforms for economic growth. At present, Pakistani cities and towns, including the secondary towns in Sindh, are constrained by weak local government capacity; insufficient focus on cost recovery and own-source revenue generation; inadequate infrastructure, absent or inefficient municipal service providers, and the lack of adequate urban management and planning systems. As the vision of the Government is to make cities engines of national growth, centers of economic activity and knowledge, and focal points for cultural change, ADB considers urban development a strategic priority. Investment in the urban sector in Sindh draws on ADB's demonstrated capacity in infrastructure development and its ability to catalyze public-private partnerships in service delivery. The multitranche financing facility affords scope for programmatic, long-term approach to the revitalization of cities guided by road maps for critical sector and institutional reforms. The Investment Program is fully consistent with ADB's forward assistance program in Pakistan that proposes to include urban service delivery, sustainable basic infrastructure, improved urban transport systems, and strengthened governance and institutions for better municipal management.¹ A key objective of ADB assistance to the urban sector in Pakistan is to promote efficient, effective and customer-focused service providers with incentives and capacity to improve quality, continuity and coverage of infrastructure services.

B. Road Map

1. Sector Vision and Investment Program Objective

2. The vision for the urban sector is accelerated national growth and productivity through more efficient and competitive cities and towns. Municipalities in Sindh should have

- (i) well-managed utilities that provide cost effective, quality and continuous service, comparing favorably against regional comparators;
- (ii) sound financial management;
- (iii) proper regulatory and oversight arrangements; and
- (iv) where subsidies are necessary, they should be measurable, targeted and sustainable.

3. The Sindh Cities Improvement Investment Program (the Investment Program) seeks to improve the quality, coverage and reliability of water supply, wastewater management and solid waste management (SWM) services for an estimated 4 million residents in participating secondary cities in Sindh Province. Enhanced financial sustainability of these services will contribute to this objective.

¹ The Country Partnership Strategy is under preparation.

2. Key Issues and Constraints

4. Poor infrastructure and weak systems for service delivery are increasingly bottlenecks to economic growth. Sindh secondary towns lack appropriate institutions for urban planning and service delivery. Vision is lacking, mandates are unclear, integrated and strategic action planning absent; and uncoordinated investment decisions undermine effective spending. Policy frameworks are poorly developed or implemented; the weak commitment to cost recovery undermines sustainable development and services. A core problem is “projectized” approaches and systems that incentivize continued infrastructure construction with little concern for its operation and maintenance within an overall accountable and sustainable service delivery system.

3. Approaches and Solutions

5. The opportunity to maximize development impact depends upon several key factors:

- (i) *Sustainability*. Focus first on the institutional context and on service delivery, with infrastructure development seen in this context.
- (ii) *Efficiency*. Seek efficiency through leveraging economies of scale through establishing regional utilities and clustering local governments and through introducing private sector participation, including more effective outsourcing and introducing management contracts.
- (iii) *Accountability*. Pursue corporate models and markets to improve “relationships with accountability,” including service compacts and contracts; costs and performance benchmarking; and ensuring the flow of information to customers to strengthen accountability of service providers.
- (iv) *Strategic approaches*. Look for opportunities to tap geographic and regional resources, such as trade links, transportation corridors, and business clusters.
- (v) *Finance*. Ensure linkage of asset investment with strategy for maintenance and cost recovery for sustainable systems.

6. While infrastructure financing needs in Pakistan’s urban sector are huge, there is equally large scope to revitalize the urban sector in Sindh Province by encouraging a culture of and incentives for effective urban service provision, and to create conditions for much needed expertise, efficiencies, and investment funds from the private sector. Under the Investment Program, service providers will have clear roles and strengthened lines of accountability, reoriented toward cost recovery and sustainability, and incentivised to perform.

4. Conditions in the Urban Sector

7. There are no organized water supply and wastewater management authorities in interior Sindh outside Karachi and Hyderabad, which have a water board and water authority, respectively. There are no systems for monitoring water quality, no maps of existing infrastructure, and no asset registers. Service coverage for the urban population is estimated at 55% for piped (and frequently contaminated) water, 63% for sewerage or drainage and 37% for

solid waste management collection; no sanitary disposal facilities.² Cost recovery is estimated at about 10% of operating and maintenance costs for water supply and sanitation; there are no charges for sewerage or SWM.³

8. There is effectively no clear policy framework for the provision of water supply, wastewater management and solid waste management services in the Sindh; a Sindh sanitation and solid waste management policy is awaiting notification. The process of urban infrastructure provision within the decentralized set-up is dysfunctional; and infrastructure provision does not equate to service improvement. In practice, while the TMAs operate the systems, the Public Health Engineering Department (PHED), previously a wing under the provincial Local Government Department (LGD), is the primary agency that identifies, designs and implements any infrastructure works in excess of PRs10 million in these sectors, usually by sub-contracting construction to a private contractor.⁴ PHED then transfers the completed works to the TMA to operate and maintain. Construction supervision is frequently poor, compromising the quality of works, and burdening TMAs with unsuitable assets. In turn, the TMAs are unable to operate systems adequately due to limited technical, managerial and financial resources.

5. National Vision, Planning Directions and Guiding Legislation

9. The proposed Investment Program for Sindh's secondary cities is an integral part of Sindh's Medium Term Urban Sector Revitalization Plan and Vision 2030, and is based on the Sindh current Medium-term Development Framework (2005–2010) and the strategic thrusts set out in the Vision 2030.⁵ The Government recognizes the key role of urban areas and need to (i) rationalize the public–private mix in Pakistan's development process; (ii) focus on service delivery sustainability; (iii) providing priority infrastructure and services; and (iv) strengthening urban services management capacities at all levels. Under the Sindh Local Government Ordinance (SLGO) 2001⁶, Taluka Municipal Administrations (TMAs) are responsible for municipal services and regulations. Municipal services include water supply, sanitation, solid waste and drainage systems. Outside of Karachi, municipalities are organized as Taluka Municipal Administrations (TMAs) within Common Districts. Under Article 54 (1) and (2) of the SLGO, the functions and powers of the TMA shall be “*to provide, manage, operate, maintain and improve municipal infrastructure services,*” including all those relating to water supply, other than systems maintained by the Union and Village Councils, all sewerage, sewage, and sewage treatment and disposal, storm water drainage, and solid waste collection and sanitary disposal of solid, liquid, industrial and hospital wastes. The TMA can “*assign or contract out... any of its functions to any public-private, public or private organization*” and “*set-up a corporate body to perform any of its functions, singly or jointly with other public or private bodies.*”

6. Overview of Proposed Road Map Interventions

10. The roadmap proposes a series of linked interventions to address these constraints on service delivery by (i) advocating clear policies; (ii) strengthening the institutional framework for service provision through separation of the regulatory and service provision roles, and creation

² Piped water coverage figures in four of the six participating towns in the first tranche ranges between 30% and 40%; two towns have potable ground water that residents pump themselves, preferring self-provision to reliance on municipal provision.

³ Estimates of cost recovery are rough approximations as financial information at TMA level is absent or inconsistent.

⁴ The PHED does not operate, however, in areas covered by the water board and water authority in Karachi and Hyderabad, respectively.

⁵ Government of Pakistan. *Medium Term Development Framework (2005-2010)*. Pakistan

⁶ Government of Sindh. 2001. *Sindh Local Government Ordinance*. Sindh.

of urban service corporations (USCs) under the Companies Ordinance 1984 to deliver services to clusters of TMAs; (iii) improving the financial sustainability of service provision (tariff reform, billing and collection improvements, financial management and business/investment planning); and (iv) targeting infrastructure investments, with an eye to filling technical and operational gaps.

11. These service improvement arrangements will focus around TMA “clusters” with an aggregate population of at least 350,000 persons. These clusters of cities and towns provide economies of scale for improving service provision not present in individual TMAs or towns. The first of these clusters to be supported under the Investment Program is the North Sindh Cluster that includes Sukkur, New Sukkur, Rohri, Khairpur, Shikarpur, and Larkana in north Sindh, with possible inclusion of Jacobabad in 2009,⁷ and other nearby urban centers under Tranche 2. These areas have an aggregate 2008 urban population of about 1.6 million. There are at least two or three other potential clusters, each with aggregate populations of between 500,000 and 700,000 that could be supported in subsequent phases of the Investment Program, including the Nawabshah and Mirpurkhas city clusters in mid and south Sindh.

C. Policy Framework

12. For the investment program objectives to be realized, it requires that the urban sector roadmap and associated investment program is anchored within a holistic and integrated service delivery reform agenda in improving the quality, coverage and reliability of urban services in water supply, wastewater and SWM. This requires incentivization and support through (i) an enabling policy framework for service delivery reform; (ii) effective institutions and professional management; and (iii) sustainable financing of urban service provision. A Strategic Action Plan for Reform and Investment is in Table 1.

1. Enabling Policy Framework

13. **Service delivery reform.** In parallel with the physical investments, Sindh is moving ahead with a number of initiatives designed to (i) introduce service delivery reforms, including separating out the policy and regulatory functions of key urban services; (ii) development of professional service delivery institutions created under the Companies Ordinance 1984 and serving clusters of TMAs; and (iii) moving towards financial sustainability of service provision. The program will also strengthen the strategic planning and management capacity of the TMAs to better plan services and manage the service provider. A key feature of the institutional reform and development program is that it is sequenced with the investment program in such a way that key reform milestones can trigger the release of the first, second and subsequent tranches of the investment loan. Together, the investment program and sequenced institutional reforms seek a transformation to service delivery in urban Sindh.

14. Equally importantly, the services must be sustainable, affordable, and well-regulated. There must be an appropriate institutional and policy framework for service delivery that provides incentives for effective and efficient service delivery. There would be separation between the service provider and the regulator, facilitating enforcement of service delivery targets and regulations. The regulations themselves must be well designed and clear. Tariffs would initially move to cover all operations and maintenance expenditures and thereafter towards full cost recovery. In the short-to-medium term, explicit subsidies will be required to

⁷ Inclusion refers to possible shareholding in North Sindh Urban Services Corporation. Any infrastructure funding would be made under the second tranche.

cover the difference. Key elements of the institutional reform and development action plan, and the linkage with tranche releases, are set out below.

