

## PPIAF Assistance in India

Since 2000 PPIAF has funded 54 activities in India worth \$8.9 million, four of which are ongoing. Five of these activities were funded under the Sub-National Technical Assistance (SNTA) window, two of which are ongoing.

### Technical Assistance for Enabling Environment Reform in India

Since the early 2000's the government of India has increasingly recognized that sustainable growth is highly contingent on the availability of world class, efficient, and cost effective infrastructure. The various infrastructure sectors require massive investment, and an enabling environment—consisting of investor friendly policies and a sound regulatory environment—is a crucial pre-requisite to attract private investment, which is necessary to bridge the investment gap as public investment alone is often insufficient.

#### Regulatory, institutional, and legal reforms

In April 2005 PPIAF co-sponsored an “Infrastructure Regulatory Conclave” with the Confederation of Indian Industry. The objective of the conference was to present the confederations’ recommendations on critical regulatory issues and to initiate a consultative process on issues such as autonomy, accountability, and professionalism in infrastructure. Over 200 stakeholders attended the conference, including key government officials, private sector participants, civil society organizations, consumer bodies, financial institutions, and media. The topics discussed included sessions, which were highly interactive, on regulatory authorities in the telecommunications, power, port, civil aviation, and highways sectors.

Following the conclave, additional support was requested to examine the effectiveness of regulators in India’s infrastructure sectors, as well as to analyze the regulatory framework for the highways sector. Two reports were prepared and submitted to the Planning Commission and the Department of Economic Affairs. The report on regulatory efficiency recommended the establishment of an overarching regulatory framework to improve the efficacy and effectiveness of regulators. The recommendations were based on a detailed analysis of experience with independent regulatory commissions in the electricity and telecommunications sectors. The report provided inputs for the draft white paper on “Infrastructure Regulation in India” prepared by the Planning Commission. Recommendations from the white paper are in turn expected to initiate relevant changes in the legal and regulatory framework to enhance regulatory effectiveness in various infrastructure sectors.

In 2006 PPIAF provided technical assistance to the Planning Commission to support its role as the Secretariat for the Committee on Infrastructure. This activity was aimed at supporting the Secretariat’s work program by engaging experts to provide advice on legal, institutional, regulatory, commercial, and contractual issues critical to facilitate the implementation of public-private partnership (PPP) projects. PPIAF supported the development and/or review of several guidance documents that covered seven topics: i) assistance for PPP appraisal procedures; ii) review of a model contract for ports; iii) drafting a model request for qualification; iv) desk review of a metro rail model contract; v) guidance for monitoring contracts for PPP projects; vi) drafting a model contract agreement for airport PPPs; and vii) review of a model contract for a railway stations PPP. International best practices were included in the guidance documents. These inputs, along with other advisory support, have been used by the government to develop a framework and contractual agreements for PPP projects.

PPIAF supported another forum in 2007 to discuss the government’s program to scale-up infrastructure services through PPPs. Held in Delhi, the conference discussed international experiences and best practices for implementing PPPs and provided feedback to the government from international and national private investors and experts on its scale-up program. The forum brought together about 250 participants, including senior government officials, private sector investors, financiers, and experts on PPPs to share international experience and showcase PPP opportunities in India.

A number of clear messages emerged from the deliberations, including: i) India's recent progress in developing PPPs was impressive and generated a lot of private sector interest; ii) sustaining and accelerating the present progress would require strengthening policy and regulatory frameworks, as well as substantial improvement in government capacities for managing and overseeing PPPs in operation; iii) a need to develop a pipeline of bankable projects; and iv) whilst finance was not a constraint then, it could become an issue as the program scaled up. Moreover, the conference provided an opportunity for PPIAF to discuss ideas for additional support to the Ministry of Finance, which have since been developed as follow-up activities.

