

PPIAF Assistance in Senegal

The promotion of private sector participation in the development of infrastructure has long been the goal of the Government of Senegal since the early 1990s. First generation reforms were undertaken in all key infrastructure sectors and resulted in the privatization of state-owned utilities. Building on the experiences and failures of such strategies, the Government of Senegal started to look at public-private partnerships (PPPs) as a way to improve and speed up the development of its infrastructure.

Against this background, the Government of Senegal has requested PPIAF's assistance to strengthen the investment climate and help develop environments that are favorable to private investments in infrastructure sectors. Since 2000, PPIAF has supported nine activities in Senegal, including technical assistance to strengthen the PPP enabling environment and strategic sectors such as the water, transport, and energy sectors.

Technical Assistance to Improve the PPP Environment in Senegal

In 2000, PPIAF provided technical assistance to the Government of Senegal for the development of a Country Framework Report (CFR). The CFR consisted of a comprehensive study of the country's infrastructure, which identified opportunities to improve the regulatory framework for increased private sector participation and provided recommendations to remove or reduce key bottlenecks that could impact the country's infrastructure reform program. The study examine various sectors; namely, telecommunications, water and sanitation, energy, and transport.

Among the recommendations of the CFR were: 1) to adopt specific legislations for PPP-type contractual arrangements such as build-operate-own and build-operate-transfer; 2) to simplify administrative procedures for private investors, which would help introduce more competition in infrastructure sectors; 3) to scale-up the use of energy sources such as wind and hydropower by developing a rural electrification program and by supporting the national agency for rural electrification (ASER), which was also established in 1998 by Law no. 98-29; 4) to increase efficiency in the water sector by strengthening the capacities of small independent private water operators to deliver such services in peri-urban areas; and 5) to support the deregulation of the telecommunications sector and the creation an independent regulatory body. A stakeholders' workshop was held in Dakar on January 16–17, 2001 to discuss the findings of the CFR.

PPIAF support led to key reforms in a number of infrastructure sectors including the telecommunications and energy sectors. Indeed, shortly after the completion of this activity in May 2002, the Government of Senegal implemented some of the recommendations of the study. For example, the Telecommunications Code was created by law n°2001-15, the Agency for Telecommunications and Postal Regulation (ARTP) was created in March 2002, and the deregulation of the telecommunications sector became effective in July 2004. In the energy sector, the rural electrification program was successfully launched in 2003 with the objective of providing up to 50% of the Senegalese rural population with access to electricity by 2012 (see energy sector section of this write-up).

PPIAF provided follow-up support the Government of Senegal to improve the institutional and regulatory frameworks. In 2005, PPIAF helped measure the shortfall in capital investment below the level required to support infrastructure development in Senegal. Through this activity, a rigorous analytic basis was developed for estimating under-funded infrastructure needs and identifying how these needs might best be funded in order to assure that infrastructure development objectives were fully met.

The study concluded that: 1) with the exception of the telecommunications sector, the capacity of Senegal's infrastructure was inadequate to provide sufficient service to match current demand; 2) existing capacity was insufficient to provide broad geographic coverage beyond the Dakar area; and 3) existing infrastructure was inadequate in quality and reliability to serve as a supportive platform for collateral investment in the real sectors of Senegal's economy.

Based on this assessment, the study recommended PPPs as a way to achieve the government's goal to improve the quality of services in key infrastructure services. This activity and another PPIAF-funded activity that supported the transport sector, led to the development of the Dakar–Diamniadio Highway, the first large-scale PPP project in Senegal.

In 2007 PPIAF was again approached by the Government of Senegal to support the development of a model for delegated contract management, based on the Beninese experience and lessons learned in Sub-Saharan Africa. The activity produced a comprehensive report on delegated contract management models for the execution of infrastructure projects. Furthermore, the study recommended strengthening the legal framework for delegated contract managements to support the implementation of ongoing infrastructure projects in Senegal. A regional workshop was held in Cotonou, Benin in March 2007 to discuss emerging lessons in delegated contract management with key African stakeholders.

The Government of Senegal is currently considering specific reforms to improve the execution of public infrastructure works. A draft law on delegated contract management is available.

Recognizing the need to improve the efficiency in the design and implementation of existing large-scale infrastructure projects, in particular in the transport sector, the Government of Senegal requested PPIAF's assistance in 2009 to set up a strategic framework for prioritizing infrastructure investments. The objective of this activity was to identify ways through which infrastructure can contribute to economic growth in Senegal, and to provide guidance on the most efficient use of limited public resources to leverage further investments. The final report of the study included a detailed action plan, with an associated budget, for the development of transport infrastructures in secondary cities in Senegal. The action plan was adopted by the Ministry of Infrastructure and by donor partners such as the World Bank and Japan. In fact, Japan agreed to fund a follow-up study on the expansion of roads network infrastructures in Senegal.