15. **Status of provincial policies.** The Sanitation and Solid Waste Management Policy for the province of Sindh has recently been approved and the Drinking Water Policy is currently at draft stage. The program would support the development of an integrated drinking water policy and sanitation policy for the sector, in order to maximize positive health impacts and save costs through coordinated activities. As a first step it is imperative that prior to developing implementation strategies for the Sanitation Policy, the Drinking Water Policy is finalized and approved so that integrated institutional, regulatory and financial mechanisms and the associated rules, procedures and implementation strategies, can be developed and executed. The Drinking Water Policy needs to make provision for going beyond the provision for ‘un-bundling’ and ‘outsourcing’ of services to make reference to the potential use of broader forms of private sector participation, including service and management contracts, lease affermage arrangements and concessions.

2. Effective Institutions and Professional Management

16. **Institutional mechanisms.** The key to improved services and sustainability is the establishment of separate utilities with ‘ring fenced’ finances, able to manage themselves according to commercial principles of efficiency. The proposed service delivery system for water, wastewater, and SWM services more closely aligns responsibilities, authority and accountabilities. The service providers responsible for delivering outcomes will have the authority and budgetary resources to do what is necessary to achieve this outcome. They should be rewarded for such achievement of outcomes and be held accountable if targets are not reached. This requires separating out the role of government from that of service provider and that of customer; and separating key functions of policymaking, provision, and regulation. The proposed USCs must be accountable for delivering against a commitment to customers to provide quality and sustainable service.

17. **Two-stage reform process.** The Investment Program proposes a progressive, two-stage reform process for improving water supply, waste water and solid waste management services. Initially, participating cluster TMAs would join together to form a corporatized operating utility – USCs to take full responsibility for water supply, wastewater and solid waste management systems and initiate service improvements in these sectors. The USCs would aggregate water, wastewater and solid waste management operations of all participating TMAs into a single institution to take advantage of economies of scale and to share the overhead costs of professional management. Incentivized agreements would be put in place between the TMAs and USCs, and further developed with more private sector involvement under second stage reforms and introduction of performance-based management contracting. The USCs, as a direct service provider, are intended only as a transition arrangement in preparation for introducing more comprehensive public-private partnerships with technically qualified private operators from Pakistan’s business community, teamed-up with international operator expertise, to provide a more robust solution to the challenge of service delivery and infrastructure development.

18. During first stage reforms, tripartite Service and Asset Management Agreements between the TMAs, the USCs and the Sindh (the latter a party to the agreement because of its role as a financier, will help clarify roles and responsibilities, and improve services by focusing management and current expenditure on establishing asset condition, system performance benchmarking and readily achievable improvements to operations and maintenance. Future

stage-wised investment plans, linked to performance improvement, will be identified forming a foundation for the next stage. Under these Service and Asset Management Agreements, TMAs will provide USCs with the right to use all assets – infrastructure, associated land, and mobile plant and equipment – as required to deliver the contracted services. During second stage reforms, the USCs would build on this foundation to engage private sector operators for higher performance delivery, while maintaining the integrity of the agglomerated approach for different services.

3. Sustainable Financing for Urban Services

19. **Urban services financing.** Financing for these services is currently characterized by (i) poor financial management and inadequate funding for system operation and maintenance; and (ii) vertical and ad-hoc provisions for development of new infrastructure, with an emphasis on large “schemes”. The over-emphasis on new infrastructure at the cost of optimal maintenance and operation has led to a disconnect between planning, budgeting and operating functions, thereby resulting in poor service levels. The reform agenda is geared towards (i) improving financial management and revenue collection, to improve financial sustainability; and (ii) improving the allocative efficiency of capital expenditure by bringing it within the ambit of the local USCs. The USCs are incentivized to use resources efficiently in responding to public service demands. Ring-fenced finance of these services and a specific target to progressively improve cost recovery to initially cover full operations and maintenance (O&M) costs, and thereafter full system costs, will ensure that the USC focuses on maximizing return on investment. Full system cost recover is the long-term goal.

20. **Financial reforms needed.** The financial reform agenda focuses on the basics in terms of improving financial sustainability (tariff reform, billing and collection, computerized financial management and business/investment planning etc.), to complement the addressing of technical and operational gaps (mapping, reducing unaccounted for water, metering, asset inventory management, O&M planning etc.). As part of the business plan for the USCs, specific recommendations will be made for the breaking out of tariff transition targets, moving from minimum O&M cost recovery towards full cost recovery, including funding shifts, and building in locally-driven and focused capacity development. The Investment Program's operational and transition support funding mechanism supports this process.

Table 1: Sindh Cities Improvement Investment Program Action Plan for Reform and Investment^a
Water Supply and Sanitation (WSS) and Solid Waste Management (SWM)

Issues	Timeframe ^b	Agency	Actions
Strategy 1. Establish Corporate Structure and Systems for Improved Corporate Governance			
Management structure for delivering services weak; corporate governance systems absent	Q4 (2008)	P&DD/ TMAs	NSUSC's established under Companies Ordinance 1984; followed by subsequent USCs established prior to future financing requests
	Q4 (2008)	TMAAs	Shareholders Agreement signed, including provisions for good corporate governance
	Q1 (2009)	NSUSC/ TMAs/Sindh	Service and Asset Management Agreements signed and Tripartite Financing Agreement(s) signed
	Q1 (2009)	NSUSC/ P&DD	Skills-based, independent Directors introduced to NSUSC Board
	Q4 (2008) - Q1 (2009)	P&DD/ NSUSC	Recruitment of key management from market on competitive basis, including Managing Director, Directors Operations, and Finance
	Q1 – Q2 (2009)	NSUSC	Business planning process introduced; NSUSC business plan approved by Board and initiated
	Q1-Q2 (2009)	P&DD, LGD	Ensure Taluka Municipal Officers, Taluka Officers Infrastructure, Regulation, Finance are in place, at adequate grade level, in SCIP participating TMAs
	Q1-Q2 (2009)	P&DD, TMA	Ensure TMA offices have computer and internet connectivity for communication with NSUSC and Sindh
	Q2-Q3 (2009)	NSUSC	Board Charter approved by NSUSC Board
	Q2-Q3 (2009)	NSUSC	Corporate Board, Management and Staff Code of Ethics introduced
Q2 (2010) – Q1 (2011)	P&DD/TMAAs	Confirm mid –Sindh Town Cluster for 3 rd tranche financing; incorporate 2 nd Urban services Corporation	
Strategy 2. Improve Financial Performance			
Concrete actions to improve financial management and performance	Q1 –Q2 (2009)	P&DD	Establish Operational and Transition Support Funding mechanism; escrow account set up, financing agreement signed with NSUSC; funding mechanism operational
	Q1 –Q3 (2009)	NSUSC, TMA	Financial accounts separated out from TMAs
	Q2- Q4 (2009)	NSUSC	Introduce financial systems, including accounting (as per Companies Ordinance), updated customer database and improved billing and collection systems; improve and expand outsourcing of billing and collections
	Q2 - Q4 (2009)	NSUSC, TMAs	Update customer registration and regularize existing connections
	Q3 (2009)	NSUSC	Begin metering at source and of bulk supplies
	Q3 (2009)	NSUSC	Begin metering large commercial customers
	Q2 (2010)	NSUSC	Begin metering individual households; beginning with distribution network improvement zones
	Q1 (2010)	TMAAs	Taluka Councils initiate first round of tariff increases, subject to service improvements
Strategy 3. Establish Professional Management Structure and Business Processes			
Essential to ensure focus on and capacity for service delivery, and O&M and preservation of assets	Q1-Q2(2009)	NSUSC	Exercise management autonomy, authority to spend against agreed budgets, and performance measured against incentivized targets
	Q1 – Q3 (2009)	NSUSC	Deputation of selected TMA staff to NSUSC and SAMA effectivity in 6 first tranche TMAs
	Q1 – Q2 (2009)	NSUSC	Contract international consultant/operator to advise NSUSC
	Q1-Q2 (2009)	NSUSC	Capital Works and Safeguard Units established and staffed within 3 months of loan effective date
	Q1 – Q2 (2009)	NSUSC	Recruitment of technical managers (5) and assistant managers –finance (3)
	Q1 - Q4 (2009)	NSUSC	Establish transparent and streamlined business processes
	Q1 – Q3 (2009)	NSUSC	Establish decentralized offices/customer relations units in each participating town
	Q2 – Q4 (2009)	NSUSC	Build staff capacity – create job descriptions, design and initiate training to revamp skills mix
	Q2 – Q4 (2009)	NSUSC	Design and introduce performance incentives; linkage of bonuses to performance
Q1 (2010)	NSUSC	Initiate continuous improvement benchmarking for NSUSC; other USCs	

