

PPIAF Assistance in India

Technical Assistance for India's Transport Sector

PPIAF has supported nine activities in the transport sector in India since 2003, with a total value of \$1,262,400. The activities have focused on providing support for legal, regulatory, and institutional reforms; developing a strategy for scaling up public-private partnerships (PPPs) in provincial roads; and formulating a draft PPP railway policy. PPIAF is currently supporting the development of a toolkit for mainstreaming PPPs in city road development in the state of Maharashtra.

Chhattisgarh State Highways

In 2004 the Chhattisgarh Infrastructure Development Corporation requested PPIAF assistance to prepare a road program suitable for PPPs. As part of its program of infrastructure development, the state government of Chhattisgarh had set up the Chhattisgarh Infrastructure Development Corporation to act as a focal point for promoting and catalyzing investments in infrastructure, especially in PPPs. To assist this program, PPIAF provided a grant to support the government to develop a strategy for involving the private sector in road service provision and prepare the appropriate legal and regulatory framework to support private sector involvement.

The PPIAF-funded activity was organized in two phases. The first phase supported the Chhattisgarh Roads Sector Participation Study on Policy Options and Final Strategy for private investment in the sector. The activities conducted for the study included: i) a review of the roads sector, covering the policy environment, the extent and condition of the network, plans for improvement, data on traffic volumes, and a review of past experience with private sector participation; ii) a background report on Indian experiences with private sector investment; iii) a report on the legal and regulatory framework for private participation in the roads sector, identifying changes necessary to facilitate the development of private sector investment; iv) an engineering review of candidate roads for private sector participation; and v) the development of a financial model to estimate costs and revenues for a range of private investment options. A study tour was also conducted in August 2004, with five senior officials from the Chhattisgarh government and the Chhattisgarh Infrastructure Development Corporation traveling to the United Kingdom and South Africa to learn about these countries' experiences with private sector investment.

The main conclusions of the financial analysis included: i) traffic volumes were generally low, and large grants or annuities would be required to make new roads or major improvements attractive to the private sector; ii) the size of financially viable projects was small and might not be large enough to attract outside interest; and iii) the net cost to the government for private sector arrangements is higher than conventional government funded projects, because private finance is more expensive than government borrowings.

The final strategy recommended that build-operate-transfer contracts should be used in preference to joint ventures between the state and private sector, or special purpose vehicles with major users. Other key elements of the recommended strategy included: i) new bypasses should be constructed where sufficient congestion relief can be obtained to justify the required large state contribution; ii) roads with private sector participation should be tolled; iii) state financial support should take the form of grants, which should be payable while the state has surplus funds, rather than annuities which involve future payments, when budgetary pressures could be more severe; iv) the state should commission independent detailed project reports for any proposed road PPP; v) the state should accept responsibility for land acquisition; vi) construction, maintenance, and operating costs should be borne by the private sector; and vii) revenue risks should be mitigated through revenue guarantees, rather than provision for concession extension, on grounds of transparency. A lessons learned note on the legal, institutional, and regulatory

framework for developing provincial road projects on a PPP basis was also produced. The note highlights key issues for state road agencies and suggests a framework for scaling up PPPs in provinces that involves: i) improved planning, prioritization, and project development; ii) mandated nodal institutional responsibility; iii) enabling legislative and regulatory framework; iv) evolving alternative contracting structures; v) clarifying toll policy; and vi) managing government support and contingent liabilities.

The results of the financial modeling for the initial 12 roads were presented at a workshop in December 2004, and those for the finalized list of 14 candidate roads were presented at the stakeholder consultation workshop in April 2005. The objective of the stakeholder consultation was to: i) assess the impact of the initiative to create an enabling environment for private sector participation in the road sector; ii) disseminate the findings of the engineering review and financial analysis undertaken as a part of the first phase of the project; iii) communicate with stakeholders the various options and projects identified for the candidate roads; iv) discuss the legal requirements for the facilitation of private sector investment; and v) select two or three roads for private sector participation. The workshop was attended by 26 participants with active involvement from key policy makers in the state, including the Minister of Finance, who reiterated the government of Chhattisgarh's keenness to involve the private sector in the road sector and assured the strong support for initiatives within the road sector from the government.

