# **Case Studies in FCS**

# Full Description

Examples of private sector engagement in the provision of infrastructure services in FCS as well as case studies that show the difficulties in implementing PPPs in FCS organized by sector and country are set out below:

- Infrastructure
- Information and communications technology (ICT)
- Power
- Solid Waste Management
- Tourism
- Transport
- Water

#### **Infrastructure**

### Mozambique

• Mobilizing Finance for Infrastructure a Study for the UK Department for International Development - Mozambique Country Case Study, Cambridge Economic Policy Associates (CEPA) 2015 - This report was produced by CEPA as part of a wide-ranging research programme funded by the UK Department for International Development (DFID) that explores the factors constraining the provision of private finance to support infrastructure investment in DFID's focus countries. It provides an overview of the market for infrastructure finance in (focusing on economic infrastructure sectors: energy, transport and water) using evidence gained from 11 consultations held with stakeholders (in the period December 2014 to February 2015) and complementary desk-based research. The study provides background on the key policy reforms implemented by the Government of Mozambique (GoM) in an attempt to provide a framework more conducive for private finance; an overview of closed and pipeline transactions that have taken place across the different infrastructure sectors; and then sets out the findings on the main factors constraining increased private finance for infrastructure drawing largely on the views of stakeholders.

#### South Sudan

- Building Public-Private Partnerships in South Sudan
  - It's a Texas Two-Step—But Who's Leading? Building Public-Private Partnerships in South
     Sudan, SmartLesson, IFC March 2015 This SmartLesson explores the difficulties and obstacles

in promoting public-private partnerships as a means of strengthening the private sector and thus the country's economy. South Sudan is considered a fragile post-conflict state and falls under IFC's Conflict Affected States in Africa Initiative.

# Information and communications technology (ICT)

### Haiti

• <u>Haiti Teleco</u>, Public-Private Partnership Stories, IFC 2010 - On April 29, 2010, the Central Bank of Haiti (Banque de la Re?publique d'Hai?ti or BRH) signed an agreement with Vietnam's largest mobile telephone operator, Viettel, to significantly expand telecommunications services in the earthquakeravaged country. The public-private partnership is expected to modernize Teleco, help improve the company's technical and financial capacities, modernize its infrastructure, and provide new services to its customers.

# Myanmar

- Ooredoo 3G Network Financing, Infrastructure Investment Project Briefs, ABD and WBG March 2017

   With assistance from the World Bank Group (including funding from the Public-Private
   Infrastructure Advisory Facility-PPIAF), the government undertook significant ICT reforms such as restructuring of the incumbent operator and regulator, introducing competition, and opening the sector to foreign investment. The project consists of rolling out an advanced third-generation (3G) mobile telecommunication network across Myanmar under a 15-year operating and associated spectrum license. Following a successful competitive bid, the government awarded Ooredoo Myanmar one of two mobile telecom licenses. International development financial support was secured from the Asian Development Bank and the International Finance Corporation, each of them contributing a \$150 million direct loan for the project. The project is expected to provide mobile phone and internet services to 77 percent of Myanmar's population in both urban and rural areas, thereby opening the doors to mobile banking services. It is also expected to increase competition in the sector, thereby driving down costs to the consumer, to provide a positive demonstration effect for infrastructure projects in the country and to support local firms.
- Telecommunications Reform, Public-Private Partnership Briefs, World Bank Group and PPIAF, May 2015 As the ICT sector and telecommunications operators specializing in mobile telephony tend to be the first to arrive in post-conflict settings, it is important that government reforms and regulatory approaches facilitate these investments and begin to change country risk ratings and investor perceptions. The brief describes how the WBG together with PPIAF helped with the development of Myanmar's ICT sector by creating the enabling policy alongside the regulatory and legal environment for a more competitive telecommunications market in Myanmar. This assistance led to the finalization of key regulations providing a legal basis for the implementation of sector liberalization. With the regulatory framework and capacity-building initiatives in place, the Myanmar Post and Telecommunications Department (PDT) launched a competitive, transparent licensing issuance process for the selected bidders. The respective Laws and Regulations are published on the website of PDT.