Issues	Timeframe	Agency	Actions
Strategy 4. Reform Legal and Regulatory Environment			
Sound legal and regulatory environment still has significant gaps	Q1-Q3(2009)	TMA, Sindh	Provide enforcement powers to NSUSC to collect payments and disconnect non-paying customers, with transparent and step-wise process
	Q3 (2009)	P&DD, LGD, Sindh	Provincial Public-Private Partnership rules (under SLGO) revised and improved to support public-private partnerships in WSS and SWM, in coordination with PPP reforms under SGRRP
	Q4 (2009)	P&DD, LGD, Sindh	Revise and adopt provincial drinking water policy
	Q4 (2009)	P&DD/PSU, LGD, Sindh	Prepare and adopt implementing guidelines for provincial water and sanitation and SWM policies to support sustainable, professionalized urban systems
	Q3 (2009)-Q1 (2010)	P&DD, PSU	Conduct study on WSS and SWM regulatory framework needs; recommend way forward
	Q4 (2010)	P&DD, LGD, Sindh	Following on study, establish regulatory framework to advise and monitor user charges and standards with objective of cost recovery, sustainable WSS and SWM services expansion
Strategy 5. Promote Public Accountability and Informed and Responsible Urban Services Customers			
Creating an informed, responsible and proactive customer-base is essential for bottom-up demand for better services.	Q2-Q3 (2009)	NSUSC	Establish "customer care" and grievance redressal unit
	Q1 (2009)	NSUSC	Customer Advisory Committee established to advise USC Board on matters related to community needs and community-level service delivery
	Q2 – Q3 (2009)	NSUSC	Establish "customer liaison" network each participating TMA for readily accessible customer service, in conjunction with civil society organizations as needed
	Q1 (2009)	NSUSC	Initiate public awareness and outreach campaign
	Q4 (2009)	NSUSC, P&DD/PSU	Developed web-based public information system and information sharing strategy for CRC and performance benchmarking results, Service and Asset Management Agreements and monitoring results, relevant outsourcing contracts, etc.
	Q1 (2010)	P&DD/PSU, LGD	Introduce citizen's report card (CRC) for WSS and SWM services for participating TMAs
Strategy 6. Optimize Results from Private Sector Provision and Partnerships			
Optimal involvement of the private sector is essential to maximize efficiency	Q2 (2009)	NSUSC	Initiate improve effectiveness of SWM outsourcing contracts as they come up for renewal.
	Q2 (2009)	NSUSC	Initiate improve effectiveness of billing and collections contracts as any come up for renewal.
	Q2 (2009) – Q1 (2010)	P&DD, NSUSC	Assess PSP options for construction and for operations through Design-Build-Operate arrangements, management contracts or lease arrangements for SWM and WSS
	Q4 (2011)	NSUSC	Initiate performance-based management contract(s) for sanitary landfill operations (either integrated, or secondary and final disposal combined) with private sector operator
	Q2 (2011)	NSUSC	Initiate transaction process for performance-based management contract or lease arrangement for WSS
	(2013)	NSUSC	Initiate performance-based management contract or lease arrangement for WSS
Strategy 7. Improve Infrastructure for Better Coverage, Quality and Reliability of Services			
Strategic infrastructure investments, coupled with reforms, to expand system to meet growing demand	Q1(2009) – Q2(2012)	NSUSC	Water source, treatment and distribution improvements
		NSUSC	Wastewater, sewerage and drainage improvements
		NSUSC	Secondary collection improvements and sanitary landfill development

Urban Planning

Issues	Timeframe	Agency	Actions
Strategy 1. Establish Institutional Focal Point at Provincial Level			
	Q1 (2009)	P&DD	Operationalize Urban Policy & Strategic Planning Unit; recruit Urban Unit Head
	Q2 – Q3 (2009)	P&DD	Recruit Urban Unit Staff budgeted under SCIP
	Q2 (2009)	P&DD	Notify Government technical committee review urban economic development and urban investments in Sindh.
	Q2 (2009)	P&DD	Notify Sindh working group and advisory committee on urban planning and development to include government, private sector, research institutions, and civil society organizations
	Q2 – Q3 (2009)	P&DD	Prepare business plan for Urban Policy & Strategic Planning Unit, including public communication and information sharing strategy
	Q2 (2009)	P&DD	Establish working relationship with the National Planning Commission and the Urban Unit-Punjab.
Strategy 2. Increase TMA Capacity for Urban Planning			
	Q3 (2009)	P&DD, LGD	Senior TO-Planning Officers appointed in Sukkur & Larkana; develop prioritized schedule for posting additional staff to District Headquarter towns with urban populations > 200,000
	Q4 (2009)	P&DD, LGD	Senior TO-Planning Officers appointed in participating District Headquarter towns with urban populations >200,000 as per prioritized schedule
Strategy 3. Develop and Implement Tools for Urban Policy-making and Strategic Planning			
	Q2 (2009)	P&DD	Establish Urban Unit website
	Q3 (2009)	P&DD, LGD	Provide Government comments on and revisions to Urban Sector Assessment drafted under PPTA 4534; post to Urban Unit website
	Q4 (2009)	P&DD	Complete urban data and policy review to identify gaps and prepare work plan to fill gaps.
	Q1 (2010)	P&DD	Initiate economic regeneration study to assess potential of and develop strategy for revitalizing secondary cities, including economic/resource/strategic SWOT analysis of key urban clusters
	Q3 (2009) – Q2 (2011)	P&DD	Develop integrated data and mapping system for policy setting, planning and public information for urban sector in Sindh, drawing on existing government data and linking these Management Information and Geographic Information Systems (MIS/GIS) to Urban Unit website.
	Q4 (2009)	P&DD, LGD	Undertake strategic master plan preparation studies – commencing with Sukkur, then Larkana
	Q1 (2010)	P&DD, LGD	Develop program for urban services infrastructure mapping in larger secondary towns, drawing on NSUSC mapping under SCIP.
	Q4 (2011) – Q2 (2012)	P&DD, LGD	Develop and implement simplified zoning system in pilot town

Sindh=Government of Sindh, LGD=Local Government Department, NSUSC=North Sindh Urban Services Corporation, P&DD=Planning and Development Department, Q=quarter, PSU = SCIP Program Support Unit; SWM=solid waste management, TMA=Taluka Municipal Administration, WSS=water supply and sanitation.

^a Action Plan will be updated and expanded as appropriate with roll-out of reforms throughout Sindh Province, further reform needs emerge.

^b Timeframe expressed on calendar-year basis. Action Plan initiatives to be replicated for each Urban Services Corporation as it emerges in subsequent tranches.

D. Investment Program

21. **Overview.** The Investment Program aims to improve water supply, wastewater management and solid waste management services to clusters of secondary cities in Sindh. This will in turn improve the urban environment, public health and economic opportunities for an estimated 4 million urban residents of Sindh's second-tier cities. This will be achieved through an integrated program of institutional reforms and investments in priority infrastructure rehabilitation and improvements. The key institutional reform is establishment of Urban Services Corporations (USCs), as public limited companies, by participating local governments. The Investment Program has four parts: (i) Urban Planning, Institutional Development and Program Management Support to support the EA and IAs in program execution and in institutional reforms; (ii) Water Supply and Wastewater Management Improvements to improve service coverage, quality and reliability through civil works and equipment provision; (iii) Solid Waste Management Improvements comprising the provision of civil works and equipment required for the construction and operation of sanitary landfill facilities, solid waste collection equipment and communal waste bins; and (iv) Operational and Transition Support funding to cover cash shortfalls in the newly established USCs, in advance of tariff increases and increased cost recovery. Investment types and sequencing are described in Table 2.

22. The proposed Investment Program totals \$400 million equivalent over a period of 10 years, of which the ADB contribution would be an investment loan of \$300 million. The investment loan would be managed through Multitranche Financing Facility (MFF) arrangement comprising up to five tranches, depending on the pace of execution of the institutional reform and development action plan and the status of project preparation and availability of counterpart funding. Each tranche will be not less than \$25 million equivalent in value.

23. **First Tranche.** The investment program focuses on improvements in water supply, wastewater and solid waste management arrangements in town clusters, starting in North Sindh. First Tranche investments seek to (i) create a new institutional model better able to respond to demand for improved public services; and (ii) develop interventions that can be quickly implemented to demonstrate the ability of improved management to deliver improved services. The approach begins at a relatively small scale, and makes the most effective use of existing infrastructure assets, including the repair, renewal and extension of extraction, treatment, storage and distribution facilities for water supply, and maximizing the utility and efficiency of existing sewerage systems. For solid waste, existing services are woefully inadequate; a more comprehensive approach, with new and better managed collection fleets delivering waste to sanitary landfill sites, is needed.

Table 2: Subprojects by Tranche – Indicative Schedule

Subsector	Subproject	Cost^a (\$ mn)
First Tranche – 2008 to 2012		
Part/Subproject No.		
A/1	Consultant support for P&DD for program implementation, future tranche preparation; institutional reform and development; strategic urban planning; and private sector participation, studies, training and orientation, computers, equipment, office furniture, fixtures, vehicles, etc; and Independent Verifier function	4.1
A/2	Consultant support for NSUSC operations, capital works implementation, future subproject preparation, studies, training and orientation, computers, equipment, office furniture, fixtures, vehicles, etc.	2.1
B/3	Water supply improvements in Sukkur, New Sukkur, Rohri and Khairpur, including 6 water distribution network improvement (DNI) zones; and water quality testing Larkana and Shikarpur; and detailed engineering design and construction supervision	13.7
B/4	Wastewater improvements in Sukkur, New Sukkur, Rohri, Khairpur, Shikarpur and Larkana, including detailed engineering design and construction supervision	2.3
B/5	Mapping and planning work for water supply and sanitation network management and expansions	0.5
C/6	Solid waste management improvements sanitary landfill disposal works, landfill equipment Larkana, Shikarpur, Khairpur and for Sukkur area landfill at Rohri, including detailed engineering design and construction supervision	3.3
C/7	Secondary collection system – Skip-hoist system for Sukkur, New Sukkur, Rohri, Khairpur, Shikarpur and Larkana, including concrete bases for skips	3.0
D/8	Operational and transition support funding	8.0
	Interest during implementation	1.0
Total ADB Financing – First Tranche		38.0
Second Tranche – 2010 to 2014		
A/1	Consultancy support for P&DD for program implementation and future loan project preparation, institutional development, strategic urban planning, private sector participation, and creation of Urban Services Corporation (USC) for second cluster towns; studies, training and orientation, computers, equipment, office furniture, fixtures, vehicles, etc.; and Independent Verifier function	
A/2	Consultancy support for USC operations, capital works implementation, future subproject preparation, studies, training and orientation, computers, equipment, office furniture, fixtures, vehicles, etc.	
B/3-B/5	Phase 2 of water supply improvements North Sindh cluster towns, including Jacobabad; Sukkur intake improvement works; other water supply improvements, including source augmentation, transmission and distribution network extensions and DNI zones; wastewater improvements, including wastewater treatment and final disposal, in North Sindh cluster towns, including Jacobabad, other nearby centers; water quality testing, mapping and planning, engineering design and construction supervision	
C/6-	Landfill development and collection equipment for Jacobabad, other north Sindh towns; expansion of first	
C/7	tranche landfills; secondary collection equipment and related infrastructure; engineering design and supervision	
D/8	Operational and transition support funding	
Subtotal		50.0
Third Tranche – 2011 to 2015		
A/1	Consultancy assistance for program implementation and future loan project preparation, institutional reform and development, strategic urban planning, private sector participation, and creation of USC for third cluster towns; studies, training and orientation, computers, equipment, office furniture, fixtures, vehicles, etc., and Independent Verifier function	
A/2	Consultancy assistance for USC operations, capital works implementation, future subproject preparation, studies, training and orientation, computers, equipment, office furniture, fixtures, vehicles, etc.	
B/3-B/5	Water supply improvements, including source augmentation, transmission and distribution network extensions and DNI zones, wastewater management improvements including wastewater treatment and final disposal in second cluster towns, and in north Sindh cluster; water quality testing, mapping and planning, engineering design and construction supervision	
C/6-	Landfill development and collection equipment for second cluster towns; expansion of first tranche landfills;	
C/7	secondary collection equipment and related infrastructure; engineering design and supervision	
D/8	Operational and transition support funding	
Subtotal		70.0