With the completion of the first phase of the project, the government committed to undertake phase II and implement two to three road projects on a build-operate-transfer basis. After intensive discussions with key stakeholders, phase II was launched in November 2005, and the government agreed to prepare detailed project reports for the pilot roads. As part of phase II of the project, PPIAF was to provide funding for a draft amendment to the Chhattisgarh Highway Act, 2003, draft terms of reference for the pilot projects, and a revised engineering review of the selected roads.

However, within a few months after the launch of phase II there were changes within the Chhattisgarh Infrastructure Development Corporation, and in early 2006 the state government decided not to pursue the pilot projects. The government decided to independently develop a Special Purpose Vehicle to involve the private sector in the improvement of approximately 1,500 km of roads, and phase II of the project was terminated.

Results of PPIAF's Activities in Chhattisgarh's State Highway Sector

Category	Outputs
Enabling environment reform	
<i>Analyses/assessments prepared</i>	<ul style="list-style-type: none"> • Chhattisgarh Private Sector Participation Study in Road Sector, 2006
<i>Plans/strategies prepared</i>	<ul style="list-style-type: none"> • Policy Options and Strategy for Private Sector Participation in the Chhattisgarh Roads Sector, 2005
Project cycle-related assistance	
<i>Transaction support</i>	<ul style="list-style-type: none"> • Engineering Review for Chhattisgarh Roads Sector Private Sector Participation, 2005

Capacity and awareness building	
<i>Workshops/seminars</i>	<ul style="list-style-type: none"> • Study tour for senior officials to the United Kingdom and South Africa, August 19–31, 2004 • Workshop to discuss estimated costs and revenues to both the government of Chhattisgarh and potential private sector participation partners and develop a financial model for 12 candidate roads, December 2004 • Stakeholder Workshop to discuss the findings of the diagnostic study on policy options and strategies, April 2005
<i>Knowledge products disseminated</i>	<ul style="list-style-type: none"> • Scaling Up Highways PPP Program in India: Emerging lessons for the provincial highways development program, 2006

Category	Outcomes
Capacity and awareness building	
<i>Technical capacity enhanced</i>	<ul style="list-style-type: none"> • Technical capacity of the Chhattisgarh Infrastructure Development Corporation and Department of Public Works enhanced, 2005

Department of Economic Affairs, Indian Ministry of Finance

Light Rail

Several Indian cities have been considering PPP projects in light rail and metro transit in the last decade. Following problems with procuring Mumbai 2 and Hyderabad Metro PPPs, there was considerable debate as to whether metro transit PPPs were feasible or if the best option was traditional public sector procurement. In 2009 PPIAF and the World Bank shared a draft book [Private Sector Participation in Light Rail/Light Metro Transit Initiatives](#), authored by Cledean Mandri-Perrott and Iain Menzies, with the government of India. With its practical focus targeting government agencies considering undertaking light rail transit (LRT) investment, the book generated considerable interest within the government. Toward that end, the Department of Economic Affairs in the Ministry of Finance requested PPIAF assistance to fund a one-day seminar to present the report and case studies on experience with PPPs in LRT systems.

The seminar was held on August 25, 2009 in New Delhi and was attended by 40 participants, including senior officials from the finance ministry, urban development ministry, planning commission, and states and cities preparing metro projects. The authors of the World Bank report presented the study findings and made three presentations: i) Bankability and Planning of Successful PPPs: Lessons Learnt; ii) Considering Urban Rail PPPs: An Overview; and iii) Understanding and Managing Risk in LRT: Principles and PPP Case Studies. A presentation on the Manila LRT Line I Extension PPP project was also made.

The aim of the seminar was to assist state governments and public authorities to establish effective urban rail systems and focused on the use of PPP arrangements for these projects. Rather than identifying a single approach, it sought to present options and discuss practical issues related to preparing and implementing new urban rail systems. The approach was focused on providing information that could be utilized to make informed decisions, adapted to local policy and objectives.

The seminar endeavored to provide answers to questions regarding how to successfully incorporate private sector participation in urban rail systems, and the primary focus was to discuss the issues from design through to project implementation. Its premise was that underlying transport policy decisions would have already been made, and that urban rail PPP has already been identified as the appropriate transport solution. The seminar also provided an opportunity to share experiences and discuss issues surrounding the design and implementation of PPP schemes in urban rail and examine different case studies and international experience. Copies of the draft light rail book were disseminated at the seminar. A PPIAF publication, "[Private sector participation in urban rail: Getting the structure right,](#)" was also produced as part of this activity. The government of India posted the conference presentations on its [PPP website](#). This activity led to a mandate from the City of Mumbai to the International Finance Corporation to advise it on developing a complex operation and maintenance contract as part of a \$3 billion investment for the city's light rail project.