### **Results of PPIAF's Activities for Regulatory Enabling Environment Reform in India**

<b>Category</b>	<b>Outputs</b>
<b>Enabling environment reform</b>	
<i>Analyses/assessments prepared</i>	<ul style="list-style-type: none"> <li>• Recommended Framework to Improve Regulatory Effectiveness in Infrastructure Sectors: A Review of Indian Experience in Power and Telecoms Sectors, 2006</li> <li>• Assessment of Regulatory Framework for Highway Sector in India, 2006</li> <li>• Assessment of Guidelines and Processes for PPP Appraisal, June 2006</li> <li>• Report on the Development of Model Guidelines for the Monitoring of PPPs in India, March 2008</li> <li>• Assistance in drafting Model Concession Agreement for Non-Metro Airports, 2008</li> <li>• Assistance in drafting Model Concession Agreement for Greenfield Airports, 2008</li> <li>• Review of Draft Model Concession Agreement for the Construction of a Greenfield Port Terminal, 2006</li> <li>• Desk Review of Draft Model Concession Agreement for Metro Rail, 2008</li> <li>• Review of Model Concession Agreement for Modernization of Railway Stations in India, 2008</li> <li>• Assistance in drafting Model Request for Qualifications, 2008</li> </ul>
<b>Capacity and awareness building</b>	
<i>Workshops/seminars</i>	<ul style="list-style-type: none"> <li>• Infrastructure Regulatory Conclave, April 26, 2005</li> <li>• <a href="#">International Conference on Meeting India's Infrastructure Needs with PPPs</a>: International Experience and Perspectives and summary report, February 5–6, 2007</li> </ul>

<b>Category</b>	<b>Outcomes</b>
<b>Capacity and awareness building</b>	
<i>Technical capacity enhanced</i>	<ul style="list-style-type: none"> <li>• Technical capacity of the Planning Commission enhanced, 2006–2008</li> </ul>
<i>Consensus achieved</i>	<ul style="list-style-type: none"> <li>• Consensus achieved on using PPPs to meet India's infrastructure needs, 2007</li> </ul>

## Financing mechanisms

Recognizing that a deeper and more diversified financial sector would facilitate private participation in infrastructure, the Department of Economic Affairs requested PPIAF assistance in 2007 to identify constraints in PPP infrastructure financing in India. The PPIAF-funded study analyzed the financing of PPPs in India, the equity profile of projects, the pricing of debt and mark-up over risk-free rate, and the implications of lower equity for project robustness.

The study was a pioneering effort in collecting an extensive amount of primary data on PPPs and the status of PPP financing in India, with the objective of providing evidence-based descriptions on the challenges of infrastructure financing. Whilst identifying the increasing role of the private sector in the development of infrastructure, the study noted that several changes would be required in the way projects were financed in the future. The study's recommendations included: developing new sources of funding on both the debt and equity side, supplementing the current source of funding in the form of commercial bank financing of debt requirements and equity from promoters, and removing regulatory impediments for the optimum utilization of current sources of debt. A stakeholder roundtable was held in January 2008 to discuss the findings of the draft report, and was attended by 40 participants representing senior central and state government officials, developers, financiers, industry associations, and donors. The key issues discussed included the lack of an active bond market, special purpose vehicles' constraints on the leveraging capacity of developers due to regulatory requirements, the lack of long-term resources such as insurance and pension funds, the cascading effect of dividend tax, the lack of suitable exit options for developers, and the incentives for project development.

### Results of PPIAF's Activities in Support of PPP Financing Mechanisms in India

Category	Outputs
<b>Enabling environment reform</b>	
<i>Analyses/assessments prepared</i>	<ul style="list-style-type: none"> <li>Infrastructure PPP Financing in India, 2008</li> </ul>
<b>Capacity and awareness building</b>	
<i>Workshops/seminars</i>	<ul style="list-style-type: none"> <li>Stakeholder roundtable to discuss the report's key findings, January 2008</li> </ul>
<i>Knowledge products disseminated</i>	<ul style="list-style-type: none"> <li>PPIAF publication "<a href="#">Financing boom in public-private partnerships in Indian infrastructure: trends and policy implications.</a>" 2008</li> </ul>

Category	Outcomes
<b>Capacity and awareness building</b>	
<i>Consensus achieved</i>	<ul style="list-style-type: none"> <li>Consensus achieved on key issues for financing PPPs in infrastructure, 2008</li> </ul>

## Capacity building

During the Eleventh Five-Year Plan (2008–2012) the government of India set a target to increase infrastructure investment from 5% to 9% of GDP. Of the \$320 billion investment required to bridge this gap, the government estimated \$90 billion should be mobilized from the private sector. To realize this vision, the government of India and several state governments initiated PPP policy initiatives. The momentum generated by these PPP programs (mostly concentrated at the national level) led to an

increase in the number of states considering PPPs for service delivery. With such growth in the number of PPP programs, policymakers became increasingly focused on issues relevant to the programs.

Recognizing that the scale of India's PPP programs may present significant challenges in terms of both the public and private sector capacity to deliver, but may also present opportunities to take a programmatic approach to exploit economies of scale and develop substantial information exchange within the public sector, the Department of Economic Affairs solicited PPIAF support in 2007. The government requested PPIAF assistance to review the processes and capacity of state governments and infrastructure ministries in conceptualizing, awarding, and monitoring infrastructure PPP projects.

