



PPIAF's Global Knowledge Portfolio

As a global platform for the generation and dissemination of knowledge on public-private partnerships (PPPs) in infrastructure, PPIAF can help developing countries leverage global best practices to improve and expand the provision of infrastructure services through efficient PPPs.

PPIAF supports a robust global knowledge agenda that complements its grant-funded technical assistance within countries. The program supports the development of new knowledge through research and helps make existing knowledge more accessible to policy makers and other stakeholders. Research findings are disseminated through books, user guides, notes, toolkits, workshops, videos, and specialized Web sites.

PPIAF's knowledge products and training resources contribute to developing countries' efforts to create an enabling environment for sustainable PPPs in infrastructure, strengthen local capacity to undertake sound sector reforms, and develop efficient and sustainable PPPs. They cover topics that cut across sectors as well as sector-specific issues in gas, transport, electricity, telecommunications, and water and sanitation. They focus on key themes that together constitute a reference framework for achieving significant and sustainable improvement in the delivery of infrastructure services.

Themes in Focus

PPIAF's global knowledge portfolio covers seven main themes embracing a wide range of issues critical in the design and implementation of sound reforms in infrastructure and efficient PPPs.

1. Information on Infrastructure PPPs

PPIAF funds a number of data-gathering activities that contribute to greater understanding of private participation in infrastructure (PPI) across countries and sectors. It provides continuing support to the *PPI Database* (<http://ppi.worldbank.org>), cofunded with the World Bank. The database, a primary source of information on PPI trends in low- and middle-income countries, presents data by sector, region and country. The data cover 25 years, 137

developing countries, and more than 43,000 infrastructure projects. The database produces 20 publications a year

analyzing sectoral and regional trends and elaborating on issues relating to PPI. In addition, in response to the 2008 global economic and financial crisis that started in the fall of 2008, the database launched a series of analyses monitoring the effects of the crisis on financing for PPPs in infrastructure. These analyses are among the few sources of real-time information on the impact of the financial crisis on PPPs across regions and sectors.



PPIAF also publishes notes (in the Gridlines series) and reports providing insights into where and how PPPs have been used for infrastructure projects in developing countries. Past publications include these:

- *The Role of Developing Country Firms in Infrastructure*, which examines, through surveys and interviews, the importance of local and regional companies in infrastructure in many developing countries.
- *Building Bridges*, which reports on the role of new, non-OECD financiers in Africa, such as China

and India, and sheds light on the financing mechanisms they use.

- *Another Lost Decade? Effects of the Financial Crisis on Project Finance for Infrastructure*, which analyzes the implications of the financial crisis for PPP financing.

2. Sector Reforms and PPPs

Through knowledge products targeted to policy makers, PPIAF disseminates global best practices in designing sound sector strategies and policies as well as PPP programs that support the development of infrastructure sectors. These knowledge products include comprehensive toolkits that help policy makers assess options for reform and provide practical guidelines, checklists, case studies, and sample documents. PPIAF's toolkits are designed to be self-taught or used and demonstrated in workshops and training courses. They are available online and can be downloaded onto CD-ROM.

Selected PPIAF Toolkits

- Toolkit for Public-Private Partnerships in Roads and Highways (2009)
- Cross-Border Infrastructure Toolkit (2007)
- Port Reform Toolkit: Effective Support for Policymakers and Practitioners (2005)
- Toolkit on Market-Based Approaches in Private Sector Provision of Bus Services (2007) (also available in French)
- Approaches to Private Sector Participation in Water Services: A Toolkit (2006)
- Labor Issues in Infrastructure Reform (2004)

Besides the toolkits, several other PPIAF publications have tackled aspects of sector reform and the role of PPPs. These cover a range of topics:

- *Foundations for Sustainable Development: Rethinking the Delivery of Infrastructure Services in Mongolia*
- *The Challenge of Reducing Non-Revenue Water in Developing Countries*
- *Protecting Electricity Retailers against Price Volatility: The Case of Tariff Equalization in South Wales*
- *The Private Sector's Role in the Provision of Infrastructure in Post-Conflict Countries*