Ports

The Indian economy has been transformed in recent years from a highly regulated economy to one in which productivity and performance are of prime importance. With this backdrop, three major objectives of infrastructure regulation have been identified by the government of India: encouraging investment, consumer protection, and efficient provision of services. Differentiated regulatory mechanisms have evolved in the country to address the needs of the different infrastructure sectors in the context of the prevailing market structure and policy perspective. The regulatory experience of infrastructure sectors in India is now more than 15 years old and has evolved over time to tackle diverse challenges while also addressing issues of design and effectiveness, along with a need to ensure jurisdictional clarity between the sector regulators and the Competition Commission.

Against this backdrop, the government of India's Department of Economic Affairs sought PPIAF assistance in 2010 to review and analyze the draft Major Ports Regulatory Authority Act 2009, with a view to ensure that it was consistent with international best practice, appropriately adapted to Indian operational realities, and directed towards ensuring efficient, competitive, and economical operation of the ports sector. This activity also included a review of the draft Ports (Consolidated) Act, 2010. The resulting PPIAF-funded report on "Regulation of the Indian Port Sector" outlines various alternatives that could assist the relevant authorities to make decisions on a new or revised port sector regulatory framework and restructuring the sector.

The main conclusions of the report are: i) a new Ports Act should be promulgated, distinguishing two types of ports, national and regional; ii) a Port Authority of a National Port should be managed by a Board of Directors nominated by both the central government and by the government of the state where the port is located and, if applicable, partly by the concerned port city, in proportion to the shareholding of each party; iii) corporatization of major ports on the basis of the Landlord Port Model is still the best institutional option for port reform in India; iv) the Ministry of Shipping's plans to corporatize Jawaharlal Nehru Port Trust is a step in the right direction; and v) the tariff authority for major ports should be transformed from a tariff regulator to a competition regulator on the basis of a new Port Competition Act applicable to all commercial ports in the country. The concerned Port Authorities, terminal operators, and maritime service providers should do tariff setting, and tariff regulation should be part of any concession agreement—its provision enforced by the concerned Port Authority.

Another component of this PPIAF-funded activity was an in-depth analysis and review of the consultation paper "Regulatory Philosophy and Approach in Economic Regulation of Airports and Air Navigation Services," circulated by the Airport Economic Regulatory Authority, with a view to ensure consistency with international best practice, appropriately adapted to Indian operational realities, and directed towards ensuring efficient, competitive, and economical operation of the sector.

The main findings were: i) the consultation paper was of high quality, discusses the main issues of regulation, and reflects best practice regulation; ii) the Airport Economic Regulatory Authority is an independent regulator accountable to democratic bodies; and iii) the current price cap regulation still has too many elements of traditional cost-based regulation and should be reformed towards incentive regulation.

Results of PPIAF's Activities with India's Ministry of Finance in the Transport Sector

Category	Outputs
Enabling environment reform	
<i>Analyses/assessments prepared</i>	<ul style="list-style-type: none"> • Regulation of Indian Port Sector report, 2011 • Assessment of the Regulatory Philosophy of Airports Economic Regulatory Authority of India, 2011
Capacity and awareness building	
<i>Workshops/seminars</i>	<ul style="list-style-type: none"> • Seminar on International Experience in PPP Light Rail Metro, August 25, 2009
<i>Knowledge products disseminated</i>	<ul style="list-style-type: none"> • PPIAF publication "Private sector participation in urban rail: Getting the structure right" prepared, 2010

Category	Outcomes
Capacity and awareness building	
<i>Technical capacity enhanced</i>	<ul style="list-style-type: none"> • Technical capacity of the Ministry of Roads, Transport, and Highways enhanced, 2010 • Technical capacity of the Airport Economic Regulatory Authority enhanced, 2010
<i>Consensus achieved</i>	<ul style="list-style-type: none"> • Consensus achieved on the need for private sector participation in metro transit, 2009

