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## Case Studies and Lessons Learned - Water

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There have been mixed results in water PPPs and water utility reform, for a number of reasons. This section provides some insights into some of the precedents from around the world, with lessons learned.

### General

- [Water in the Circular Economy and Resilience WICER](#) is an initiative by the World Bank's Global Water Practice to help embrace and implement circular and resilience principles in the water sector around the world.
- [Public-Private Partnerships for Urban Water Utilities: A Review of Experiences in Developing Countries \(2010\)](#) This report analyzes the market growth of PPPs in the developing world since 1990, and the performance of more than 65 large water PPP projects representing more than 100 million people for access, service quality, operational efficiency, and tariff levels.
- [Water PPPs in Africa \(2014\)](#), World Bank Group, WSP, July 2014.
- [The Challenge of Reducing Non-Revenue Water \(NRW\) in developing countries: how the private sector can help with performance-based service contracting](#), World Bank Discussion Paper # 8, December 2006, (co-authored with Roland Liemberger and Bill Kingdom)
- [Mixed Private-Public Ownership Companies "Empresa Mixta" \(2011\)](#) This review of the empresa mixta model in Latin America was undertaken to better understand its structure, applicability and strength in mitigating risks in the water and sanitation sector.

- [Using management and lease-affermage contracts for water supply](#) , PPIAF Gridlines #12, September 2006, (co-authored with Klas Ringskog, Mary Ellen Hammond, and Alain Locussol)
- [Ways To Improve Water Services by Making Utilities More Accountable \(2008\)](#) This review aims to help those who work in and with water utilities, as well as organized users, regulators, and policymakers to improve the quality of water services by making service providers more accountable to the people they serve.
- [Key Topics in Public Water Utility Reform \(2008\)](#) This report presents a framework of attributes of well-functioning utilities and how they have introduced key institutional changes. It aims to help water and sanitation sector practitioners choose and apply public utility reform approaches. The report concludes that structural trends are altering the landscape in which water utilities operate and that these alterations offer opportunities for change.
- [Characteristics of Well Performing Public Water Utilities - Water Supply & Sanitation Working Notes \(pdf\)](#) This report presents findings on attributes of well-run public utilities and attempts to identify important factors that influence their performance. The scope is also largely oriented to utilities that serve urban communities, but with varying characteristics and service objectives.
- [Water for Life: The Impact of the Privatization of Water Services on Child Mortality](#) This study finds that child mortality fell 8 percent in the areas that privatized their water services.
- [Investing in Water Infrastructure: Capital, Operations and Maintenance \(2012\)](#) This paper outlines the major challenges when financing global water infrastructure. World Bank Group.
- [Water operators from emerging markets: new players for Public Private Partnerships](#) , Gridlines # 56, June 2010, (co-authored with Ada Karina Izaguirre and Alexander Danilenko)
- [Public Private Partnerships for urban water utilities: a review of experiences in developing countries](#), PPIAF-World Bank, Trends and Policy Options#8, 2009 - translated in French (2010)and Japanese (2012).
- [Ways To Improve Water Services by Making Utilities Accountable \(2008\)](#) This review aims to help those who work in and with water utilities, as well as organized users, regulators, and policymakers to improve the quality of water services by making service providers more accountable to the people they serve.
- [Characteristics of Well Performing Public Water Utilities - Water Supply & Sanitation Working Notes \(2006\)](#) This report presents findings on attributes of well-run public utilities and attempts to identify important factors that influence their performance. The scope is also largely oriented to utilities that serve urban communities, but with varying characteristics and service objectives.
- [A Framework to Approach Shared Use of Mining-Related Infrastructure](#) (2014) by Perrine Toledano, Sophie Thomashausen, Nicolas Maennling, and Alpa Shah, Vale Columbia Center on Sustainable International Investment, Columbia University, 2014. The publication presents an economically, legally and operationally rational framework to enable shared use of mining-related infrastructure, including rail, ports, power, water, and internet and telecommunications (ICT).

## Africa

- [Water PPPs in Africa](#), World Bank Group, WSP, July 2014.
- [The Limits and Possibilities of Prepaid Water in Urban Africa](#) : Lessons from the Field by Chris Heymans, Kathy Eales and Richard Franceys, World Bank Group, Water and Sanitation Program (WSP), August 2014.
- [Internal delegation contracts for water in Uganda: an innovative approach to establishing a successful public utility](#), Gridlines # 55, June 2010, (co-authored with William Muhairwe, Silver Mugisha and Josses Mugabi)
- [Partnering for water in Cote d'Ivoire: lessons from 50 years of successful private operation](#), PPIAF Gridlines # 50, August 2009, (co-authored with Eustache Ouayoro and Matar Fall)(translated in French)
- [The management contract for Johannesburg water, World Bank Water Working Notes #20](#), June 2009, (co-authored with Jean Pierre Mas and Ian Palmer)

- [Reforming urban water utilities in Western and central Africa: experiences with PPPs](#) (tome 1 and 2), World Bank, Water Sector Board Discussion Paper #13, June 2009, (co-authored with Matar Fall, Alain Locussol and Richard Verspyck) [Case Study of Water Supply PPPs in Mozambique](#) (2009)
- [Corporatizing a water utility: a successful case using a performance-based service contract for ONEA in Burkina Faso](#), Gridlines # 53, March 2010, (co-authored with Matar Fall and Harouna Ouibiga ) (English) (translated into French)
- [Improving water services in a post-conflict situation: the case of the management contract in Kosovo](#), PPIAF Gridlines#52, March 2010, (co-authored with Josses Mugabi and Manuel Mariño)
- [Hargeisa Water Agency Commercial Finance Pre-feasibility Report](#). The document provides the pre-feasibility report for the investment opportunities proposed by the Hargeisa Water Agency.