## Republic of Congo

Public-Private Partnership in Telecommunications Infrastructure Projects, Case of the Republic of
 Congo, World Bank 2011 - This paper delineates the role of government in Public-Private Partnerships
 (PPP) in the telecommunication sector in the Republic of the Congo. PPPs offer policy makers an
 opportunity to improve the delivery of services and the management of facilities, and help to mobilize

private capital which in turn speeds up the delivery of public infrastructure. Along with power and transportation infrastructure projects, telecommunication figures among the most growing area in PPP projects in Africa. Nevertheless, fitting telecommunication projects into a PPP model is challenging. In order to address these challenges, this paper also summarizes the achievements in Congo's economic infrastructure sector, the risks allocated to the implementation of the project, and recommends World Bank Group risk mitigation instruments.

#### Power

### **Burkina Faso**

• FasoBiogaz, ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREE) 2020 - FasoBiogaz is a flagship and pioneering project for Burkina Faso. FasoBiogaz SARL is an enterprise located in the industrial zone of Kossodo in Ouagadougou, Burkina Faso, and operates the first industrial biogas plant connected to the SONABEL power grid. With an installed electrical capacity of 275 kW, the plant is transforming slaughterhouse waste and other available organic substrate into biogas and digestat. While biogas is transformed into electricity and injected into the national power grid, the digestat is commercialized as biofertilizer. The project is financed by the Dutch private investor company Van Kersbergen Invest B.V. In the framework of the Private Investor Program (PSI), the Netherlands Enterprise Agency has agreed to reimbursement up to 750,000 EUR based on a results-based milestones agreement. The initial investment amounts to 1,500,000 EUR for the implementation of a plant with an installed capacity of 500 kW. Operating revenues are generated through the sale of electricity and digestat as biofertilizer. In 2015, FasoBiogaz was able to negotiate a Power Purchase Agreement (PPA) with SONABEL with a desirable tariff for 3 years. With a currently installed power of 275 kW, the plant can daily inject between 4,200 and 4,300 kWh into the grid.

### Cameroon

- <u>Dibamba Power Plant</u>, Multilateral Development Banks' Collaboration, Infrastructure Investment Project Briefs, World Bank April 2016 In 2009, the Government of Cameroon awarded AES Dibamba Power Development Corporation (DPDC) the right to develop an 86-MW thermal energy Independent Power Plant (IPP). The Dibamba Project provides Cameroon with peaking and reserve capacity in electricity generation, in order to meet the growing public sector and industrial demand for electricity.
- Kribi Power Plant, Multilateral Development Banks' Collaboration, Infrastructure Investment Project Briefs, AfDB, EIB, World Bank April 2017 In 2009, the Government of Cameroon (GoC) awarded the Kribi Power Development Corporation (KPDC), a 20-year public-private partnership (PPP) to design, build, finance and operate the 216 MW Kribi natural gas-fired power plant, and associated transmission line. The Kribi power project is the first gas-to-power PPP being implemented in Cameroon and in the Central- African region, under a traditional project finance structure and its success will pave the way for the country to make significant public investments as well as mobilize private sector investment. It will add to the overall stability and reliability of the power system, as such it will complement the development of Cameroon's hydropower projects.

### Guinea

• Electricité de Guinée, Public-Private Partnership Stories IFC 2016 - Guinean's national power utility, Electricité de Guinée (EDG), is responsible for providing power generation, transmission, and distribution services across the country. However, electricity distribution under EDG suffers from

weak governance, old infrastructure, poor maintenance of assets, frequent blackouts, high electricity theft rates and losses, poor billing and collection rates, and overall poor financial performance. To help address this, the Government of Guinea hired IFC as the lead advisor to structure a performance-based public-private partnership (PPP) for EDG. The consortium Veolia-Seureca won the bid for a 4 year performance-based management contract, and the PPP agreement was signed in June 2014 despite significant challenges posed by the Ebola epidemic, which was at its peak during this time. The private operator will provide EDG with experienced staff to oversee operations, experts to bring complementary expertise to specific projects, such as IT systems, and much needed improvements in EDG's operational performance. Veolia and EDG staff will work closely together to achieve the key performance indicators that have been set in the contract. It is expected that the improved services, for nearly 300,000 households by the end of the contract, will increase the quality and reliability of power services in Guinea.