Results of PPIAF's Activities to Improve the PPP Enabling Environment in Senegal

Category	Outputs
Enabling environment reform	
<i>Analyses/assessments prepared</i>	<ul style="list-style-type: none"> • Country Framework Report, 2002 • Analysis of the Water Sector in Senegal, 2002 • Analysis of the Telecommunications Sector in Senegal, 2002 • Analysis of the Water Sector in Senegal, 2002 • Analysis of the Energy Sector in Senegal, 2002 • Analysis of the Transport Sector in Senegal, 2002 • Analysis of Legal and Regulatory Frameworks in Senegal, 2002 • Assessment of Recent Economic Developments in Infrastructure in Senegal, 2005 • Delegated Contract Management Models for the Execution of Infrastructure Projects in Africa, 2007 • Spatial and Growth Pole Approach for Sustainable Development in Senegal, 2010
Capacity and awareness building	
<i>Workshops/seminars</i>	<ul style="list-style-type: none"> • A stakeholders' workshop was held in Dakar on January 16–17, 2001 to discuss the findings of the CFR • A regional workshop was held in Cotonou, Benin, in March 2007 to discuss emerging lessons in delegated contract management with key African stakeholders

Category	Outcomes
Enabling environment reform	
<i>Institutions created or strengthened</i>	<ul style="list-style-type: none"> The Senegalese Agency for Telecommunications and Postal Regulation (ARTP) was created in March 2002
<i>Plans/strategies adopted or implemented</i>	<ul style="list-style-type: none"> Action plan for the development of transport infrastructures in secondary cities in Senegal was adopted by the Ministry of Infrastructure and by donors partners (World Bank and Japan), 2010
<i>Policies adopted, legislation passed/amended, or regulations issued/revised</i>	<ul style="list-style-type: none"> The Telecommunications Code was created by Law n°2001-15 on December 5, 2001 The approval of the Telecommunications Sector Policy in July 2004 led to the deregulation of the telecommunications sector in Senegal
Capacity and awareness building	
<i>Technical capacity enhanced</i>	<ul style="list-style-type: none"> The capacities of the representatives of 10 African agencies for public works were enhanced during the regional workshop, held in Cotonou in March 2007
Category	Impacts
<i>Additional private investment in the sector</i>	<ul style="list-style-type: none"> The reforms implemented in Senegal led to additional investments of \$1.7 billion in the telecommunications sector, \$453 million in the transport sector, and \$93 million in the energy sector, 2002–2009

Technical Assistance for Senegal's Energy Sector

The PPIAF-supported CFR in 2000 made recommendations that were adopted by the government as it developed a Rural Electrification Program (REP). The REP was initiated in 2003 with the assistance of the World Bank as a priority program for the efficient scale-up of rural electrification through PPPs structured as privately-operated concessions. Some recommendations of the CFR were directly linked to the REP. In particular, the CFR recommended: direct concessional financing of components targeting poverty alleviation; more competition in the infrastructure sector; pricing systems for cost recovery, which reconcile economic and social objectives; and universal coverage of electricity services.

The recommendations of the CFR related to the energy sector were taken into consideration during the design of the REP. For instance, the primary objective of the REP was to ensure electricity services were accessible to all communities throughout Senegal. Furthermore, the REP was structured with subsidies from international donors to reduce up-front costs of construction, installation, and concession structuring; thus allowing bringing electricity to poor rural areas. The REP concessions were competitively awarded. Under the REP, the country was divided into 11 concessions awarded pursuant to an international bidding process. Prior to each process, all bidders received notification regarding a pre-determined amount of output-based aid (OBA) subsidy funding available for the project. Awards were made based on the highest number of new connections proposed for the pre-determined subsidy amount. Finally, the tariffs for rural concessions in the REP were set at levels consistent with the socioeconomic conditions of the target customers, their consumption patterns, and their ability to pay.

On May 30, 2008 the first concession of the REP, the Saint-Louis–Dagana–Podor project in the northern part of the country, was awarded to the Office National de l'Electricité, Morocco's electricity utility. It has attracted foreign direct investment totaling \$24 million, funded with a mix of equity, debt, and subsidies. The World Bank is providing subsidies representing approximately 30% of the financing, and the Global Environment Facility is providing a \$1.1 million grant to support solar technology in 5,719 new connections (29% of the total).