3. Role of Regulation in Infrastructure

PPIAF has long recognized the importance of sound sector regulation in the development of sustainable infrastructure services, especially when the private sector is involved. It has played a leading role in supporting governments' efforts to build institutional capacity to regulate. Its global presence and multisectoral focus have made it well placed to identify and disseminate the lessons from the successes and failures of reforms over the past two decades. PPIAF is also seeking new lessons as a second generation of regulatory issues has emerged in countries that have already enacted reforms. These new issues include the need for regulations better adapted to conditions in rural areas, the need for alternative technologies, and, in electricity, the need to monitor the wholesale generation market to deter anticompetitive practices.

PPIAF's efforts to help strengthen infrastructure regulation in developing countries include support to:

- The *Body of Knowledge on Infrastructure Regulation*, a web portal that provides summaries of key concepts as well as links to more than 300 references and case studies
- Five regional regulatory forums in Africa, East Asia, South Asia, Latin America, and Europe and Central Asia.

In addition, new research reports are being published on the emergence of hybrid regulatory models and the use of expert panels in regulatory activities.



4. Project Preparation

For developing countries seeking to attract private financing for infrastructure development, a major obstacle is the scarcity of viable projects. One reason for this is the lack of local expertise to build a solid pipeline of projects

and serve as a credible counterpart to potential investors. To help address this issue, PPIAF has supported knowledge products that disseminate best practices in project design, bidding, and management, adapted to local conditions. It has fostered peer exchanges drawing on the growing body of experience among developing countries with successful PPP programs. PPIAF has also sponsored the development of training programs through different media (seminars, e-learning, Web sites) to make this knowledge easily available to those who would otherwise be unable to afford it.

As part of this effort, PPIAF is funding the *PPP in Infrastructure Resource Center for Contracts, Laws and Regulation*, or PPPIRC (<http://www.worldbank.org/pppiresource>), a tool that helps development specialists and government officials better manage the complex legal and contractual issues associated with infrastructure projects. This user-friendly Web site features checklists, model bidding documents, terms of reference, sample laws and regulations, and clauses from contracts designed for transactions in the power, transport, telecommunications, and water and sanitation sectors.

Attracting Investors to African Public-Private Partnerships: A Project Preparation Guide has become a popular guidebook among clients needing to prepare viable PPP projects. A forthcoming book, *Public-Private Partnerships in emerging markets – how to engage with the private sector?* adopts a similar approach but expands the discussion of the tasks and processes required to attract private investors beyond Africa to developing and transition economies more generally.



Nigerian bus drivers speaking at a PPIAF Public Transport Planning and Reform workshop in Tschwane, South Africa.

PPIAF has also supported such knowledge products as these:

- *Public-Private Partnership Units: Lessons for Their Design and Use in Infrastructure* (publication)
- *A Guide for Hiring and Managing Advisors for Private Participation in Infrastructure* (toolkit)
- The Multilateral PPPI Capacity Building program, co-sponsored by the World Bank Institute, the Asian Development Bank, and the Inter-American Development Bank's Multilateral Investment Fund of the Inter-American Development Bank(MIF)

5. Infrastructure Financing

A need to supplement scarce public resources is an important motivation for governments to embark on a PPP program or for public entities or operators to seek commercial financing. Structuring financing schemes for infrastructure projects can be complex, however, and it requires specialized skills that are often scarce in emerging economies.

Several PPIAF knowledge products include discussions on infrastructure financing. PPIAF has also supported several publications that discuss specific issues and best practices in structuring financing schemes to achieve viable PPP projects:

- *Review of Risk Mitigation Instruments for Infrastructure Financing and Recent Trends and Developments* provides a concise guide for practitioners on instruments that can help governments mobilize commercial debt and private equity.
- *Unlocking Land Values to Finance Urban Infrastructure* looks at how local authorities can use revenues and capital gains from publicly owned urban land to finance their infrastructure needs.
- *Managing Contingent Liabilities in Public-Private Partnerships: Practices in Australia, Chile and South Africa* reviews approaches adopted by governments for prudent management of the contingent liabilities associated with PPP projects.
- *Multi-Country Review of Insolvency Frameworks* presents valuable information for sub-national governments and lenders facing decisions about debt financing for infrastructure projects.