### Lebanon

• <u>Butec Utility Services</u>, Public-Private Partnership Briefs, World Bank, May 2016 - Recurring episodes of conflict and a challenging political-economy in Lebanon have contributed to serious power shortages in the country that reduce the quality of life for Lebanese citizens, and continue to be a burden to the public budget. The Government of Lebanon (GoL) has made power sector reform a top priority and encouraged private sector participation in the process. International Finance Corporation (IFC) and the Multilateral Investment Guarantee Agency (MIGA), assisted Butec Group Holding S.A.L. (Butec) and, its subsidiary, Butec Utility Services (BUS) with quasi-equity financing, and a risk guarantee, respectively.

### Liberia

• Amended Contract for the Liberian Electricity Company (LEC), Public-Private Partnership Stories, IFC August 2018 - The brief explains how the IFC in coordination with other development partners, helped to bring private sector participation into the power sector in Liberia by structuring a partnership between the government of Liberia and a private partner. As there was a lack of market appetite for a fully private option, in April 2010, IFC concluded the design and tendering of a five-year management contract for the Liberia Electricity Corporation (LEC), the electricity utility in the capital city of Monrovia. Manitoba Hydro International (MHI) of Canada was awarded the management contract, and took over LEC operations on July 1, 2010. The European Union, Norway, USAID and the World Bank are providing \$50 million in donor funds for the operator to greatly expand and improve electricity services in Monrovia between 2010 and 2015. The project expanded the reach of affordable electricity from 500 connections to ultimately serve 165,000 Liberians.

### **Nigeria**

• Azura-Edo Independent Power Plant, Multilateral Development Banks' Collaboration: Infrastructure Investment Project Briefs, World Bank 2017 - Nigeria has long suffered from a shortage of electricity, a problem the Federal Government of Nigeria (FGN) began to tackle with comprehensive power sector reforms in 2010. The World Bank Group (WBG) responded by providing support for reforms and private sector investment through its joint Energy Business Plan (EBP) for Nigeria which included an investment in the Azura-Edo Independent Power Plant (Azura IPP). The Azura IPP, financed by IFC and other development financing institutions as well as private sector lenders, is expected to provide electricity to 14 million residential consumers. Azura-Edo is the first wholly project-financed IPP in Nigeria. As such, it is regarded as a ground-breaking project that sets a precedent for future private sector investors in the gas-to-power value chain.

### **Somalia**

### • Supporting the ICT Sector and Broadband Connectivity

Strategy and PPP Options for Supporting the ICT Sector and Broadband Connectivity in Somalia , WBG 2017 - The lack of a national fibre optic backbone network was a key inhibitor to the development of Somalia's broadband market. Given the enormous economic and social benefits that broadband Internet access can deliver, the expansion of broadband access to a wider part of the population was seen as a key strategic objective for the government of Somalia and the private sector alike. However, neither the public nor the private sector can or should do this alone. The public sector lacks the capacity and experience necessary to build and operate telecom infrastructure, but it can contribute donor funding that the private sector does not have access to, provide subsidies in hard-to-reach areas, and create a regulatory environment that legitimizes and protects private assets in national infrastructure. Due to this common interest, a public-private partnership (PPP) and joint investment programs are models worth considering for the development of a national backbone network.