This first concession is expected to bring 19,574 new electricity connections to 298 villages over three years (2010–2013), supplying electricity to approximately 130,000 people. Furthermore, it is expected that the 11 concessions, when completed, will make possible 200,000 new connections that will benefit over one million people. These new connections in turn are expected to improve education and health, among the other benefits that arise from access to electricity.

In January 2010, the International Finance Corporation partnered as a shareholder with one in this venture and will contribute 19.9% of the total capital required by the project.

On November 20, 2009, the 25-year rural electrification concession for Louga–Kébémér–Linguère was awarded to Morocco's Office National de l'Electricité.

In December 2010, the 25-year rural electrification concession for the Kaffrine–Tambacounda–Kédougou region was awarded to the French company Electricité de France and its Senegalese partner Matforce. The concession is located in the southeast of the country, and covers a 48,000 km² region—one quarter of the national territory. It covers a rural population spread out over more than 2,000 villages. During an initial three-year phase, the program (initiated in early 2012) aims to bring electricity to 180,000 people. There was complete freedom of choice of technology, with the main solutions deployed being photovoltaic kits and connection to the national electricity grid. The €11.625 million project is financed by a €7.7 million loan from the Agence Française de Développement (AFD), a €2 million loan from a private bank, and €1.925 million in shareholders' equity, of which €1.348 million is from Electricité de France and €0.577 million is from Matforce.

Several other tenders are under way, including Kébémér-Louga-Linguère, Mbour, Kolda-Velingara, and Kaolack-Niouro-Fatick-Gossas.

Building on these recommendations and ongoing efforts from the Government of Senegal to implement the REP, PPIAF provided a grant to the Government of Senegal in 2008 to prepare a market survey and pre-feasibility study for the Matam–Bakel–Kanel–Ranéroù (Northern Senegal) rural electrification concession. The study helped the rural electrification agency consider different options for structuring the proposed concession through: an analysis of market demand at household and community levels; the identification of potential technical options and investment requirements; the evaluation of the economic and financial viability of the concession; and the estimation of subsidy level required.

In December 2010, consensus was achieved on the PPP option for the electrification of the Matam–Ranéroù–Bakel region.

Results of PPIAF's Activities in Senegal's Energy Sector

Category	Outputs
Project-cycle related assistance	
<i>Transaction support</i>	<ul style="list-style-type: none"> Local Electrification Plan for Matam–Ranéroù–Bakel in the rural North-Eastern region of Senegal, December 2010
Capacity and awareness building	
<i>Workshops/seminars</i>	<ul style="list-style-type: none"> Stakeholder workshop on the Local Electrification Plan for Matam–Ranéroù–Bakel, January 2011

Category	Outcomes
Capacity and awareness building	
<i>Consensus achieved</i>	<ul style="list-style-type: none"> • Consensus achieved on the PPP option for the electrification of the Matam-Ranéro-Bakel region, December 2010

Category	Impacts
<i>Additional private investment in the sector</i>	<ul style="list-style-type: none"> • \$24 million in foreign direct investments, a mix of equity, debt, and subsidies for Saint-Louis • Kaffrine–Tambacounda–Kédougou 25-year rural electrification concession awarded to Electricité de France and its Senegalese partner Matforce for €1.925 million, December 2010
<i>Increased number of people with infrastructure services</i>	<ul style="list-style-type: none"> • The Saint-Louis–Dagana–Podor rural electrification concession is expected to provide electricity to 19,574 rural users in 298 villages by 2013 • The Kaffrine–Tambacounda–Kédougou 25-year rural electrification concession is expected to bring electricity to 180,000 people in over more than 2,000 villages by 2015

Technical Assistance for Senegal’s Transport Sector

In 2007 PPIAF helped help establish the institutional and regulatory framework for the transport sector in Senegal. The PPIAF grant supported technical assistance to the National Agency for the Promotion of Investments (APIX) to consolidate the institutional framework and develop contractual arrangements for the Dakar–Diamniadio Toll Highway project. This project is one of the first toll roads structured as a PPP, where various road segments are being financed by either the public sector or by both the public and private sectors.

PPIAF support focused on five areas, namely: 1) the design of a framework for the oversight of the highway project that reflects the context and institutional characteristics of Senegal; 2) consensus-building on the option or models preferred by the government through seminars for specific stakeholder groups; 3) recommendations on an operational organization for the administrative entity responsible for the oversight of the highway concession; 4) tailored technical assistance for that entity’s efforts in building technical and operational capacity; and 5) contribution to a broader review of the institutional management of PPPs in Senegal under the direction of APIX.

