

PPIAF Assistance in Pakistan

Since 2002 PPIAF has provided funding for 11 activities in Pakistan worth over \$3 million, one of which is ongoing. These activities have assisted in sensitizing stakeholders on key constraints and opportunities for private sector participation in infrastructure services, building consensus on policy reforms, identifying opportunities to incorporate international best practices, and enhancing the technical capacity within National Electric Power Regulatory Authority, Oil and Gas Regulatory Authority, Universal Service Fund Company, and the Urban Unit in Punjab to implement reforms.

Technical Assistance for the Enabling Environment for PPPs in Pakistan

The government of Pakistan views its public-private partnership (PPP) program as a catalyst for meeting its Millennium Development Goals, raising the level of municipal service and increasing access to basic infrastructure for its citizens. In 2005 PPIAF provided support to the government by sponsoring a seminar to build consensus on a coherent policy and program for PPPs in infrastructure service delivery. The objective of the seminar was to facilitate discussion between key government policy makers from the Planning Commission, Privatization Ministry, Finance Ministry, Ministry of Local and Provincial Governments, National Reconstruction Bureau, provincial governments, and international experts on identifying obstacles in private sector participation in infrastructure services and evolve a consensus on the direction for reforms.

The seminar on “PPP Participation in Infrastructure Projects” was held on March 30–31, 2005 and brought together about 73 participants, including officials from PPP units in other countries. Presentations were made on a number of topics, including: private participation in infrastructure and service delivery; PPP frameworks and structures; and the way forward for Pakistan. Several case studies and examples of international best practice were also discussed, including the case study of the Nelspruit water concession; India’s experience with legal, regulatory, and standardization reform; South Africa’s experience estimating the true costs of PPPs; and benchmarking and determining value for money, which included lessons from the United Kingdom.

Consensus was achieved on a number of recommendations, including: establishing a policy framework and coordinate a PPP program across the government; establishing a PPP unit as a core center of expertise; reviewing/establishing a legal framework to facilitate PPPs; and developing a communication strategy. Consensus was also achieved on the need to identify a project pipeline in line with market capacity and funding mechanisms.

In 2007, when the government was seeking to increase the role of the private sector in financing and operating infrastructure in Pakistan, PPIAF provided support to the Infrastructure Project Financing Facility (IPFF), a newly established non-bank financial institution expected to play an important role in assisting finance PPP projects. The key objective of the activity was to assist the IPFF management to develop a corporate strategy and formulate a business plan for that would maximize the facility’s financing impact.

A detailed market assessment of infrastructure financing in Pakistan was produced and identified a project financing gap of \$2–2.5 billion per annum. The report’s main findings included: i) Pakistan has a successful track record of financing thermal power projects and cellular telephony, but has been less successful in other sectors; ii) Pakistan’s domestic banks have considerable project finance experience but the small capital markets have contributed little to the private financing of infrastructure; iii) limited affordability has acted as a major impediment to private financing within the water and sanitation sector; iv) the pipeline of bankable projects could be improved through a number of specific interventions to reduce some key risks, particularly in the roads sector; and v) a new source of finance for pathfinder projects within some of the less developed sectors would be very useful.

A business plan for IPFF was also formulated as part of the PPIAF activity in December 2009. The business plan updated the infrastructure financing estimates presented by the 2007 market assessment;

described the mission, objectives and core design principles of the facility; presented its operational focus, including product mix, and high level pricing and investment policy guidelines; described IPFF's proposed organizational and governance structures; delineated the implementation plan to launch and ramp-up IPFF operations; presented a financial model for the entity, and described the model structure and key assumptions; and presented IPFF's financial plans. The plan was used by the government to obtain a non-banking license for IPFF and to register the facility as a non-bank financial intermediary.