Fourth Tranche – 2013 to 2017		
A/1	Consultancy assistance for program implementation and future subproject preparation, institutional reform and development, strategic urban planning, and private sector participation, including creating of USC for fourth cluster towns; studies, training and orientation, computers, equipment, office furniture, fixtures, vehicles, etc., and Independent Verifier function	
A/2	Consultancy assistance for USC operations, capital works implementation, future subproject preparation, studies, training and orientation, computers, equipment, office furniture, fixtures, vehicles, etc.	
B/3-B/5	Water supply improvements, including source augmentation, transmission and distribution network extensions and DNI zones, wastewater management improvements including wastewater treatment and final disposal in third cluster towns, and in second and north Sindh cluster towns; water quality testing, mapping and planning, engineering design and construction supervision	
C/6- C/7	Landfill development and collection equipment for third cluster towns; expansion of previous cluster town landfills; secondary collection equipment and related infrastructure; engineering design and supervision	
D/8	Operational and transition support funding	
Subtotal		75.0
Fifth Tranche – 2014 to 2018		
A/1	Consultancy assistance for program implementation and future loan project preparation; institutional reform and development; strategic urban planning; and private sector participation; studies, training and orientation, computers, equipment, office furniture, fixtures, vehicles, etc., and Independent Verifier function.	
A/2	Consultancy assistance for USC operations, capital works implementation, future subproject preparation, studies, training and orientation, computers, equipment, office furniture, fixtures, vehicles, etc.	
B/3-B/5	Water supply improvements, including source augmentation, transmission and distribution network extensions and DNI zones, wastewater management improvements including wastewater treatment and final disposal in fourth cluster towns, and in third, second and north Sindh cluster towns; water quality testing, mapping and planning; and engineering design and construction supervision.	
C/6- C/7	Landfill development and collection equipment for third cluster towns; expansion of previous cluster town landfills; secondary collection equipment and related infrastructure; and engineering design and supervision	
D/8	Operational and transition support funding	
Subtotal		67.0
Total		300.0

^a Tranche 1 costs includes contingencies and excludes taxes and duties.

E. Financing Plan

24. **Service provision targets (2008 - 2030).** Based on the objectives of Sindh to provide improved urban services, achieve the Millennium Development Goals, subsector targets for service provision have been derived, along with associated investment plans, for water supply, wastewater management and solid waste management for the Investment Program period to 2018, and then to 2030 in Table 3.

Table 3: Service Provision Targets
Subsector Performance Targets: Sindh Secondary Cities Urban Population

Item	2008	2018	2030
Water Supply			
% population served by household water supply connections	<55%	80%	>90%
Average hours supply per day	2-4 hrs.	10-12 hrs.	18-24 hrs.
% water delivered of potable quality	<10%	30%	70%
% unaccounted-for water	>50%	40%-50%	<30%
Cost recovery as % O&M for water services	<30%	70%	>90%
Wastewater Management			
Served by underground sewerage/covered drainage	<20%	50%	>85%
Wastewater treated	<5%	40%-50%	>85%
Solid Waste Management			
% of households with covered bins	0%	50%	>95%
% waste generated collected	<50%	70%	>95%
% waste generated disposed to landfill sites	0%	70%	>95%
Cost recovery as % O&M for SWM services	<10%	50%	>95%

%=percentage, <=less than, >=more than, O&M= operation and maintenance.

^a Charged as a percentage.

Source: Asian Development Bank estimates.

25. Based on these targets, and on the incremental costs of service provision derived from current unit costs of construction, sector plan investment costs have been derived to provide an estimate of the investments required to achieve these subsector targets, complemented by an institutional reform and the development action plan. The costs are based on (i) elevating service levels for those already served to acceptable levels; (ii) addressing the service backlog in terms of serving those currently unserved; and (iii) serving future additional urban populations. Based on these assumptions, Table 4 provides an estimate of investments required for each subsector over the short-to-medium (2008-2018) and the long-term (2019-2030).

**Table 4: Sector Investment Plan
Subsector Investment Requirements to 2030**
(\$ million; constant prices)

Item	2008-2018	2019-2030	2008-2030
Water supply infrastructure	400	550	950
Wastewater management infrastructure	430	550	980
Solid waste management	100	150	250
Sector institutional reform and development ^a	70	25	95
Total Urban Sector Investment	1,000	1,275	2,275

^aIncludes funding for recurrent expense through operational and transition support.

Source: Asian Development Bank estimates.

26. The urban sector in Sindh will require an estimated \$2.28 billion equivalent for infrastructure investment in water supply, waste water and SWM through year 2030, including some \$1.0 million through year 2018. The Investment Program provides funding for priority elements of this Investment Plan, targeting clusters of secondary cities that (i) are positioned for growth; (ii) demonstrate a commitment to reform; and (iii) are prepared to work together as a cluster to generate economies of scale in service provision. Based on historical patterns of expenditure and recent Government budgetary projections, likely levels of sector investments in the short- to medium-term are in Table 5. ADB expects to finance about 30% of the overall requirements in these secondary cities through the Investment Program.

**Table 5: Sector Financing Plan 2008 -2018
ADB Investment Program Indicative Allocation**
(\$ million; constant prices)

Investment Plan Component	Sector Investment Plan Needs 2008-2018	Investment Program 2008-2018	ADB Share of Investment Program	ADB Share as % of Sector Investment Plan
Institutional reform and development ^a	30	20	20	67
Water supply and wastewater infrastructure	830	300	220	27
Solid waste management infrastructure	100	40	30	30
Operational and transition support funding ^b	40	40	30	75
Total	1,000	400	300	30
Investment Plan Financing Sources				
ADB	300	300		
Government – Provincial and Local	600	100		
Other sources ^c	100	-		

ADB=Asian Development Bank.

^a Including implementation support for the Investment Program.

- ^b Estimated for Urban Services Corporations under the Investment Program. Does not include funding expected from the local governments to support costs of staff deputed to the USCs under the Investment Program, estimated at over \$1.5 million annually under the first tranche.
- ^c Indicative amount representing potential private sector investment and other development partner financing. Source: Asian Development Bank estimates.

SCHEDULE 2

DESIGN AND MONITORING FRAMEWORK FOR MULTITRANCHE FINANCING FACILITY

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
Impact <ul style="list-style-type: none"> Improved health, quality of life in and economic competitiveness of participating towns 	<ul style="list-style-type: none"> Increase in per capita monthly income by x% of 2008 level by 2018 in Interior Sindh^a Percentage of children under 5 years old suffering from diarrhea in last 30 days reduced from 19% in urban areas of Sindh (excluding Karachi and Hyderabad) in 2004/5 to <10% by 2018 	<ul style="list-style-type: none"> Multiple Indicators Cluster Survey - Pakistan Pakistan Standard of Living and Measurement Survey 	Assumption <ul style="list-style-type: none"> Political and economic stability prevails Risk <ul style="list-style-type: none"> Interior Sindh towns adversely affected by broader economic shocks or civil unrest
Outcome <ul style="list-style-type: none"> Increased quality, reliability and coverage of water supply, wastewater and solid waste management services in participating towns 	<ul style="list-style-type: none"> Population of participating towns served by household water connections increased from approximately 55% in 2008 to 80% in 2018 Average hours per day of water supply increased from 2 to 4 hours in 2008 to >12 hours in 2018. Wastewater treated increased from <5% in 2008 to 40% by 2018 Household access to solid waste management (SWM) services increased to 80% by 2018. 	<ul style="list-style-type: none"> Pakistan Standard of Living and Measurement Survey Benchmarking data Citizen "report cards" 	Assumptions <ul style="list-style-type: none"> Sindh remains committed to clear delineation of roles & responsibilities for urban service provision Properly staffed and empowered institutions are able to effectively deliver, operate and manage urban services Households want and are willing to pay for improved urban services Risks <ul style="list-style-type: none"> Sindh does not allow Urban Services Corporations (USC) proper oversight over infrastructure in coverage areas Weak coordination with among Government departments and with USCs undermines USC operations.
Outputs Part A: Improved Urban Service Management and Planning A.1 Creation of effective and sustainable urban services providers A.2 Urban Policy and Strategic	<ul style="list-style-type: none"> Establishment of sustainable urban service corporations Full operation and maintenance cost recovery of water services through user charges Performance-based contracts between USCs and private operators identified Urban Unit functioning, 	<ul style="list-style-type: none"> Benchmarking data Citizen "report cards" Audited financial statements of USCs Independent Verifier Report Quarterly Progress Reports 	Assumptions <ul style="list-style-type: none"> Suitable institutional reforms are implemented and an effective corporate body established for the management and operations of urban services Private sector will increase and maintain interest in private sector participation in Sindh Willingness of Government to partner with private sector There is the political will to implement reforms Risks