## Europe

- [Support to Armenia's Second Generation Water PPPs](#) by Philippe Marin (Senior Water and Sanitation Specialist) and Dambudzo Muzenda (Water and Sanitation Specialist) - both of the World Bank's Water Global Practice - with Andranik Andreasyan, the former Chairman of the State Committee for Water Economy (SCWE) for most of the water PPP reform, June 13, 2017.

## Asia

- [Infrastructure in Asia and the Pacific: Road Transport, Electricity, and Water and Sanitation Services in East Asia, South Asia, and the Pacific Islands](#). This report focuses on two of the world's fastest growing regions, East Asia and Pacific (EAP) and South Asia (SAR). The report takes stock of available data on service coverage, quality, and tariff and cost levels that can help governments and their development partners establish key needs, target resources for strategic priorities, and benchmark infrastructure performance.
- [Wastewater Treatment: Case Study of Public-Private Partnerships \(PPPs\) in Shanghai](#), Asian Development Bank (ADB) November 2010
- [Sustainable Development of Inland Waterways Transport in Vietnam](#), prepared by a World Bank team, provides a comprehensive review and assessment of the challenges that the sector faces, along with a reform program recommended to the Government of Vietnam that could help improve the enabling environment for the inland waterways transport industry and further its growth and technical sophistication.
- [Water Insecurity and Sanitation in Asia](#). This volume brings together 17 studies that examine various innovations in the water and sanitation sector in Asia and, most importantly, identify their spillover effects.
- [Vietnam Initial Assessment: Energy Efficiency and Nonrevenue Water](#). This report is a key analytical study of the project and is centered on addressing the knowledge gaps and providing technological recommendations on EE improvement and NRW reduction to generate positive impacts in the water sector in Vietnam.
- [Ensuring Water Supply in Kuala Lumpur](#) - In 1998, Kuala Lumpur, the capital of Malaysia and home to 1.5 million people, was running out of water. Water was rationed for five months. To end this crisis, the State Waterworks Department hired a contractor under a performance-based contract (PBC) to reduce non-revenue water (NRW). This case showcases the project.

## Latin America

- [Estudio de Caso - Contrato de mejoras integrales de los servicios de agua potable en el Distrito de Colón, Panamá](#), Public-Private Infrastructure Advisory Facility (PPIAF), October 2014 (Spanish).
- Panama - [Estudio de Caso - Contrato de mejoras integrales de los servicios de agua potable en el Distrito de Colón, Panamá](#), Public-Private Infrastructure Advisory Facility (PPIAF), October 2014 (Spanish).

- [Regulating Water Services: Sending the Right Signals to Utilities in Chile](#) by Gabriel Blietrán and Pamela Arellano, Viewpoint Policy Journal 286, March 2005 - During the 1980s and 1990s the Chilean water and sanitation sector underwent deep reforms so that private capital could finance the huge investments needed to achieve universal service. The regulatory framework put into place cleared the way for massive private equity. But users have also paid the price of transforming the heavily subsidized sector into a self-sustaining industry able to provide universal coverage. This note examines key features of the new regulatory scheme that have contributed to the sustainability of the reforms: a phased approach, an efficient pricing policy and methodology, and expert panels to deal with conflict resolution.
- [Mixed Private-Public Ownership Companies “Empresa Mixta” \(2011\)](#) This review of the *empresa mixta* model in Latin America was undertaken to better understand its structure, applicability and strength in mitigating risks in the water and sanitation sector.
- [Charting a New Course - Structural Reforms in Colombia's Water Sector](#) (2010).

## North Africa and Middle East

- [Water Governance in Jordan – Overcoming the Challenges to Private Sector Participation](#), Studies on Water, Organization for Economic Co-Operation and Development (OECD), June 2014.
- Tunisia - [La gouvernance des services de l’eau en Tunisie – Surmonter les défis de la participation du secteur privé](#), Studies on Water, OECD, June 2014 (French).

### Related Content

- [Water & Sanitation PPPs](#)
- [Approaches to Utility Reform](#)
- [Water and Sanitation Agreements](#)
- [PPPs in Irrigation](#)
- [Managing Non-Technical Losses and Theft in Utility Contracts](#)
- [Water & Sanitation Toolkits](#)
- [Gender & Water and Sanitation Projects](#)

#### Additional Resources

- [Contracting Tools for Non-Revenue Water Reduction](#)

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