Results of PPIAF's Activities for Enabling Environment Reform in Pakistan

Category	Outputs
Enabling environment reform	
<i>Analyses/assessments prepared</i>	<ul style="list-style-type: none"> • Market Assessment Report, November 2007
<i>Plans/strategies prepared</i>	<ul style="list-style-type: none"> • Business Plan: Pakistan Infrastructure Project Finance Facility, December 2009
Capacity and awareness building	
<i>Workshops/seminars</i>	<ul style="list-style-type: none"> • Seminar on Private Sector Participation in Infrastructure Delivery, March 30–31, 2005

Category	Outcomes
Enabling environment reform	
<i>Plans/strategies adopted</i>	<ul style="list-style-type: none"> • IPFF business plan adopted
Capacity and awareness building	
<i>Consensus achieved</i>	<ul style="list-style-type: none"> • Consensus achieved on policy reforms for enabling PPPs in infrastructure, 2005

Technical Assistance for Pakistan's Energy Sector

Since 2002 PPIAF has supported three activities in the gas sector in Pakistan: a study on an appropriate tariff regulatory regime for the Oil and Gas Regulatory Authority (OGRA); assistance in designing a gas transmission development strategy and framework for private sector participation; and review of the regulatory and institutional regime for the development of policy framework for introducing competition in the gas sector. PPIAF also provided assistance to NEPRA, the independent National Electric Power Regulatory Authority, for developing performance standards for regulating public and private generation licenses.

In 2002 PPIAF provided assistance to enhance the effectiveness of OGRA to preparing for future privatizations in the gas sector through the development of an improved tariff regulation regime. The study examined different aspects of tariff regulation including: a review of the prevailing regime; operating and maintenance issues; capital expenditure requirements and regulations; the scope for application of benchmarking; advice on asset valuation techniques and rate of return; suggested proposals for the suggested tariff regime; and financial modeling. Stakeholder consultations and training OGRA officials on the econometric regulation model and statistical methods were also a part of this activity. PPIAF's assistance for tariff reforms has helped OGRA to evaluate alternate tariff regimes and use the framework and econometric model developed as part of the study in the process of tariff determination.

In 2004, at the behest of the Ministry of Petroleum and Natural Gas, PPIAF provided funding for a study on a transmission development and private sector participation strategy for the gas sector. The government of Pakistan had been evaluating short-term and medium- to long-term options for meeting the fuel needs of the country, which was experiencing shortages in gas supply. In the short term, the government was keen to maximize the use of indigenous resources by removing constraints to gas supply, transmission infrastructure, and distribution. It was also keen to introduce competitive structures in the gas industry, where a number of private sector production companies were already in operation, and in gas transmission and distribution where the two public-sector utilities (Sui Northern Gas Pipelines Ltd. and Sui Southern Gas Company) were being prepared for privatization. Within this context, the government considered an overall review of the existing operations in the gas sector and identification of constraints and opportunities to be essential for formulating future policies and programs.

The main objective of the study was to identify medium and long-term gas infrastructure development priorities with a focus on: i) optimizing the flow patterns from various gas fields to demand centers utilizing the existing infrastructure; ii) optimizing incremental expansion of existing gas transport infrastructure; iii) exploring the potential contribution of underground storage in Northern Pakistan to address fluctuating seasonal demand; and iv) identifying potential stand-alone pipeline projects for large gas fields to demand centers, especially clusters of power plants. A significant sub-objective of the study was to deliver formal training to designated counterparts government such as OGRA, supplemented by practical-one-on-one work with models such that the officials at OGRA could continue to model future demand/supply balance scenarios after the completion of the study.

The PPIAF funded study included a modeling approach for evaluating possible future infrastructure plans; the finalized hydraulic and financial/economic evaluation models and simulation results; an indicative gas master plan; an assessment of underground gas storage; a framework for private sector participation; and a roadmap for strengthening the gas transmission development strategy.

The main recommendations of the study for priority improvements to the private sector participation framework included: i) reforming the gas pricing regime to permit OGRA to move to regulating infrastructure tariffs rather than prescribed prices for gas as a commodity; ii) determination of separate transmission and distribution tariffs; iii) OGRA regulation of public utility companies should be obligatory rather than voluntary; and iv) several clarifications/additions to the OGRA ordinances.