<p>Planning Unit (Urban Unit) sustainable; Program Support Unit sustainable throughout Investment Program implementation, providing effective support to Local Government Department /TMAs</p>	<p>operational, fully staffed and sustainable in 2018.</p> <ul style="list-style-type: none"> • Implementation of the strategic urban vision and planning processes for participating towns by 2018. • Accurate (digitized) maps for each TMA publicly available and being used • Planning officials posted and urban plans developed at city-level for major secondary towns 	<ul style="list-style-type: none"> • Quarterly Progress Reports <ul style="list-style-type: none"> • Citizen “report cards” 	<ul style="list-style-type: none"> • Interdepartmental coordination and support is not forthcoming • Political support for reform is withdrawn • Appropriately qualified staff cannot be found or retained in TMA
<p>Part B: Investments in Water Supply and Wastewater Management Improvements</p> <p>B.1 Rehabilitation and expansion of existing piped water supply systems, water works and treatment facilities in participating towns; groundwater quality monitoring system developed in participating towns</p> <p>B.2 Rehabilitation and expansion of sewerage and drainage networks and wastewater treatment completed in participating towns</p>	<ul style="list-style-type: none"> • Connected households with water meters increases from 0% in 2008 to >80% by 2018 • Reduced system leakage; unaccounted for water from >40% to <25% by 2018 • At least 80% of households connected to underground sewers or covered drains by 2018 • Percentage of wastewater treated in project towns increased from <5% to >40% by 2018 	<ul style="list-style-type: none"> • Quarterly Progress Reports • Benchmarking data <ul style="list-style-type: none"> • Citizen “report cards” 	<p>Assumptions</p> <ul style="list-style-type: none"> • There is the political will to manage development • Trust in municipal service provision can be restored <p>Risks</p> <ul style="list-style-type: none"> • Political support for planning is withdrawn • Appropriately qualified staff cannot be found or retained in TMA • Rising energy costs increases cost of pumped systems
<p>Part C: Investments in Solid Waste Management Improvements</p> <p>C.1 Development of sanitary landfills and provision of secondary collection (including equipment and services)</p>	<ul style="list-style-type: none"> • Sanitary landfills are operational, sustainable and under private sector arrangement • At least 80% of households with access to secondary collection of solid waste by 2018 	<ul style="list-style-type: none"> • Quarterly Progress Reports • Benchmarking data • Citizen “report cards” 	<p>Assumptions</p> <ul style="list-style-type: none"> • Suitable land can be acquired • Private sector will increase and maintain interest in SWM outsourcing • Willingness of Government to associate with private sector <p>Risks</p> <ul style="list-style-type: none"> • Poor enforcement of sanitation laws

Activities and Milestones	Inputs
<p>A.1 Creation of effective urban services corporations</p> <ul style="list-style-type: none"> • Incorporation of requisite Urban Services Corporation prior to periodic financing request • Recruitment of key managers to the USC within three months of incorporation • Establishment of Safeguards Cell within three months of incorporation <p>A.2 PSU and Urban Policy & Strategic Planning Unit (Urban Unit)</p> <ul style="list-style-type: none"> • Program Support Unit (PSU) maintained until Investment Program end • Urban Policy & Strategic Planning Unit (Urban Unit) maintained, staff and functioning beyond Investment Program end • Local Government Dept supported for TMA planning and liaison with USCs • Community-mapping and digitized mapping/GIS initiated participating towns by Year 1 of tranche start • City visions for participating towns by Year 3 of tranche start • Technical training and capacity of TMA staff and filling planning officers positions for participating towns completed by Year 2 of tranche start <p>A.3 Performance-based contracts with private sector pursued Advisory support for private sector participation initiated by Year 2 of tranche start Options identified under advisory support prepared by Year 3 of tranche start Increase in number and effectiveness of outsourcing and/or management contract arrangements in water supply functions and solid waste management by Year 4 of tranche start</p> <p>B.1 Rehabilitation and expansion of existing piped water supply systems, water works and treatment facilities in the participating towns.</p> <ul style="list-style-type: none"> • Timely land acquisition and implementation of resettlement plans <ul style="list-style-type: none"> • Design/build contract for subprojects package by month 6 of tranche start • Rehabilitated and new facilities constructed commissioned and made operation in phases between month 12 and month 36 <p>B.2 Rehabilitation and expansion of sewerage and drainage networks and wastewater treatment completed in the participating towns</p> <ul style="list-style-type: none"> • Timely land acquisition and implementation of resettlement plans • Design/build contract for subproject package by month 12 of tranche start • Rehabilitated and new facilities constructed commissioned and made operation in phases between month 21 and month 48 <p>C.1 Development of sanitary landfills and provision of secondary collection (including equipment and services)</p> <ul style="list-style-type: none"> • Timely land acquisition and implementation of resettlement plans • Contracts for design/ build of Tranche landfill sites and for procurement of equipment tendered by month 6 and commenced by month 9 • Equipment for Tranche procured and made operational in packages at between month 15 (collection equipment) and month 30 (landfill equipment) • Landfills for Tranche completed, commissioned and made operational between month 24 and month 30 • Creation of any Land Acquisition and Resettlement Grievance Committees by subproject implementation 	<ul style="list-style-type: none"> • ADB Total \$300 million from OCR (\$262 million) and ADF (\$38 million) • GoP \$100 million

>=more than, <=less than; ADF=Asian Development Fund, OCR=ordinary capital resources.

^a Awaiting information from Multiple Indicators Cluster Survey currently under preparation before setting indicator.

DESIGN AND MONITORING FRAMEWORK FOR TRANCHE 1

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
<p>Impact</p> <ul style="list-style-type: none"> Improved health, quality of life in and economic competitiveness of participating towns 	<ul style="list-style-type: none"> Increase in per capita monthly income by x% of 2008 level by 2018 in Interior Sindh^a Percentage of children under 5 years old suffering from diarrhea in last 30 days reduced from 19% in urban areas of Sindh (excluding Karachi and Hyderabad) in 2004/5 to <10% by 2018 	<ul style="list-style-type: none"> Multiple Indicators Cluster Survey - Pakistan Pakistan Standard of Living and Measurement Survey 	<p>Assumption</p> <ul style="list-style-type: none"> Political and economic stability prevails <p>Risk</p> <ul style="list-style-type: none"> Interior Sindh towns adversely affected by broader economic shocks or civil unrest
<p>Outcome</p> <ul style="list-style-type: none"> Increased quality, reliability and coverage of water supply, wastewater and solid waste management services in participating towns 	<ul style="list-style-type: none"> Population of participating towns served by household water connections increased on average from approximately 37% in 2008 to 52% in 2013. Average hours per day of water supply increased from about 3 hours in 2008 to more than 6 hours in 2013, and over 20 hours for 18,000 households in DNI zones. Drainage and knock on water quality benefits for 100,000 households by 2013 Household access to solid waste management (SWM) services increased on average to 80% by 2013 in participating towns. 	<ul style="list-style-type: none"> Pakistan Standard of Living and Measurement Survey Baseline and follow-up surveys 	<p>Assumptions</p> <ul style="list-style-type: none"> Sindh remains committed to clear delineation of roles & responsibilities for urban service provision Properly staffed and empowered institutions are able to effectively deliver, operate and manage urban services Households want and are willing to pay for improved urban services <p>Risks</p> <ul style="list-style-type: none"> Sindh does not allow Urban Services Corporations (USC) proper oversight over infrastructure in coverage areas
<p>Outputs</p> <p>Part A: Improved Urban Service Management and Planning</p> <p>A.1 Creation of effective and sustainable urban services providers</p>	<ul style="list-style-type: none"> Establishment of sustainable North Sindh Urban Services Corporation Performance-based contracts between NSUSC and private operators for SWM Partial operation and maintenance cost recovery of water services through user charges, with household monthly water user 	<ul style="list-style-type: none"> Benchmarking data Citizen "report cards" Audited financial statements of USCs Independent Verifier Report Quarterly Progress Reports 	<p>Assumptions</p> <ul style="list-style-type: none"> Suitable institutional reforms are implemented and an effective corporate body established for the management and operations of urban services Private sector will increase and maintain interest in private sector participation in Sindh. Willingness of Government to associate with private sector

<p>A.2 Establishment of Urban Policy and Strategic Planning Unit (Urban Unit)</p> <p>A.3 Effective support facility for Taluka Municipal Administration Planning</p>	<p>charge set at relevant WTP figure.⁸</p> <ul style="list-style-type: none"> • Average percentage of connected households paying water bill in participating towns increases from 39% in 2008 to 67% in 2013. • Urban Unit functioning, operational, fully staffed and sustainable in 2009 • Adoption of strategic urban vision and planning processes for interior Sindh by 2011. • Accurate (digitized) maps for each participating town in No. Sindh publicly available and being used • Planning officials posted and urban plans developed at town-level for Sukkur and Larkana 	<ul style="list-style-type: none"> • Quarterly Progress Reports • Citizen “report cards” <ul style="list-style-type: none"> • Quarterly Progress Reports • Citizen “report cards” • 	<p>Risks</p> <ul style="list-style-type: none"> • Lack of political will at both central and local level to adopt reforms • Interdepartmental coordination and support is not forthcoming • Appropriately qualified staff cannot be found or retained in TMA
<p>Part B: Investments in Water Supply and Wastewater Management Improvements</p>			
<p>B.1 Rehabilitation and expansion of existing piped water supply systems, water works and treatment facilities in participating towns; groundwater quality monitoring system developed in Shikarpur and Larkana</p> <p>B.2 Rehabilitation and expansion of sewerage and drainage networks and wastewater treatment completed in participating towns; shifting sewage outflow in Rohri</p>	<ul style="list-style-type: none"> • Connected households increases on average from about 37% in 2008 to 52% by 2013 in participating towns. • Over 18,000 households with access to potable water, available >20 hours day in 6 distribution network improvement (DNI) zones by 2013. • Over 27,500 households in Khairpur with improved sewage flow and wastewater stabilization; 6,000 households in Rohri with improved water supply at intake. 		<p>Assumptions</p> <ul style="list-style-type: none"> • Suitable land can be acquired as planned. • Private sector will increase and maintain interest in SWM outsourcing in Sindh • Willingness of Government to associate with private sector • Trust in municipal service provision can be restored
<p>Part C: Investments in Solid Waste Management Improvements</p>			
<p>C.1 Development of sanitary landfills and provision of secondary collection (including equipment and services)</p>	<ul style="list-style-type: none"> • Sanitary landfills are operational, sustainable and under private sector arrangement • At least 80% of households with access to secondary collection of solid waste by 2013. 		<p>Risks</p> <ul style="list-style-type: none"> • Poor enforcement of sanitation laws • Rising energy costs increases cost of pumped systems

⁸ WTP figures to be derived from Gallup Pakistan 2008 study.