Ministry of Railways, government of India

The Indian Railways has one of the largest rail networks in the world and requires massive investment to augment its capacity and modernize its infrastructure. It has been estimated that more than \$64 billion is needed for new lines, doubling and gauge conversion, port connectivity works, and augmentation of manufacturing capacity of rolling stock. Of this, approximately \$25 billion needs to be raised from extra-budgetary resources such as PPP modalities. The Ministry of Railways has undertaken several initiatives to build its PPP capacity including setting up a PPP Cell at the central level, as well as further PPP Cells at the zonal railway levels. In this context, the Ministry of Railways requested PPIAF support in 2008 to develop a comprehensive PPP policy and assess various options for Indian Railways to use private sector investment for the development of the rail sector. The primary objective of this activity was to assist the ministry in developing a more structured approach to private sector participation in railways and to communicate the same through a clear policy statement to private developers and internal audiences within Indian Railways.

The PPIAF-funded activity had a number of components, including a report on PPP policies and an assessment of PPP options for the Indian Railway, which reviewed and identified legislative

constraints to private investment in railways and assessed private sector appetite for PPP activities and structures. The main findings of the report included: i) it is easy to implement PPPs with the exception of dedicated freight corridors and high-speed passenger lines; ii) while Indian Railways is legally permitted to implement PPPs, a clear policy framework is needed to enable PPPs; and iii) the private sector is interested in all areas listed under consideration, if a suitable enabling environment is created and the PPP project has a bankable structure.

A PPP policy was also drafted under this activity, and the report provided a more transparent and effective framework for attracting private sector investment, articulating the ministry's objectives for undertaking private sector participation, the scope and areas of engagement, nodal institutional arrangement for private investment, key procurement and contracting principles, and types of support available.

The main recommendations of the report, which included the next steps for the Ministry of Railway, were to: i) finalize and adopt the policy; ii) establish an Empowered Committee with the authority to approve projects; iii) strengthen the central PPP Cell; iv) develop a program in the central PPP cell for the roll-out of sub-sector policies, guidelines, standard documents, and evaluation tools; v) establish the Rail Private Sector Participation Fund; and vi) provide training to project teams on private sector investment policies and delivery.

A presentation to the Railway Board on the draft policy was made on October 18, 2010. It was chaired by the Chairman Railway Board and well received, with the board members endorsing the need for such an overarching policy statement outlining the scope, process, and framework for engagement with private sector, and the need for a more systematic approach to dealing with private sector investment. Overall, there was general agreement with the policy content. The policy has not yet been adopted by the Railway Board.

Results of PPIAF's Activities in India's Railway Sector

Category	Outputs
Enabling environment reform	
<i>Policies prepared or legal or regulatory changes recommended</i>	<ul style="list-style-type: none"> • Draft PPP Policy for Private Sector Participation and PPPs, Indian Railway, 2010 • PPP options for Indian Railway, 2010
Capacity and awareness building	
<i>Workshops/seminars</i>	<ul style="list-style-type: none"> • Consultative session to discuss "Draft Indian Railways PPP Policy," September 18, 2009

Category	Outcomes
Capacity and awareness building	
<i>Consensus achieved</i>	<ul style="list-style-type: none"> • Consensus achieved by Indian Railway Board Members on the need for an overarching policy statement outlining the scope, process, and framework for engagement with the private sector and the need for a more systematic approach to dealing with private sector participation, 2010

Roads in Maharashtra

Whilst Maharashtra is one of the most urbanised states in India, service deficiencies in various sectors, including urban roads, adversely affect living conditions of a large proportion of the urban population and have adverse impacts on the state's economic growth and development. To address these issues, the government of Maharashtra has put a high priority to improve

infrastructure services and living conditions in the cities. The main thrust of the government is development through the use of PPP models. Toward that end, the government of Maharashtra sought PPIAF assistance in 2009 to assess PPP options and formulate enabling guidelines for developing city roads.

A report on “Facilitating PPPs in City Road Development” and a City Roads Development-PPP Toolkit were the outputs of the PPIAF-funded activity. This activity is still ongoing and will close in 2012. It is too early to determine any outcomes.

Results of PPIAF’s Activities in City Road Development in Maharashtra State

Category	Outputs
Enabling environment reform	
<i>Analyses/assessments prepared</i>	<ul style="list-style-type: none"> • Report on “Maharashtra Urban Development: Facilitating PPPs in City Roads Development”, 2011
Capacity and awareness building	
<i>Knowledge products disseminated</i>	<ul style="list-style-type: none"> • City Roads Development-PPP Toolkit, November 2011