Stakeholder workshops and counterpart training sessions on gas demand, hydraulic simulation, and an economic and financial analysis were also conducted under this activity.

As part of the continuing reform process and restructuring of the gas industry, the Pakistani government requested PPIAF assistance in 2005 to review the existing institutional and regulatory regime, and develop a policy framework for introducing competition in the gas sector. The main objective of the activity was to review the existing institutional and regulatory regime, identify policy measures required to introduce competition in the short- and medium-term, develop a plan to introduce competition in the short-run under the existing regime, and investigate the feasibility for the introduction of third party access (TPA) regime. TPA refers to the conditions, rules, and regulations for accessing pipeline space or the use of a pipeline by parties other than its owner or operator.

The PPIAF-funded study assessed the existing situation in Pakistan's gas industry and reviewed international experience on TPA along with industry models. It also presented obstacles to competition under the existing framework, recommended measures to overcome these obstacles, and presented TPA guidelines and a roadmap for introducing competition in the sector. The study's main recommendations included: supply side diversification; restructuring and unbundling of the sector; initiation of a regulated TPA regime; resolution of tariff and subsidy issues; initiation of transmission capacity market; demand side opening through additional service options to eligible users; and a redefinition of roles in policy formulation and regulatory implementation.

A stakeholder dissemination workshop was held in Karachi and Islamabad in February 2006. It was attended by 40 stakeholders, including government officials from the Ministry of Petroleum and Natural Resources, OGRA, the Privatization Commission, Sui Northern Gas Pipelines Ltd, Sui Southern Gas

Company, and representatives of the Pakistan Petroleum Exploration & Production Companies Association.

In 2005 the government also requested PPIAF support to assist NEPRA, the independent power regulator, to develop generation performance standards for public and private companies. The main objective of this activity was to: identify and establish generation performance indicators from a regulator’s perspective, specifically in the areas of reliability, availability, efficiency, and safety of electric power delivery; collect data on generator performance indicators in Pakistan and from other countries; assist NEPRA in prescribing the performance and technical standards for regulated generation entities; and provide specific formats for obtaining required information from all generation licensees.

The PPIAF-funded report analyzed the existing state of power plants in Pakistan, reviewed international practice with respect creation of performance standards (benchmarks), discussed the generation parameters to be considered for standards, and finally recommended three set of performance standards that may be subject to mandatory or voluntary regulation.

The report’s recommendations included: adopting the three main performance standards; adopting the reliability, availability, and maintainability standards; examine the feasibility of adopting efficiency and cost performance standards; forecasting the value of improvement in the performance indicators for Pakistan’s power plants; and ensuring that the data collected can be accessed and applied by stakeholders in their efforts to quantify the cause-effect relationship of past performance so that it can be applied to future decisions.

Two stakeholder workshops were held and attended by officials from NEPRA, the Ministry of Water and Power, Private Power Infrastructure Board, National Thermal Development Corporation, generating companies, and distributing companies. In 2009 NEPRA issued the National Electric Power Regulatory Authority Performance Standards (Generation) to ensure that electric generation facilities and power plants are efficiently operated to ensure service reliability and adequacy to the transmission and distribution service providers.

Results of PPIAF’s Activities in Pakistan’s Energy Sector

Category	Outputs
Enabling environment reform	
<i>Analyses/assessments prepared</i>	<ul style="list-style-type: none"> • Study on the Preparation of Tariff Regulatory Regime, 2005 • Study on Gas Transmission Development Strategy and Framework for Private Sector Participation, 2005 • Review of Institutional and Regulatory Regime, and Development of Policy Framework for Introducing Competition in the Gas Sector in Pakistan, 2006 • Report on Electricity Generation Performance Standards, 2006
Capacity and awareness building	
<i>Workshops/seminars</i>	<ul style="list-style-type: none"> • Two week training workshop on the use of financial tariff model, benchmarking, and other statistical techniques • Stakeholder workshops and training sessions on gas demand, hydraulic simulation, and an economic and financial analysis held in Lahore and Karachi, July 10–14, 2006 • Dissemination workshops for Final Report held in Karachi and Islamabad, February 2006 • Stakeholder workshops to discuss performance standards report and recommendations, 2006