6. Social Aspects of PPPs in Infrastructure

After two decades of experience with PPPs in infrastructure, policy makers are well aware that these

partnerships have many social aspects beyond their direct impact in improving and expanding services. PPIAF has supported work to explore how governments and the private sector can better address the range of social issues that can arise when using PPPs in infrastructure. These social issues include the affordability of services, the need for stakeholder consultations during the design and implementation of reforms, and the role of small-scale service providers.

A PPIAF grant to *Water Dialogues*, an international initiative in the water sector, supported efforts by different stakeholders to build consensus on whether and how the private sector can be involved in providing water to the poor. National dialogues have been concluded in Brazil, Indonesia, the Philippines, South Africa, and Uganda. An international conference, organized with support from PPIAF and the German government, brought together the participants in this initiative.

A PPIAF-funded study, *Opportunities and Challenges for Small Scale Private Service Providers in Electricity and Water Supply*, used detailed surveys at the country level and built on the existing literature to examine the role of small providers in supplying electricity and water services to the poor in Bangladesh, Cambodia, Kenya, and the Philippines.

7. Assessment of PPP Performance

PPIAF is constantly pushing the boundaries of global knowledge to improve the structuring of PPPs. One key to improving such partnerships lies in understanding how they have worked in the past. What have been the successes and failures? To whom do the benefits accrue?

PPIAF has supported several in-depth assessments of the performance of PPPs in electricity and water to help understand whether and how these partnerships have contributed to better performance and greater service coverage and to extract the main lessons learned:

- *Does Private Sector Participation Improve Performance in Electricity and Water Distribution?* is a rigorous comparison of 300 water and electricity projects with private participation and 900 state-owned enterprises. The analysis shows the significant improvements in efficiency that private operators can bring to these sectors.
- *The Impact of Private Sector Participation in Infrastructure: Lights, Shadows, and the Road Ahead* is an analysis of the Latin American experience. It shows that private participation in infrastructure can have large benefits, particularly in productivity and in the quality and coverage of services.

- *Public-Private Partnerships for Urban Water Utilities* captures the most important lessons from PPP projects in the urban water sector over the past two decades. The study shows what worked and what did not—and how PPPs can improve efficiency in poorly performing urban utilities.

Looking Forward: Evolving Priorities

Many of The topics that PPIAF's global knowledge portfolio covers under these seven themes remain relevant today as new countries embark on reforms for infrastructure services and seek to attract private operators and financiers. At the same time, pressing new challenges have emerged. PPIAF can play a catalytic role in addressing these challenges by fostering the exchange of good practices and the sharing of best practices as they develop.

Among the challenges that remain is gender disparity. . Lack of infrastructure services disproportionately affects women, especially in water, sanitation, and urban transport, and a better understanding is needed about whether and how PPPs can help. Implementing and enforcing economic regulation that is adapted to local conditions also remains a major challenge, especially in the poorest countries and in rural and peri-urban areas.

Dealing with the implications of the climate change agenda for the development of infrastructure services in developing countries is an emerging priority. As policy makers and regulators seek to shift toward a greener economy without jeopardizing the opportunities for economic growth created by more and better infrastructure services, we need to improve our understanding of how best to support their efforts. In the aftermath of the economic and financial crisis , another new priority is to understand how to attract private investors—now highly selective in considering opportunities—and how to access market financing under more stringent conditions.

What is PPIAF? Since 1999, PPIAF, a multi-donor technical assistance facility, has helped developing countries use public-private partnerships to improve their infrastructure, in particular, by supporting the development of an enabling environment for such partnerships and strengthening local institutional capacity.

What is SNTA? Since 2008 the PPIAF Sub-national Technical Assistance program has provided grants to support local governments, publicly owned utilities, and other sub-national entities that want to access financing for infrastructure from banks or bond markets, obtain or improve a credit rating, or