### **Tajikistan**

### • The Pamir Private Power Project

• In Tajikistan the Gorno-Badakhshan Autonomous Region suffered from major energy shortages following independence from the Soviet Union in 1991 and a subsequent five-year civil war. Economic and human development were choked by this lack of energy. To improve the situation, the government of Tajikistan signed a 25-year PPP agreement with Pamir Energy to upgrade and operate the region's out-of-date hydroelectric utility with financial and technical assistance from the Aga Khan Fund for Economic Development (AKFED), the World Bank, IFC, and the Swiss Economic Cooperation Office (SECO). The project phased in higher tariffs and subsidized electricity payments of poor consumers. Although the project faced numerous challenges in implementation due to difficulty in securing contractors and materials, it was finished on time and on budget in 2006. It later faced issues with the population's adjustment to higher energy tariffs and a culture of non-payment but these challenges were overcome over time. Eventually, Pamir was even able to grow energy output enough to export to Afghanistan. As of 2016, the project is providing renewable energy for 226,000 people in Tajikistan and 28,500 in northern Afghanistan with an eye for expansion to a further 170,000 in Afghanistan over the next five years. Sources: Tajikistan: Providing Reliable Electricity in the Pamir Mountains, World Bank April 17, 2012; Jumaev Tajikistan Energy Sector Private Power Project (PPPP), 2016).

#### **Tuvalu**

• The Tuvalu Solar Power Project, e8 General Secretariat 2009 - The report describes an e8-funded small-scale solar power system project in Tuvalu together with lessons learned and success factors. The e8 comprises of 10 leading electricity companies from the G8 countries promoting sustainable energy development through electricity sector projects and human capacity building activities in developing nations worldwide. The project was inaugurated on February 21, 2008 and intends to decrease reliance on fuel and to enhance renewable energy-based electrification in the small island state of Tuvalu. Tuvalu is one of the places on earth most vulnerable to the effects of climate change. The sea level rise associated with global warming threatens the very livelihood of the 12,000 Tuvaluans residing on the nine extremely low-lying coral atolls. The e8 project features a 40 kW grid-connected solar system that accounts for about 5% of Funafuti's (Tuvalu's capital) peak demand, and 3% of TEC's annual household consumption". Its main objective is to decrease the reliance on fuel and enhancing renewable energy-based electrification.

### **Solid Waste Management**

# Papua New Guinea

• Case Studies in Private Sector Participation: Solid Waste Management, prepared by the Pacific Private Sector Development Initiative (regional technical assistance facility co-financed by the ADB, the Government of Australia, and the Government of New Zealand) 2017 - In most urban areas in the Pacific, solid waste management services are the responsibility of the municipal authorities, who finance the services through their own budgets, with only limited contributions from fees paid directly by users. The private sector has been involved in the Pacific's solid waste sector for many years, providing waste collection and/or disposal services in Fiji, Papua New Guinea, Samoa, Solomon Islands, and Tonga. Two case studies in Papua New Guinea and Fiji discuss the impacts of public-private partnership contracts in the solid waste management services. The case study in Papua New Guinea draws on the National Capital District Commission (NCDC)'s experience with contracting rubbish collection to the private sector, and underscores the importance of robust and transparent procedures for tendering and contracting.

### West Bank & Gaza

 Public-Private Partnership Stories: West Bank & Gaza: Solid Waste Management, IFC November 2013 - The brief describes the successful conclusion of the first public-private partnership (PPP) in the West Bank. Decades of political and economic instability in the West Bank and Gaza had resulted in inadequate infrastructure investment and poor provision of public services to the people of Palestine, especially with regard to solid waste management. In response, the World Bank Group provided an integrated solution to the Joint Services Council for Hebron and Bethlehem (JSC-H&B). IFC worked closely with technical consultants and legal counsel to design a PPP structure built on a sound technical, legal, and regulatory foundation. Anticipating private sector concerns around the fragile and conflict-affected status of West Bank and Gaza, IFC held numerous conversations with regional and international solid waste operators to develop a robust transaction structure that addressed the country's unique situation. Under the project structure, the private partner is responsible for the operation and management of Al-Minya landfill and two transfer stations at Tarqoumiya and Hebron, including the long-haul transfer of waste to from the transfer stations to the landfill. The Joint Services Council for Hebron and Bethlehem will provide a minimum waste guarantee of 500 tons per day to the operator and pay fees per ton of waste managed at the landfill and transfer stations. Primary waste collection is not a part of the private sector's responsibilities and will remain in the hands of various municipal entities. The PPP agreement was signed at Al-Minya on September 2, 2013.