Activities and Milestones	Inputs
<p>A.1 Creation of effective urban services corporations</p> <ul style="list-style-type: none"> • Incorporate North Sindh Urban Services Corporation (NSUSC) • Recruit Managing Director/initial Board of Directors by October 2008 • Recruit other key managers to NSUSC by November 2008 • Establishment of Safeguards Cell within 2 months of establishment <p>A.2 Establishment of PSU and Urban Policy & Strategic Planning Unit (Urban Unit)</p> <ul style="list-style-type: none"> • Establish Program Support Unit (PSU) by May 2008 • Staff and operationalize Urban Policy & Strategic Planning Unit (Urban Unit) within 3 months of loan effectiveness. <p>A.3 Effective support facility in for TMA Planning</p> <ul style="list-style-type: none"> • Community-mapping and digitized mapping/GIS initiated by Year 2 • City Visions for Tranche 1 towns in Year 3 • Technical training and capacity of TMA staff and recruitment of planning officers for Sukkur, Khairpur, Shikarpur and Larkana completed in Year 2 <p>A.4 Performance-based contracts with private sector pursued</p> <ul style="list-style-type: none"> • Advisory support for PSP initiated in Year 2 • Options identified under advisory support prepared by Year 3 • Increase in number and effectiveness of outsourcing and/or management contract arrangements in water supply functions and solid waste management between Year 1 and Year 4 <p>B.1 Rehabilitation and expansion of existing piped water supply systems, water works and treatment facilities in the participating towns</p> <ul style="list-style-type: none"> • Construction contract for priority Tranche 1 subproject package by month 2 <ul style="list-style-type: none"> • Construction contract for Tranche 1 subproject package by month 6 • Rehabilitated and new facilities constructed commissioned and made operation in phases between month 12 and month 36 <p>B.2 Rehabilitation and expansion of sewerage and drainage networks and wastewater treatment completed in the participating towns</p> <ul style="list-style-type: none"> • Contract for Tranche 1 subproject package by month 12 • Rehabilitated and new facilities constructed commissioned and made operation in phases between month 24 and month 48 <p>C.1 Development of sanitary landfills and provision of secondary collection (including equipment and services)</p> <ul style="list-style-type: none"> • Timely land acquisition and implementation of resettlement plans by month 6 • Contracts for design/ build of Tranche 1 landfill sites and for procurement of equipment tendered by month 6 and commenced by month 9 • Equipment for Tranche 1 procured and made operational between month 15 (collection equipment) and month 30 (landfill equipment) • Landfills for Tranche 1 completed, commissioned and made operational between month 24 and month 30 • Creation of any Land Acquisition and Resettlement Grievance Committees by month 6 <p>ADTA - Improving Efficiency and Public Accountability of NSUSC</p> <ul style="list-style-type: none"> • Establish technical and financial information baselines for water supply, wastewater and SWM operations by month 12; continue data collection through month 42 • Initiate and complete operations improvement programs by months 12 and 42 • Review and amend existing outsourcing contracts, prepare and initiate new model outsourcing contract for NSUSC use by month 12 for SWM and month 18 for WSS • Identify PSP options to improve water services and landfill operations by month 12 • PSP transactions for landfill operations between months 18-42 • Customer Awareness and Public Outreach campaign implemented by month 6 • Citizen Report Cards system initiated by month 18 • Computerized customer complaints center established within NSUSC by month 18 	<ul style="list-style-type: none"> • ADB \$38 million from ADF • GoP \$12.0 million • ADTA \$2.9 million; \$2.5 million from ADB Special Funds and \$0.4 million counterpart from NSUSC and Sindh.

>=more than, <=less than.

ADF=Asian Development Fund, OCR=ordinary capital resources; DNI=Distribution Network Improvement

^a Awaiting information from Multiple Indicators Cluster Survey.

SCHEDULE 3

IMPLEMENTATION FRAMEWORK

1. Unless otherwise modified or amended in the related loan or project agreements, Pakistan will ensure implementation of the Investment Program as described below.

A. Program Management

2. The Planning and Development Department (P&DD), Sindh will be the Executing Agency (EA) and assume overall responsibility of the Investment Program.

3. Sindh has established a Program Support Unit (PSU) to support the overall Investment Program implementation, including to; (a) promote urban and related sector reforms as agreed in the Investment Program's Action Plan for Reform and Investment, and in the Investment Program's Design and Monitoring Framework (DMF); (b) support roll-out of the urban services corporation (USC) model to new town clusters; (c) assume responsibility for the preparation of the periodic financing requests, (d) facilitate inter-departmental and provincial coordination on the Investment Program implementation; (e) carry out Investment Program monitoring and evaluation through the Investment Program Performance Monitoring System; (f) prepare quarterly and annual performance reports on program progress; (g) be responsible for review and quality assurance of social and environmental safeguards documentation prepared by the USCs; and (h) engage an independent verifier to assess USCs and the participating TMAs compliance with the Investment Program-related agreements. The PSU will also act as the secretariat of the Program Steering Committee (PSC). The PSU will establish regional offices, as required.

4. The Program director, who heads the PSU, will be recruited through a competitive process acceptable to ADB, and criteria mutually agreed between Sindh and ADB. The Program director will be supported by professional and support staff who have been or will be, as the case may be, recruited competitively to the PSU against criteria and according to a process acceptable to ADB. The PSU staff will include specialists in municipal services engineering, municipal finance, program implementation, monitoring and evaluation, finance and accounting, urban development and information technology. The PSU staff will be supported by a team of national and international consultants, on intermittent basis, with expertise in municipal services reform and private sector participation, urban planning, municipal services engineering, tariff and regulatory policy, environmental and social safeguards, monitoring and evaluation, law, and communications. The Program director will be responsible to ensure that the implementation of the Investment Program is consistent with the environmental and social safeguards frameworks.

5. Sindh will establish an Urban Policy and Strategic Planning Unit (Urban Unit) to provide strategic urban planning and policy support for urban development in Sindh. The Urban Unit Head will be recruited through a competitive process acceptable to ADB, open to government and market applicants, and criteria mutually agreed between Sindh and ADB. The Urban Unit Head will be supported by professional and support staff who have been or will be, as the case may be, recruited competitively to the Urban Unit against criteria and according to a process acceptable to ADB. The Urban Unit staff will include specialists in urban policy and economics, regional and urban planning, statistics and mapping, and information technology. The Urban Unit staff will be supported by a team of national and international consultants, on intermittent

basis, with expertise in regional and strategic urban planning, urban economics and policy, municipal finance, statistics, management information systems and mapping.

6. Sindh will establish the Program Steering Committee (PSC) to (a) provide policy direction and strategic oversight for the Investment Program, (b) advise on key sector reform milestones in Action Plan for Reform and Investment, (c) review annual and quarterly performance reports on reform and implementation progress of the Investment Program, (d) provide focal point for inter-agency coordination on Investment Program-related matters, (e) advise on or make policy-level decisions required to facilitate timely Investment Program execution, and (f) meet at least on a quarterly basis in Karachi. The PSC will be chaired by the Additional Chief Secretary, P&DD with the Program director being the member-secretary. The members of the PSC will comprise, among others, representatives from relevant provincial departments, district governments, the participating TMAs, and civil society. The chair of the PSC may invite other persons as necessary either to become a member of the PSC or to attend its meetings.

7. Sindh will also facilitate the establishment of the USCs, to be incorporated under the Companies Ordinance 1984 with all participating TMAs as the shareholders. Each USC will have a Board of Directors (the "Board"), which will include (a) *nazims* of the TMAs that comprise the shareholders of the corporation, (b) District Coordination Officers whose coverage areas include the relevant towns or other Sindh government officials, (c) the Program director, (d) a representative from the provincial Finance Department; (e) the managing director of the USC, and (f) at least thirty five percent (35%) of the Board members will be independent directors selected according to skills-based criteria and in accordance with a process acceptable to ADB. The independent directors must include representatives from the business community and at least one third will be women. The managing director of the urban services corporation must have experience in managing service delivery and other relevant qualifications to be agreed upon between ADB and Sindh. The managing director and the key staff of USCs will be recruited from the open market and on competitive basis acceptable to ADB.

8. The USC will be responsible for the day-to-day management of urban services provision, including on-the-job training of deputed TMA staff in utility operations, and will implement all water supply, sanitation and solid waste management construction and rehabilitation work, including the subprojects, in their coverage areas. The USC will also (a) be responsible for the procurement process, including the award and implementation of contracts related to water supply, sanitation and solid waste management subprojects; (b) prepare annual plans and budgets for submission to its Board; (c) provide immediate oversight for environmental and social safeguards related to the subprojects; and (d) prepare periodic financing requests with respect to the relevant subprojects.

9. Each participating TMA and USCs will enter into the Service and Asset Management Agreement and other relevant agreement(s) that will set out the terms and conditions for each participating TMA to delegate the provision of water supply, sanitation, wastewater, sewerage, drainage, and solid waste management services to the USCs.

10. Sindh, each participating TMA and the USC will enter into an agreement which will document the financing to be provided by Sindh to USCs for the purpose of (a) capital investment for assets to be managed by the USCs and owned by the participating TMAs, and (b) covering USC's operating cash flow shortfalls for the delivery of municipal services delegated by each participating TMA to USC. Sindh will be responsible to establish the

Operational and Transition Support Funding Mechanisms to cover the operational cash-flow shortfall of the USCs, which will operate through separate escrow accounts to be managed by escrow agents and in accordance with the guidelines for Operational and Transition Support Funding as agreed between ADB and Sindh.

B. Performance Monitoring and Reporting

11. Sindh through the PSU will establish (a) an Investment Program Performance Monitoring System, in form and substance acceptable to ADB, which will incorporate a set of performance monitoring indicators relating to outputs and outcomes, including service delivery performance, physical implementation, institutional reform and capacity-development milestones, and (b) baseline data for each of the selected indicators and conduct annual surveys with the assistance of consultants, and update ADB on the progress against each indicator.

12. Sindh through the PSU will prepare quarterly progress reports on the Investment Program, including progress against reform and service delivery objectives, and implementation progress of subprojects under the Investment Program. The reports will also incorporate the information provided by the USCs (through their Board of Directors). The progress reports should be submitted to ADB within 30 days from close of each quarter. The reports will discuss progress made during the period of review, changes if any on implementation schedule, problems or difficulties encountered and remedial actions taken, and work to be undertaken in the coming quarter. The USCs will also be responsible for providing information as required to the independent verifier.