The analysis presented by the PPIAF-funded report, "Action Plan to Support Public Sector Agencies Engaged in Development of PPPs," highlighted the progress that had been made in the institutional framework, as well as the development capacity gaps for PPPs. The main capacity gaps identified by the report included: i) the decision-making process on whether to proceed with a project as a PPP or through the public sector; ii) understanding and reporting the fiscal costs of PPPs to the government; iii) analyzing and understanding the performance of the existing PPP program; iv) communicating the rationale for the program to stakeholders inside and outside the government; and v) contract management and monitoring.

The action plan's recommendations to fill these gaps included: the establishment of a central PPP unit by the government of India, which would play a key role in assisting the line agencies and state governments manage transaction advisers, as well as an enhanced guidance role; the development and implementation of a national-level training strategy; and mainstreaming PPPs in the planning and budgeting process, including the development of best practice case studies on PPPs in India, decision-making tools, and a methodology for implementing the PPP programs, and piloting the concept of "pre-bid" grading of PPP projects to improve the quality of PPP project preparation.

A stakeholder workshop was held in January 2008 to discuss the report's key findings and action plan. The workshop was attended by 25 participants. Consensus was achieved on the key measures identified in the plan, and it was agreed that the government would implement key measures over the next 12–18 months.

In 2008 the government of India requested follow-up PPIAF assistance to help the Department of Economic Affairs (Infrastructure) address the challenges identified in the PPIAF-funded action plan. PPIAF assistance was requested to strengthen the Indian government's infrastructure PPP framework and increase the capacities of national, state, and local/city governments to implement PPP projects. The objective of the activity was to assist the national PPP cell by developing toolkits, training modules, and a communication strategy that would facilitate capacities at all levels of government to implement PPP projects.

Several outputs were developed as part of PPIAF assistance which included: i) PPP case-studies and online toolkits to assist and facilitate national, state, and city governments to develop and implement PPP projects, covering all key stages of the PPP cycle, including workshops to familiarize officials with content and use; ii) basic and advanced PPP training courses and a training of trainers workshop; and iii) inputs into a communication strategy. Consultants were appointed to undertake each of these components with extensive inputs and interaction with various stakeholders.

The toolkits are available in three forms: [web-based toolkit](#), CD-ROMs, and manuals. The toolkits cover five infrastructure sectors: state highways, ports, urban transport (bus rapid transit), water and sanitation, and solid waste management. The web-based PPP toolkit is a resource designed to help improve decision-making for infrastructure PPPs in India and to improve the quality of the PPPs developed. A [brief user guide to the toolkit](#) is also available on the PPPs in India website.

An assessment of training needs was also undertaken, and tailored course content developed for the National PPP Capacity Building Program in 2010. A consultation workshop was held in November 2010 to seek inputs from trainers, training institutions, PPP nodal officers, and PPP experts for further

improving the course design and content for subsequent phases and deliberate on the likely challenges in implementing the rollout at the national level.

After conducting a national communications needs assessment in March 2010, a consultation workshop was held on July 19, 2010 to disseminate the findings and key recommendations of the PPIAF-funded study and obtain feedback from stakeholders. Key findings that emerged were: i) the relevance of communications in the context of PPPs; ii) the role of communications to be understood by all stakeholders and misconceptions to be clarified; iii) placing structured frameworks across all sectors for the development of the communications strategy; iv) introducing lateral thinking around frameworks; v) identifying key stakeholders in projects and address their concerns in a heterogeneous manner; and vi) the need for proactive communication and a separate budget for it. It was agreed that the model toolkits for major sectors were to be made available and widely disseminated, and a communications manual for guidance at the program/project level to central and state governments and municipalities would be initiated.

By 2009 the government of India was in the midst of implementing an ambitious program of infrastructure development with private sector investment, and it wanted to strengthen the risk assessment and management capacity of the PPP cell at the Department of Economic Affairs. The government wanted to ensure that projects were well structured and bankable; the risks were assigned to the party most suited to bear them; and the contingent liabilities were identified and capped. Toward that end, the Department of Economic Affairs sought assistance from PPIAF in 2009 to strengthen the project appraisal capacity of the PPP cell.

The resulting PPIAF-funded report on strengthening the PPP cell's risk management framework for infrastructure PPPs highlighted the specifics of the analytical tools developed for the PPP cell to carry out its appraisal role for the roads, ports, and water sectors. The report also highlighted the next steps to be carried out by the department to make the analytical tools operational to their full extent. Financial models for ports, roads, and urban water supply projects were produced, as well as a generic model for PPPs structured on an annuity basis. The project officers at the PPP cell were trained on how to use these tools for analyzing projects, with consultants helping the officers apply the models to 15 live projects.