### Tourism

# Kirbati

• Otintaai Hotel, Public-Private Partnership Stories, IFC 2013 - The Republic of Kiribati has long depended on the public sector and foreign aid. Its government would like to change this by reforming state-owned enterprises, developing its infrastructure, and laying the foundation for growth in the private sector. As a part of this reform effort, the government turned to IFC to find a private sector partner to rehabilitate and operate the state-owned Otintaai Hotel, which had long been a drain on the state budget. As one of Kiribati's few hotels, the project is critical to expanding the provision of suitable accommodation to visitors. Royal Crown Enterprises Limited, a local firm, won the tender in Kiribati's first PPP in the tourism sector. Under the 25-year concession, Royal Crown will renovate and manage the 40-room hotel, providing accommodations meeting the equivalent of a three-star rating by Australia's official accommodation accreditation system. It is estimated that the \$2.25 million in private sector investment will be mobilized in the first two years. The concession was granted in September 2013.

### **Transport**

# Chad

#### Performance-based road contracts in Chad

Output Based Aid, World Bank 2005 - Despite Chad's recent debut as an oil exporter, its people rank among the world's poorest. Large parts of the country are left in extreme isolation by the lack of a backbone road network that is passable year-round. To tackle the poor internal integration, the government formulated the National Transport Program in 1999. And to address the need for sustainable road maintenance, it started a pilot project that moves from traditional input-based planning and contracting of maintenance to the more output-based approach known as performance-based maintenance and management of roads (PMMR). A private operator has been contracted to provide road services. Results so far are encouraging, and the government plans to expand the share of the road network covered by PMMR contracts. The PMMR arrangement is being replicated elsewhere in Sub-Saharan Africa, including Burkina Faso, Cape Verde, Madagascar, and Tanzania.

# Mozambique

• N4 Toll Route - Global Infrastructure Hub (GIH) Case Studies, November 2020 - The case study describes the N4 Toll Road Project, a brownfield toll road concession of 630 km running from Pretoria, South Africa's administrative capital, to Maputo, the capital of Mozambique and a deep-sea port on the Indian Ocean. The project was structured as a public-private partnership (PPP) between the governments of South Africa and Mozambique and a private consortium for a 30-year period. The project is the first cross-border transport PPP project in Sub-Saharan Africa and the first brownfield PPP of this scale in South Africa. The case study describes the development of the project (challenges and opportunities addressed by the project as well as perceived long-term benefits), procuring and finance (procurement process, contractual model, infrastructure finance and risk mitigation), management (political and operational coordination, including tariff setting as well as the harmonisation of rules, standards and procedures) and draws conclusions. According to the case study the project has not only benefited the two countries but has also fostered trade among other neighbouring countries such as Namibia and Botswana. The road has also facilitated further private sector investment in transport infrastructure. According to the case study factors that contributed to the success included (i) a strong government commitment, support and regulatory framework; (ii) an efficient and in-depth stakeholder management; (iii) specific contractual conditions, that obliged the concessionaire to subcontract a share of local small companies in both countries, including training on the job for the construction workers (iv) early risk identification and allocation (v) a detailed contract that focuses on performance (not design) specifications and outlines specific responsibilities. See also N4 Toll Road from South Africa to Mozambique, Toolkit for Private Sector Partner Partnerships in Roads & Highways, PPIAF 2009 and A Case Study on N4 Toll Concession SADC PPP Case Studies, South African Institute of International Affairs (SAIIA) 2012.