C. Review

13. Sindh and the USCs will conduct together with ADB quarterly review of the implementation of the individual tranche. The review will discuss the progress of the individual tranche and any changes to implementation arrangements or remedial measures required to be undertaken towards achieving the objectives of the subprojects and Investment Program.

14. Sindh and the USCs will conduct together with ADB a mid-term review (MTR) of each individual tranche. The MTR will include review of summary of contracts awards and disbursement, implementation progress including progress against service delivery performance, reform, institutional development and capacity building milestones. The mid-term review will also identify problems or weaknesses in implementation arrangements, and agree on changes needed.

15. Sindh and the USCs will conduct together with ADB a similar MTR of the Investment Program in the fifth year from date of approval of the Facility by ADB.

16. Sindh will submit to ADB a subprogram completion report within three months of physical completion of the subprogram, and Investment Program completion report within three months of physical completion of the Investment Program. These reports shall provide detailed evaluation of the subprograms and the Investment Program, respectively, covering the design, costs, contractors' and consultants' performance, social, environmental and economic impact, economic rate of return, and other details for each subprogram and the Investment Program as may be requested by ADB.

D. Procurement and Consulting Services

17. Pakistan will ensure that the procurement of goods, works and services financed from the MFF will be carried out in accordance with ADB's *Procurement Guidelines* (2007, as amended from time to time) and that all consulting services will be selected and engaged in accordance with ADB's *Guidelines on the Use of Consultants* (2007, as amended from time to time).

E. Disbursement

18. Each PFR will result in a separate loan agreement, which will describe the detailed disbursement arrangements agreed between Pakistan and ADB. The individual loan proceeds will be disbursed in accordance with ADB's *Loan Disbursement Handbook* (2007, as amended from time to time).

19. To ensure the timely release of loan proceeds and to expedite project implementation, immediately after the effectiveness of each tranche, Sindh will establish the necessary imprest accounts at National Bank of Pakistan, one of which will be for P&DD/PSU to cover eligible expenditures under Parts A and D of the Investment Program and the remaining for USCs to cover eligible expenditures under Parts A, B and C. In connection with the imprest account of P&DD, P&DD will establish a separate escrow account at National Bank of Pakistan, with an escrow arrangement and independent verification mechanism that are additional arrangements to manage the funds specifically for Part D. The imprest accounts will be established, managed, replenished, and liquidated in accordance with the ADB's *Loan Disbursement Handbook*, and the agreed upon detailed arrangements. The total amount to be deposited into the imprest account will not exceed the equivalent of 6 months of estimated expenditures or 10% of the related loan amount, whichever is lower. The statement of expenditures (SOE) procedure may be used for reimbursement of eligible expenditures for the Investment Program and to liquidate advances provided into the imprest accounts. Any individual payment to be reimbursed or liquidated under the SOE procedure will not exceed \$100,000. The loan proceeds may also be disbursed directly to the consultants and contractors under the direct payment procedure.

F. Auditing and Accounting

20. Pakistan will cause Sindh and USCs to ensure that proper accounts and records are maintained in a timely manner to adequately identify the use of tranche proceeds in such a manner and details as may be specified in each legal agreement.

SCHEDULE 4

SELECTION CRITERIA AND APPROVAL PROCESS FOR TOWN CLUSTERS AND INVESTMENT PROGRAM SUBPROJECTS

A. Selection of Clusters

1. The Investment Program will be rolled-out to certain clusters of urban settlements within the talukas in Sindh (the “towns”) in a phased and strategic manner, to be timed with the formation of Urban Services Corporations (USCs) to manage water supply, wastewater and solid waste management services. The town clusters considered for inclusion under the Investment Program will:

- (i) have an “anchor town” around which a cluster of towns can be identified, together providing a critical mass for efficient operation of a USC;
- (ii) have an “anchor town” that is strategically located near transport links, and owing to its proximity to natural and industrial resources, has the capacity to generate economic growth and employment;
- (iii) be prepared to jointly incorporate a USC with other towns within the cluster, under the Companies Ordinance 1984; and
- (iv) agree to a package of institutional reforms aimed at the effective and efficient management of urban services.

2. “Anchor towns” are defined as contiguous urban areas having the population in excess of 150,000. Other towns within 150 kilometers of the anchor town, and having urban populations in excess of 50,000⁹, may join the cluster. For inclusion in the Investment Program, the cluster should include an aggregate estimated urban population of more than 350,000. Hyderabad and Karachi are not eligible for financing under the Investment Program. The Program Support Unit (PSU) of the Planning and Development Department (P&DD), the Executing Agency (EA), will identify, process and approve the selection of town clusters.

B. Subprojects

1. Selection of Subprojects

3. Following are the criteria to be satisfied in the selection of a subproject for financing under the Investment Program.

4. **Linkage with Urban Sector Roadmap and Investment Program.** The infrastructure subprojects should fall within the water supply, wastewater management and solid waste management subsectors in clusters of towns in Sindh. The infrastructure and non-infrastructure subprojects should form an element of the investment program identified as a part of the Urban Sector Roadmap for Sindh, and should enhance service improvements in these subsectors.

5. **Linkage with Service and Asset Management Agreements.** Under the second and subsequent tranches, the subprojects should be included under the investment plan option agreed and set out in the Service and Asset Management Agreements between USCs, the Taluka Municipal Administrations (TMAs), and Sindh.

⁹ As determined by the 1998 census.

6. Linkage with Water Supply and Wastewater System Mapping and Strategic Sanitation Plans. Under the second and subsequent tranches of the Investment Program, water supply distribution network improvement (DNI) subprojects should be prepared based on water supply system maps prepared for each urban cluster under the program. Drainage, wastewater management and sanitation subprojects should be identified and prepared based on wastewater system maps and strategic sanitation plans prepared for each urban cluster under the program.

7. Economic and Financial Criteria. The subproject should be technically sound and economically feasible, and, in the case of revenue generating subprojects, be financially feasible and sustainable. The estimated economic rate of return should be 12% or higher based on economic analysis carried out in accordance with the ADB's *Guidelines for the Economic Analysis of Projects*.

8. Sustainability Criteria. Under the second and subsequent tranches of the Investment Program, no subproject should be approved in any participating TMA funded under the preceding loan tranche unless the subject TMA has increased the tariffs to customers receiving improved services under the preceding tranche(s). The tariff increase will be to appropriate levels, taking into consideration general willingness-to-pay survey(s) from reputed firm(s) acceptable to ADB, and the real cost of delivering the improved service as assessed by the Independent Verifier.

9. Environmental and Social Criteria. The subproject should be environmentally and socially justified, and the selection, planning and design of the subproject should be subject to a process of public consultation to be carried out as a part of the social and environmental assessments. The following criteria should apply:

- (i) The subproject should be consistent with the applicable provisions of the Sindh water supply, sanitation and solid waste management policies, and with other regulations, rules and standards applicable to Sindh.
- (ii) For each subproject, a rapid environmental assessment checklist¹⁰ will be filled out to assist in environmental screening of each subproject in accordance with ADB's *Environmental Policy* (2002), ADB's *Environmental Assessment Guidelines* (2003) and the Environmental Assessment and Review Framework as referred to in Schedule 5 to the FFA for all civil works packages. The subproject should have acceptable residual negative impacts after mitigation. For each subproject, an Initial Environmental Examination or Environmental Impact Assessment, as appropriate, in accordance with the ADB Environment Policy will be prepared, including an Environmental Management Plan in accordance with the Environmental Assessment and Review Framework.
- (iii) The subproject should not be located in environmentally sensitive areas such as wildlife sanctuaries, national parks, legally protected areas for reasons of biodiversity or ecological assets, or in critical or sensitive areas identified as archaeological or heritage sites and monuments by the relevant authorities.
- (iv) For each subproject, the involuntary resettlement categorisation checklist will also be prepared to determine whether or not land is needed, and if land is needed, designs will be adjusted so as to minimise land impacts and resettlement requirements. For any subproject that requires land acquisition or affects existing structures or assets, then the land acquisition and resettlement

¹⁰ Rapid Environmental Assessment checklist is available at the ADB website.

plans will be prepared in accordance with the provisions of the ADB's *Involuntary Resettlement Policy* (1995) and the Land Acquisition and Resettlement Framework, agreed upon between the ADB and Sindh as set out in Schedule 5 to the FFA.

- (v) Each subproject will be evaluated for social impact and will have to be deemed socially sound, and as necessary include any measures to mitigate any possible adverse social impacts and maximize positives impacts. For each subproject package an Initial Poverty and Social Assessment (IPSA) will be conducted in accordance with ADB's policies and procedures. If the IPSA identifies further investigation and further incorporation of social aspects in the subproject design are needed, a fuller social analysis will be conducted and social assessment/specific action plan will be developed as necessary. The provisions included in the Gender Action Plan for the Investment Program will be developed as necessary.
- (vi) Consistent with the ADB's *Policy on Indigenous Peoples* (1998), an assessment will be made for each subproject to determine whether or not indigenous people will be affected. If indigenous people are to be affected, terms of reference will be prepared for the preparation of an indigenous people's action plan in accordance with ADB's *Policy on Indigenous Peoples*.
- (vii) The subprojects involving civil works will be prepared and implemented through the USCs established to provide, on behalf of the TMAs, urban service delivery in approved towns clusters. In the event that the new USC has not been incorporated, the PSU will assume this responsibility.
- (viii) All necessary federal and provincial approvals will have been obtained in advance of submission of the subproject for financing.
- (ix) Sufficient counterpart funding from Pakistan and Sindh will be allocated to implement the subproject.

2. Procedures

10. The approval procedures for subprojects intended for financing under the facility will follow the required provincial and national procedures as appropriate, and as supplemented by the requirements of the Land Acquisition and Resettlement Framework and Environmental Assessment and Review Framework.

11. For the subprojects already prepared for first tranche financing, the approval process stands completed as at the date of this agreement.

12. The USCs, or PSU will identify non-infrastructure subprojects under Part A of the Investment Program, and prepare the subproject detailed proposals. These will follow the format and content of the proposals prepared for the first tranche works.