Category	Outcomes
Enabling environment reform	
<i>Policies adopted, legislation recommended, or regulation issued/revised</i>	<ul style="list-style-type: none"> National Electric Power Regulatory Authority Performance Standards (Generation) Rules adopted, 2009
Capacity and awareness building	
<i>Technical capacity enhanced</i>	<ul style="list-style-type: none"> OGRA technical capacity enhanced, 2005–2006 NEPRA technical capacity enhanced, 2006

Technical Assistance for Pakistan's Telecommunications Sector

Increasing access to telecommunication services in rural areas of Pakistan is a goal of the government, which set itself a challenging nation-wide target of providing 95% of its population affordable telephony and data services for Internet access by the end of the year 2015. In 2006 the government established the Universal Service Fund (USF) to increase access the access to telecommunications of certain populations and geographic areas that remain un-served or underserved. The government requested PPIAF assistance to support to the Ministry of Information Technology and Telecommunications to prepare and implement a least-cost subsidy scheme that would facilitate the effective use of the fund for rural expansion of telecommunications.

Several outputs were developed as part of this PPIAF activity, which included: a report on the administrative structure of the USF and an assessment of the monitoring and enforcement features of the service fund framework. This assistance led to the establishment of the Universal Service Fund Company (USFCo), which manages the fund's subsidies. The PPIAF activity also included the development of service agreements for USFCo subsidies to operators to extend mobile services into un-served areas. Pakistan is one of the first countries in the world to embark on a PPP-based universal service program focused on extending access to broadband Internet services in un-served and under-served areas.

The USFCo has committed over 60% of all funds that it has collected through levies on operator revenue within 3–4 years of operation and has been able to meet the yearly objectives of rolling out broadband infrastructure set by the Ministry.

In 2008 USFCo initiated a broadband program that provides output-based subsidies to private firms that roll-out broadband networks in underserved towns across the country. Following a subsidy auction in late 2008, USFCo finalized a pilot project for the Faisalabad region, the agreement for which was designed in March 2009. Through the pilot project, 72,500 broadband connections were to be provided by Pakistan Telecom Company Limited and 16, 500 by Wateen Telecom. The companies qualify for subsidy payments when they achieve pre-defined targets within a specified timeframe.

In 2009 USFCo sought assistance from PPIAF to develop audit methodologies for monitoring improvement in broadband services provided by the private sector in underserved areas. The aim of this activity is to assist the USFCo develop an audit framework and capacity to monitor the effective delivery of broadband services awarded under PPP arrangements in Pakistan. This activity has two components: i) to assist USFCo design audit methodologies for monitoring the effective delivery of broadband services awarded under previous PPP arrangements and build capacity of the USFCo staff undertake robust and efficient audits that ensure the effectiveness of future PPPs; and ii) conduct a detailed technical audit of the pilot broadband program to verify that the targets set out in the services agreement between the USF and the firms have actually been achieved.

Several outputs were developed as part of this activity: i) an overview of the draft methodology for technical audit of the USF broadband service deployment; ii) a report on audit test procedures for service

and subsidy agreement for broadband between the USF and service providers; iii) a final report on the technical audit of the USF broadband service deployment pilot.

The technical audit concluded that the USF did not account for the possibility of service providers to failure to meet their expectations and operators are impacted by economic factors, as well as incidence of force majeure such as floods in 2010 that reduce their performance. The audit also noted that there are some cases where the quality of service performance and support to the institutions could be strengthened in order to maximize the benefits, such as increasing the bandwidth offered in educational broadband center installations. The report also noted the training, monitoring, and support offered to the institutions through their USF projects should be increased.