### **Niger**

• <u>Dry Port</u>, Public-Private Partnership Stories, IFC 2015 - As a landlocked country, Niger depends on neighboring countries' infrastructure to import and export goods, resulting in prohibitive transport costs. This is a significant obstacle for the country's economic development. Therefore, the Government of Niger (GoN) decided to structure and implement a dry port project in Dosso (corridor of Benin) and Niamey Rive Droite (corridors of Togo, Ghana and Co?te d'Ivoire) for the country to facilitate and process international trade, speed up the flow of cargo, reduce red tape and transportation costs, and move the time consuming sorting and processing of merchandise inland away from the congested seaports of Cotonou (Benin), Lome (Togo), Tema (Ghana), and Abidjan (Côte d'Ivoire).

Bollore? Africa Logistics (B.A.L.) won the bid for a 20-year concession to build, develop, and operate both dry ports in Dosso and Niamey Rive Droite.

### Papua New Guinea

# • Port Moresby (Jacksons) International Airport International Passenger Terminal

On 2 February 2017 ADB and the Papua New Guinea (PNG) National Airports Corporation (NAC) signed a transaction advisory services agreement to develop a new international passenger terminal at Port Moresby (Jacksons) International Airport through public-private partnership (PPP). The project will use a PPP scheme where the private sector will design, build, finance, operate, and maintain the airport facilities. A new international passenger terminal, the extension of the main runway, and other infrastructure enhancements will help the airport meet forecast air services growth up to 2040. The concession period and other parameters will be determined based on the feasibility study (see <u>ADB Helps PNG Expand Port Moresby International Airport Using PPP</u>, ADB February 2, 2017; <u>A Flexible Financing Model for Large-Scale Infrastructure Investments</u>, ADB October 16, 2017).

#### Somalia

### • Aden Abdulle International Airport, Mogadishu

Success Story - Somalia Airport, published by the African Legal Support Facility (ALSF) - The Federal Government of Somalia entered into an amended and restated Concession Agreement on the Management and Upgrade of the Aden Abdulle International Airport, Mogadishu with the private sector operator, Favori LLC on 16 May 2019. The international law firm of Latham and Watkins LLP and aviation sector specialists, Mott Macdonald were engaged to provide the federal government of Somalia with specialist legal advice and technical support during the renegotiation process. The revised agreement represents a considerable improvement over the initial concession agreement signed with the Contractor and marks a significant step towards best practice on concession contracts. Key improvements to achieving a fairer and more balanced agreement are described in more detail in the success story.

# Water

#### **Armenia**

• Yerevan Water Supply - Going Private Gradually ADB 2008 - This case study focuses largely on how the Government of Armenia first embarked on private sector participation in its water supply and sewerage sector, which was through the 4-year management contract in Yerevan.

#### Benin

# • Leveraging the Private Sector for Rural Water Supply

Doing More with Less: Leveraging the Private Sector for Rural Water Supply in Benin, SmartLesson, IFC May 2015 - In 2006, the government of Benin launched a reform of the water sector that transferred the management of rural water supply schemes from local communities to private operators (POs) under lease/affermage contracts to improve accountability and quality of service. Working together, IFC and the World Bank helped develop public-private partnerships (PPPs) to extend the water supply into rural areas of Benin. The project, designed as a pilot program, subsidized concession for groups of PWS ("clusters") as an alternative to the affermage model. Ten pilot rural water supply systems were selected in three different municipalities across the country and grouped into four clusters of two to three systems each. Each of the four clusters was tendered as a separate transaction by the respective municipalities. The tender process led to the award of four eight-year concession agreements for the design,

partial financing, rehabilitation, extension, and operation of the 10 rural water systems to three winning bidders. For the first time in Benin, bankable long-term commercial agreements allowed private operators to raise funding from local commercial banks to undertake the necessary investments. The SmartLesson offers a perspective on what it takes to design and implement sustainable rural water PPP projects, and shares the lessons learned during the project implementation process. (See also Providing Essential Infrastructure in Fragility, Conflict and Violence-Affected States - A toolkit for enabling SME participation, PPIAF 2017; Subsidized concession contracts: how did it work? chapter IV in: Benin – Innovative public private partnerships for rural water services sustainability - A Case Study, WSP, World Bank, IFC June 2015, World Bank, June 10, 2015; see also Toolkit: Structuring Private-Sector Participation (PSP) Contracts for Small Scale Water Projects by Victoria Rigby Delmon, Water and Sanitation Program (WSP), May 2014).