In 2009 the government of India also requested PPIAF technical assistance to prepare a business plan for the Infrastructure Financing Company Limited (IIFCL), a wholly government-owned institution established to raise long-term funds to lend to infrastructure PPP projects. While IIFCL was ideally placed to catalyze investment flows to infrastructure projects based on PPP arrangements, as well as pure private and public sector projects, it needed to evolve its role in the changing market context under the global economic and financial crisis. The IIFCL urgently required high-quality knowledge and advice to develop a business plan and strategy to help support infrastructure development over the short, medium, and long term. Toward that end, IIFCL approached PPIAF to provide technical assistance for commissioning consulting services to prepare a three-year business plan and a perspective plan up to the end of the next plan period (i.e., 2017). The Indian infrastructure financing market was assessed, and key challenges to increasing investment in infrastructure were identified. The consultants then analyzed IIFCL's ability to address these challenges through new products and various initiatives. Two strategic options were evaluated and a non-bank financial company was recommended as the best strategic approach. This activity was recently completed, and the PPIAF team will continue to monitor for outcomes. PPIAF also provided assistance to the IIFCL through its Sub-National Technical Assistance (SNTA) program. The SNTA activity designed and implemented a risk management system for IIFCL. More information on this activity can be found in the SNTA section of the country write-up.

## Results of PPIAF's Activities for Enabling Environment Capacity Building in India

Category	Outputs
<b>Enabling environment reform</b>	
<i>Analyses/assessments prepared</i>	<ul style="list-style-type: none"> <li>• Strengthening the Risk Management Framework for Infrastructure Projects, 2010</li> <li>• Strengthening Risk Assessment Framework for PPP Projects Phase II, 2010</li> <li>• Generic financial model for an annuity PPP, 2011</li> <li>• Financial models for roads, port, and water sectors, 2011</li> <li>• Market Assessment Report, 2011</li> </ul>
<i>Plans/strategies prepared</i>	<ul style="list-style-type: none"> <li>• Action Plan to Support Public Sector Agencies Engaged in Development of PPPs, 2008</li> <li>• Strategy and action plan to integrate stakeholder communications in the overall process of developing and implementing PPP projects, 2010</li> <li>• Business Plan for the India Infrastructure Finance Company Limited, 2011</li> </ul>
<b>Project cycle-related assistance</b>	
<i>Transaction support</i>	<ul style="list-style-type: none"> <li>• Quantitative analysis and identification of issues for road, housing complex, police headquarters, and bulk port terminal PPPs, 2011</li> </ul>
<b>Capacity and awareness building</b>	
<i>Workshops/seminars</i>	<ul style="list-style-type: none"> <li>• Two stakeholder consultation workshops were held for the public sector agencies' action plan:               <ul style="list-style-type: none"> <li>○ Workshop to launch the study, October 2007</li> <li>○ Discussion and dissemination of study findings, January 31, 2008</li> </ul> </li> <li>• Stakeholder consultations on communications strategy, July 19, 2010</li> <li>• Consultation workshop on the National PPP Capacity Building Program, November 15–16, 2010</li> <li>• Regional training workshops to familiarize government officials with the content and use of the PPP toolkit, December 2010–June 2011</li> <li>• PPP courses to build capacity among national level trainers to teach courses to other government officials on issues related to PPPs, June 20–24, 2011</li> </ul>
<i>Knowledge products disseminated</i>	<ul style="list-style-type: none"> <li>• <a href="#"><u>Toolkit for Improving PPP Decision-Making Processes in five infrastructure sectors (State Highways, Water and Sanitation, Ports, Solid Waste Management, and Urban Transport), 2010</u></a></li> </ul>

Category	Outcomes
<b>Enabling environment reform</b>	
<i>Plans/strategies adopted</i>	<ul style="list-style-type: none"> <li>• Key capacity building measures in Action Plan to Support Public Sector Agencies Engaged in Development of PPPs adopted to strengthen the infrastructure PPP framework and increase the capacities of national, state, and local/city governments to implement PPP projects, 2008</li> <li>• Strategy and action plan to integrate stakeholder communications in the overall process of developing and implementing PPP projects adopted by the Department of Economic Affairs and printed: <i>Manual on Effective Communication in PPP Projects</i>, July 28, 2011</li> </ul>
<b>Capacity and awareness building</b>	
<i>Technical capacity enhanced</i>	<ul style="list-style-type: none"> <li>• Technical capacity of Department of Economic Affairs' PPP Cell and PPP nodal officers enhanced, 2011</li> </ul>