The report's main recommendations for improving the broadband program include: i) negotiating variations to the existing contracts, while insisting that educational and community broadband center programs are fulfilled, or improved; ii) ensuring that students and public access users targeted by the project have good quality and attractive service; iii) rewarding operators for implementing broadband infrastructure to facilitate private service; iv) instituting a higher level of commercial responsibility and service contracts on community broadband center operators; and iv) committing additional financial resources through award of competitive grants to build internet content and applications for the use of communities of interest.

The draft audit methodology has been refined at the end of each audit milestone, and the final audit methodology reflects lessons from the audit of the broadband deployment pilot. The final methodology is being refined with input from the Ministry and USFCo.

Results of PPIAF's Activities in Pakistan's Telecommunications Sector

Category	Outputs
Enabling environment reform	
<i>Analyses/assessments prepared</i>	<ul style="list-style-type: none"> • Administrative Structure of the Universal Service Administration, 2006 • Pakistan Rural Services Universal Service Fund Subsidy Project: Monitoring and Enforcement Features of Pakistan Universal Service Fund Framework, 2007 • Report on Audit Test Procedure for Service and Subsidy Agreement from Broadband between USF and Service Provider, December 2009 • Final Report on Technical Audit of the USF Broadband Service Deployment Pilot (Faisalabad Telecom Region), November 2011
Capacity and awareness building	
<i>Workshops/seminars</i>	<ul style="list-style-type: none"> • Training sessions for USFCo staff, 2012

Category	Outcomes
Enabling environment reform	
<i>Institutions created or strengthened</i>	<ul style="list-style-type: none"> • Universal Service Fund Company created, 2006
Capacity and awareness building	
<i>Technical capacity enhanced</i>	<ul style="list-style-type: none"> • USFCo technical capacity enhanced, 2011

Technical Assistance for Pakistan's Water and Sanitation Sector

PPIAF has supported three activities in water and sanitation sector in Pakistan, by providing assistance to the provincial government of Punjab to evaluate its policy, institutional, and regulatory frameworks in the urban water supply and sanitation (WSS) and solid waste management (SWM) sectors.

In 2004 the government of Punjab sought PPIAF assistance to design key elements of its WSS reforms and build broad consensus among stakeholders on its proposed program and implementation plan for the sector. This effort was part of the government's plan to enhance the quality of life in and attract investors to the province's largest cities (Lahore, Faisalabad, Multan, Rawalpindi, Gujranwala, Sargodha, Sialkot, Derghazi Kahn, and Bhawalpur). As part of this effort, the government wished to examine options for improving performance of the WSS utilities through: i) contractual incentives, including PPPs; ii) financial incentives, including through output-based financing; iii) appropriate setting of WSS tariffs; iv) independent economic regulation and monitoring of service; and v) management development to implement the reforms.

Several outputs were developed as part of this activity: i) a final report and reform roadmap; ii) report on financial incentives; iii) study on consumer preferences for improved WSS services and willingness to pay; iv) report on economic regulation; v) tariffs study; vi) a communication strategy; vii) a report on contractual incentives; and viii) status quo reports for several cities (Bahawalpur, Dera Ghazi Khan, Faisalabad, Gujranwala, Multan, Rawalpindi, Sialkot, and Sargodha).

The PPIAF-funded final report, the "[Punjab Urban Water Supply and Reform Study](#)" reviewed the performance of the WSS service in the eight largest cities, recommended actions, and delineated the necessary steps to be taken by the provincial government to initiate reforms in this sector. The key issues concerning the WSS services that were identified included: i) poor service quality; ii) poor state of assets; iii) lack of regulation and enforcement of water abstractions and wastewater return flows to the environment; iv) service standards and performance of service providers not set or regulated; v) lack of accountability; vi) lack of commercial orientation in the WSS providers; vii) tariff revenues do not cover current operating costs due to poor collection rates and low tariff rates; viii) supervision of performance and performance of services is in the same hands; and ix) lack of reliable data hampers planning or performance benchmarking.