### Benin, Burkina Faso, Kenya, Niger, Senegal, and Uganda

• Managing Public Water Service in Medium-Sized African Cities, Taibou Adamou Maiga, June 2015, WSP, World Bank - This note analyzes the experience of six African countries (Niger, Benin, Burkina Faso, Kenya, Uganda and Senegal) in creating the policy and institutional frameworks necessary to accelerate private sector involvement in water service delivery. While the situation in rural areas is well known, the need for water service is also particularly acute in medium-sized cities throughout Africa. These urban areas (with populations of 3,500 to 40,000, depending on country definitions) are growing rapidly and face many challenges that may not be present in capital cities.

#### Haiti

• Professionalizing Drinking Water Service Delivery in Small Towns of Haiti, Lessons from the Rural Water Supply and Sanitation Project in the Sud Region (EPAR-Sud), Jean-Martin Brault, Zael Sanz and Bruno Le Bansais, Water and Sanitation Program (WSP), World Bank 2015 - This document aims to share lessons learned from the implementation of the World Bank financed component of the rural water supply and sanitation project (EPAR) in the Sud region after its final evaluation. Leading the reform of the drinking water and sanitation sector in Haiti, the EPAR of the National Directorate of Drinking Water and Sanitation (DINEPA) involved the construction or rehabilitation of drinking water schemes in small towns with fewer than 10,000 inhabitants in the Sud region. As a result of the project, there will be a real and sustainable increase in the water supply to Haiti's populations of benefitting communities of the Sud region, thus providing improved access for most households. A long-term solution must be implemented in order to make the meters more affordable to the operators and thus enable them to continue expanding their customer base.

### Mozambique

• Delegated Management of Urban Water Supply Services in Mozambique, World Bank and PPIAF June 2009 - Delegated management of urban water supply services in Mozambique encountered a string of difficulties soon after it was introduced in 1999, but in 2007 a case study revealed that most problems had been overcome and the foundations for sustainability had been established. The government's strong commitment, the soundness of the institutional reform and the quality of sector leadership can be credited for these positive results. Donor support for investments and institutional development were also important. Results reported here are as of the end of 2007.

### **South Sudan**

- "Bottom-up" Approach
  - Waiting for Water, Handshake, Jane Jamieson in: Handshake Issue #9: Reconstruction, IFC 2013 The article describes a different approach to water service delivery in post-conflict

environments. The role of government and development partners should not only focus on the traditional development model of large new investments, but also consider how to harness and regulate the markets that have emerged and that will continue to be significant players.

#### Sudan

## • Al Manara Water Treatment Project

Meeting water demand in growing cities: a PPP project in Sudan (Access through subscription – no publicly available) - Significant increases in investment and improvements in management capacity are required to meet the demand for infrastructure services in the rapidly growing cities of low- and middle-income countries. Closing the infrastructure financing gap requires both public and private finance. Sudan has long experienced under-investment in potable water infrastructure, and access to clean drinking water in fast-growing Khartoum is inadequate. The Al Manara water treatment project is a success story, with capacity to deliver international standard water at scale, despite Sudan's ongoing economic difficulties. A public–private partnership structure allows timely completion of works and ensures sound management while transferring technical skills to the local utility and its Sudanese staff. The paper concludes by considering the extent to which this approach may be replicable in other cities of politically fragile countries.

#### Related Content

PPPs in Fragile and Conflict-Affected States (FCS)

Models for Private Sector Engagement in FCS

Success Factors for Private Engagement in FCS

PPP Institutional, Legal, and Regulatory Frameworks in FCS

Sample PPP Project Documents, Contracts and Contractual Provisions in FCS

Case Studies in FCS

Further Reading and Resources on FCS

Additional Resources

Infrastructure in Fragile and Conflict-Affected States