13. Each subsequent infrastructure subprojects under Parts B and C, intended for financing under this facility, will be prepared, processed and approved in accordance with the following procedures:

- (i) The USC (or PSU, in the event the new USC for a particular subproject has not been established) in consultation with the TMAs, will identify the infrastructure subprojects and prepare the subproject detailed design, feasibility assessment, and associated checklists for poverty and social assessment, involuntary resettlement and environmental screening. These will follow the format and

content of the feasibility studies prepared for the first tranche works (with assistance of consultants as necessary). Infrastructure subprojects must demonstrate how they will be operationally sustainable.

- (ii) The USCs will obtain the necessary approvals as identified in the Service and Asset Management Agreements to be entered into between the USCs and the TMAs.
- (iii) The USCs will submit proposed subproject design, feasibility studies and associated safeguards analysis to P&DD, for appraisal.
- (iv) On successful appraisal of all proposed subprojects, P&DD will further submit the subproject proposals, associated Environmental Impact Assessments or IEEs and Land Acquisition and Resettlement Plans (LARP), and appraisal report to ADB for review and approval, and will inform Pakistan of such action.
- (v) The USCs will translate a summary of the subproject's LARP into Sindhi and disclose the document to the affected persons prior to submitting it to ADB. The USCs will review the LARP as necessary based on comments from the affected people and ADB.
- (vi) If any of the subprojects in the tranche are categorised as being "A" or "B-sensitive", and thus require compliance with the 120 days circulation rule under ADB's environmental policy, the Summary Environmental Impact Assessment or Summary Initial Environmental Examination must be circulated to the board and the general public in accordance with the ADB's Public Communication Policy 120 days before the Periodic Financing Request is submitted to the ADB.
- (vii) PSU will compile a review report on the compliance of Pakistan and Sindh with loan covenants relating to the previous tranche.
- (viii) ADB will approve the subproject proposals, subject to satisfactory compliance with all safeguard policies and related loan covenants; and
- (ix) ADB will approve the subproject proposals, subject to any further modifications required to be made to the proposals or safeguards.

14. The necessary funding required to cover the operation and maintenance cash shortfall arising out of earlier investments under the earlier tranche as well as new investments under Parts B and C must be provided through Part D.

15. The USCs will submit proposed subproject design, feasibility studies and associated safeguards analysis to P&DD for appraisal.

16. On successful appraisal of all proposed subprojects, P&DD will further submit the subproject proposals and appraisal report to ADB for review and approval, and will inform Pakistan of such action.

17. Based on ADB's approval, and subject to any modifications or remedial measures required by ADB, NSUSC or other USCs, as appropriate, will implement the subprojects related to water supply, wastewater management and solid waste management sectors and ensure that ADB has access to all documents related to the subproject proposals and approval processes. These documents should be kept for five years after approval.

SCHEDULE 5

SOCIAL DIMENSIONS AND SAFEGUARD REQUIREMENTS

1. Pakistan and ADB will ensure that all the requirements prescribed in this Schedule, and the following safeguard frameworks and plans that have been prepared with respect to the Facility and the first tranche and of which ADB has been provided full copies, and which are deemed incorporated herein by reference, are complied with during the processing and implementation of the (i) the Water Supply and Wastewater Management Improvements component and (ii) the Solid Waste Management Improvements component under the Facility:

- (i) Environmental Assessment and Review Framework, dated 30 May 2008;
- (ii) Land Acquisition and Resettlement Framework dated 22 September 2008, and
- (iii) environmental management plan, resettlement plan for the first tranche.

2. The frameworks cover the Facility-specific information and requirements in accordance with ADB's safeguard policies: (i) the general anticipated impacts of the components or projects likely to be financed under the Facility on the environment, involuntary resettlement, and indigenous peoples; (ii) the safeguard criteria that are to be used in selecting components and projects; (iii) the requirements and procedures that will be followed for screening and categorization, impact assessments, development of management plans, public consultation and information disclosure (including the 120-day disclosure rule, if required), and monitoring and reporting; and (iv) the institutional arrangements (including budget and capacity requirements) and the client's and ADB's responsibilities and authorities for the preparation, review and clearance of safeguard documents.

3. Prior to the preparation of each Periodic Financing Request (PFR), the applicability and relevance of each safeguard framework for environmental assessment, involuntary resettlement, and indigenous people will be reviewed by the PSU and updated to ensure relevance and consistency with applicable country legal frameworks and ADB's safeguard policies, as amended from time to time.

4. In all cases, for each new PFR preparation, the client will review ongoing projects to check on the status of compliance with the safeguard plans and frameworks, and submit the review reports to ADB, together with other required safeguard documents relevant to components included in the tranche being processed. In any case if major noncompliance is discovered in the course of the review of ongoing projects, a corrective action plan will be prepared and submitted to ADB.

SCHEDULE 6

UNDERTAKINGS

Pakistan will, and will cause Sindh, to undertake that they will:

- (i) ensure timely implementation of the agreed reforms set forth in the Strategic Action Plan for Reform and Investment, which is part of the urban sector Roadmap and Investment Program;
- (ii) ensure that ADB is kept informed on policies and programs related to municipal services in the secondary towns of Sindh and other policies and programs that will materially affect the financial viability of each subproject under the Investment Program;
- (iii) prior to any intervention related to water supply, wastewater and solid waste management infrastructure and services in a particular town cluster under the Investment Program, ensure the timely incorporation of the relevant USCs pursuant to the Companies Ordinance 1984, as may be amended from time to time, and allow the USC to operate as a limited liability company;
- (iv) prior to any intervention related to water supply, wastewater and solid waste management infrastructure and services in a particular town cluster under the Investment Program, issue the necessary notification(s) to allow USCs to effectively plan, design, construct, operate, manage and maintain all water supply, wastewater and solid waste management infrastructure and services in their respective coverage areas. The coverage areas will be the areas to be agreed upon between the Sindh, the relevant TMAs and USCs, to the satisfaction of ADB;
- (v) provide the necessary resources needed to ensure that (a) the USCs established under the Investment Program are effective, sustainable vehicles for the delivery of water supply, wastewater and solid waste management services; and (b) the facilities constructed under the Investment Program will continue to be in good condition during and after the completion of the Investment Program;
- (vi) ensure that the participating TMAs increase their tariffs to customers receiving improved services and that the increase will be to appropriate levels, taking into consideration general willingness-to-pay survey(s) from reputed firm(s) acceptable to ADB, and the real cost of delivering the improved service as assessed by the independent verifier;
- (vii) ensure that the USCs have adequate enforcement mechanism to effectively collect service fees and penalize defaulters in order to improve the collection efficiency, deter non-payment and ensure sustainability of USC operations.
- (viii) provide the USCs with timely assistance and support to ensure that the USCs are able to effectively carry out its entire obligations to be set out under the Service and Asset Management Agreement, which will be entered into between the relevant TMAs and the relevant USCs;

- (ix) provide the necessary resources needed to ensure that the TMAs participating in the Investment Program are adequately staffed;
- (x) ensure that all subprojects are selected in accordance with the agreed criteria set out in Schedule 4 of the FFA and other applicable requirements and guidelines for subproject implementation and monitor together with the USCs the implementation of subprojects up through the completion of each subproject;
- (xi) ensure that (a) all land and rights-of-way required for any subproject under the Investment Program are made available in a timely manner, including the requirement for allocation in the annual budget for the financing of land acquisition and related resettlement costs under the Investment Program; (b) upon completion of the detailed design and detailed measurement survey, the resettlement plans under the Investment Program will be prepared in full consultation with the affected people and in accordance with the Land Acquisition and Resettlement Framework (LARF) agreed upon between Sindh and ADB and will be promptly disclosed to the affected people; (c) any reports on the implementation of the resettlement plan to be prepared by an external monitoring and evaluation agency will be submitted to ADB on periodic basis, and (d) the entire involuntary resettlement activities under the Investment Program will be carried out in accordance with the LARF and resettlement plans agreed upon between Sindh and ADB, the relevant national and local policies on resettlement and rehabilitation, and ADB's *Involuntary Resettlement Policy* (1995);
- (xii) prior to issuance of notice for mobilization for civil works activities under a subproject, ensure that (a) the LARP has been disclosed to the affected people and submitted to ADB for review and approval; (b) the negotiations on the resettlement entitlements with the affected people have been completed; and (c) the affected people have been satisfactorily compensated for their loss through cash payment or land replacement or other forms of agreed entitlement;
- (xiii) ensure that in the event of any changes to the agreed LARPs, including on the agreed compensation to the affected people, inform ADB and update the LARPs accordingly, and submit the updated resettlement plans to ADB for review and approval;
- (xiv) together with the USCs, ensure that the design, construction, operation, and implementation of all subproject facilities are carried out in accordance with ADB's *Environment Policy* (2002), and Pakistan Environmental Protection Act, 1997. Any adverse environmental impacts arising from the construction, operation, and implementation of subproject facilities will be minimized by implementing the environmental mitigation and management measures and other recommendations specified in the Environmental Assessment and Review Framework (EARF) and Initial Environmental Examinations/Environmental Impact Assessments, as applicable. Subproject assessment will be conducted in accordance with the EARF, which has been prepared based on Pakistan environmental requirements and ADB's *Environment Policy* (2002). Any change in subproject scope will be classified and environmental assessment conducted in accordance with the EARF;

- (xv) ensure that (a) the environmental management and monitoring plan will be strictly implemented, and together with USCs and ADB review progress in the implementation of the environmental management and monitoring plan covering the subprojects financed under the loan prior to processing the follow-up loans, and (b) they will submit to ADB annual monitoring reports on subprojects' environmental performance in accordance with the EARF;
- (xvi) implement the Gender Action Plan prepared under the Investment Program to encourage gender-balanced consultation and participation in the Project planning and implementation, including the representation of women in the board of directors of USC;
- (xvii) monitor the subproject effects on women during implementation of each subproject, including where relevant, with gender-disaggregated data collected pursuant to the monitoring and evaluation system referred to in the IPPMS and the Gender Action Plan;
- (xviii) ensure that (a) there is no differential payment between men and women for work of equal value, and (b) civil works contractors do not employ child labor in the construction and maintenance activities in accordance with the relevant laws and regulations of Pakistan; and
- (xix) ensure the availability and timely release of counterpart funding for the timely implementation of the subprojects under the Investment Program.