The main elements of the reform roadmap included the corporatization of water and sanitation agencies (WASAs) in two cities; implementation of measures to enhance accountability and sector governance; institutionalizing baseline data collection on operational, commercial, and financial performance indicators; and assessing options for PPPs to improve the effectiveness of service delivery.

Several stakeholder workshops and meetings took place during the execution of the activity. A project launch workshop was held on September 15, 2005 and a series of stakeholder consultations on the WSS reform strategy were held on October 10–20, 2005. Workshops were held to discuss the results of the willingness to pay survey on February 4, 2006 and the preliminary recommendations from the study on April 26, 2006. Finally on November 23–24, 2006 a seminar was organized by the Urban Unit of the

Government of Punjab to discuss key WSS policy and program issues in the light of the PPIAF financed reports and international experience and seek stakeholder views on the WSS issues and policy options. These workshops brought key stakeholders including the federal government, provincial government, district government, utilities staff, NGOs, funding agencies and key donors and facilitated the provincial government's assessment of options for reforms and improvement of service delivery.

Several government and World Bank reports that have subsequently drawn on the outputs produced as part of this activity, including the policy note "Pakistan, Punjab – Options for Improving the Water Supply and Sanitation Services in Urban Areas."

Other important outcomes from this activity include: the competitive recruitment of new managing directors for the five largest WSS utilities in Punjab, with contracts linked to performance; ii) the signing of performance contracts between the government and several large WSS utilities; iii) the adoption of baseline data and the launch of Pakistan node of IB-Net, part of the performance benchmarking initiative, closely linked to the PPIAF funded activity; and iv) the signing of an agreement between the Lahore Water utility, Urban Unit of the government of Punjab, a local NGO, and Union Council # 60 to improve WSS services.

Within the context of municipal service delivery, the government of Punjab has also identified SWM to be of critical importance to the province and its population. Toward that end, in 2005 the government requested PPIAF's support to review technical, legal, and regulatory frameworks for improvement of SWM facilities, systems, and services, and for effective optimization of private sector involvement in investment and service delivery.

The PPIAF-funded study was launched in September 2006 with a stakeholder workshop held in Lahore with attendance of about 75 participants. Five city districts and four town municipal administrations were selected for a detailed assessment under the study. All relevant activities of SWM were covered by the study and included major waste categories with an emphasis on municipal solid waste. The study focused on the legal and regulatory frameworks, private sector participation, and technology and planning aspects in the SWM sector.

The main findings and critical issues regarding technical and planning aspects identified by the study included: i) a striking shortage of planning and management resources in the cities; ii) the lack of reliable data on solid waste quantities, composition, and waste stream hinders informed decision making; iii) poor collection performance with only 15–60% of total municipal solid waste reaching the final disposal site; iv) inefficient street sweeping approach, double-handling of waste, and inappropriate equipment; v) lack of awareness and insufficient cooperation amongst waste producers; and vi) no appropriate treatment and disposal of municipal solid waste with valuable but largely informal and unhygienic recycling activities.

The main findings and critical issues regarding legal and regulatory frameworks identified were: i) existing frameworks are fragmented; ii) there is insufficient implementation and enforcement of existing laws and regulations; and iii) while existing laws allow private sector participation, inconsistencies and gaps hinder a broader involvement by the sector. The lack of expertise and management capacity within the municipal authorities was also found by to hinder private sector participation.

A series of short- and medium-term actions recommended by the report for improving SWM services included: adjustments to the regulatory framework; increasing planning and management capacity by recruiting additional engineers and planners for SWM at the city level and building their capacity; developing a solid basis for informed decision-making and sound planning beginning with elaboration of integrated SWM concepts and action plans; introducing a door-to door collection and container pick-up system; introducing sound and safe final disposal systems; improving recycling; and promoting appropriate private sector participation with focus on collection and transport of waste.

A stakeholder consultation workshop to present the findings of the study was organized in June 2007. Consensus was achieved on the need to develop appropriate PPP options and emphasized public communication and community participation for improving solid waste management services.

To complement and disseminate the work carried out under this study, PPIAF provided further support to the Infrastructure Project Development Facility (IPDF), Ministry of Finance, to organize a two-day workshop on PPPs in municipal services with special focus on water, sanitation, and SWM services. The overarching objective of this workshop was to sensitize and educate provincial and local government officials and decision makers on issues, challenges and opportunities in PPPs, with specific focus on the SWM and WSS sectors.

The key objectives of this workshop included: i) informing key government stakeholders about the concepts, opportunities, and risks in the service delivery with PPP and relations to municipal finance, regulation, and oversight functions; ii) informing the participants of the role, function, and available supporting services of the IPDF in preparing PPP projects; iii) identifying key policy issues on WSS and SWM sectors in Pakistan; iv) exploring strategies on project structuring and tariff setting for SWM and WSS services in the context of Pakistan; v) identifying opportunities to incorporate international best practices pertaining to private sector participation in the public infrastructure and provision of high quality municipal services.

The workshop was held in Islamabad on March 5–6, 2008 and attended by over 40 participants. It covered three thematic areas: i) IPDF guidelines for public entities to facilitate PPPs and ensure adequate preparation of infrastructure projects for tendering PPPs; ii) managing SWM services with private participation; and iii) managing WSS services with private participation. The seminar raised awareness amongst key stakeholders on issues relating to private sector participation in the WSS and SWM sectors. A brochure with the presentations and summary of discussions was printed and posted on the IPDF website and disseminated to a large number of stakeholders including provincial and local governments.

Results of PPIAF’s Activities in Pakistan’s Water and Sanitation Sector

Category	Outputs
Enabling environment reform	
<i>Analyses/assessments prepared</i>	<ul style="list-style-type: none"> • Punjab Urban Water Supply and Sanitation Reform, 2006 • Report on Consumer Preferences for Improved WSS Services, 2006 • Economic Regulation Report, 2006 • Report on Tariffs, 2006 • Financial Incentives Report, 2006 • Status quo reports for Bahawalpur, Dera Ghazi Khan, Faisalabad, Gujranwala, Multan, Rawalpindi, Sialkot, and Sargodha, 2006 • Workshop report, 2007 • Report on Punjab Solid Waste Management Reform, 2008 (9)
<i>Plans/strategies prepared</i>	<ul style="list-style-type: none"> • Communication Strategy, December 2006

Capacity and awareness building	
<i>Workshops/seminars</i>	<ul style="list-style-type: none"> • Project Launch Workshop, September 15, 2005 • Stakeholder consultation on WSS reform strategy, October 10–20, 2005 • Stakeholder workshop to review results of the willingness to pay survey, February 4, 2006 • Stakeholder workshop to discuss preliminary recommendations of the study, April 26, 2006 • Stakeholder workshop on WSS reforms and recommendations, November 23–24, 2006 • Project launch workshop in Lahore, September 2006 • Stakeholder Consultation Workshop to present findings of report on Punjab Solid Waste Management reform, June 2007 • Workshop on PPPs in municipal services with focus on water sanitation, and SWM services, March 5–6, 2008

Category	Outcomes
Enabling environment reform	
<i>Institutions created or strengthened</i>	<ul style="list-style-type: none"> • Five largest WASAs (Lahore, Faisalabad, Gujranwala, Multan, and Rawalpindi) in Punjab strengthened, 2006
Capacity and awareness building	
<i>Technical capacity enhanced</i>	<ul style="list-style-type: none"> • Technical capacity of Urban Unit, Planning and Development Department, government of Punjab, enhanced, 2006–2007
<i>Consensus achieved</i>	<ul style="list-style-type: none"> • Consensus achieved on WSS reform roadmap, 2006 • Consensus achieved on the need to develop appropriate PPP options and emphasized public communication and community participation for improving solid waste management services, 2007