Following the adoption of the institutional and regulatory framework for the oversight of the highway concession contract in September 2009, the segment of the highway to be developed through a PPP arrangement (30-year concession) was awarded to *Société Eiffage de la Nouvelle Autoroute Concédée* (“SENAC”), a Senegalese special purpose company created to implement the project, owned by Eiffage Group, one of the leading construction groups worldwide and one of France’s main toll road operator. The 30-year concession contract was signed between the Government of Senegal and SENAC on July 2, 2009. It requires the concessionaire to build, finance, operate and maintain 20.4 km of road segment between Pikine and Diamniadio, and to operate and maintain other existing road segments for the same period of time.

The PPP component of the road reached financial closure on November 15, 2011. The Pikine–Diamniadio road segment will be financed as follows: €95 million with equity from the sponsors and debt from international financial institutions, and €130 million financed with public sector funds consisting of

loans (€50 million from the African Development Bank (AfDB), €25 million from the AFD, and €55 million from the Government of Senegal).

The public sector component of the road consists of the Pikine–Patte d’Oie road segment (4.2 km), and it will be financed as follows: €120 million in funds from the Government of Senegal, €70 million in loans from the World Bank’s International Development Association, and €33 million from AFD.

Once completed, the highway project will provide substantial socioeconomic benefits for more than 2 million Senegalese living in Dakar and surrounding cities. The Dakar–Diamniadio Highway is expected to create more than 1,435 new jobs and cut the average commute to and from Dakar from the current two hours to less than 30 minutes.

Results of PPIAF’s Activities in Senegal’s Transport Sector

Category	Outputs
Enabling environment reform	
<i>Analyses/assessments prepared</i>	<ul style="list-style-type: none"> • Development of Institutional and Regulatory Frameworks for the Dakar–Diamniadio Toll Highway project in Senegal, 2009
Project cycle-related assistance	
<i>Transaction support</i>	<ul style="list-style-type: none"> • Technical assistance for the preparation of the concession contract, 2009

Category	Outcomes
Enabling environment reform	
<i>Plans/strategies adopted or implemented</i>	<ul style="list-style-type: none"> • Action plan for the development of contractual arrangements for the construction and management of the Dakar–Diamniadio toll highway was adopted by the Government of Senegal, 2009
Project cycle-related assistance	
<i>Transactions facilitated or supported</i>	<ul style="list-style-type: none"> • 30-year concession for the construction and operation of the Pikine–Diamniadio road segment of the toll highway was awarded to SENAC, owned by Eiffage Group, 2009

Category	Impacts
<i>Additional private investment in the sector</i>	<ul style="list-style-type: none"> • €225 million for the PPP component of the road segment, and €223 million for the public sector component

Technical Assistance for Senegal’s Water Sector

The Government of Senegal is engaged in reforms to facilitate the achievement of the Millennium Development Goals, which aim to halve the level of poverty in developing countries and increase access to sustainable water and sanitation services all by the target date of 2015. PPIAF has supported this initiative through two important activities in the rural and urban water sectors in Senegal, approved in 2007 and 2009 respectively.

Rural Water Sector

A large proportion of the rural population of Senegal obtains water from mechanized boreholes, which were installed and maintained by the government. In 2005 the Government of Senegal introduced a specific reform to transfer the maintenance of rural systems from the Department of Water Infrastructure Maintenance (DEM) to the private sector. Facing constraints to the implementation of the reform, the Ministry of Hydraulics requested technical assistance from PPIAF in 2007 to increase the reliability of water services in rural areas by supporting small-scale operators in the maintenance of rural boreholes in Senegal.

An assessment of the opportunities and relevance of private sector participation in the maintenance of rural boreholes in Senegal helped identify the specific roles of the two parties involved: the DEM, on the government side, and the Associations of Borehole Users (ASUFOR), on the beneficiary side. In addition, the activity developed a model contractual framework and bidding documents for the transfer of maintenance responsibilities, and assisted the Ministry of Hydraulics to define a capacity building program to facilitate the transition of the DEM in its new regulatory role. Both the DEM and the ASUFOR were strengthened through this activity.

The Government of Senegal demonstrated its commitment to supporting this activity by setting up a task force that regularly met with the PPIAF-funded consultant to discuss progress on the study and provide feedback. As a pilot phase, the study recommended that the DEM issue five-year licenses to private operators selected through a competitive bidding process. This recommendation was fully approved by the Government of Senegal in 2009. Furthermore, in 2010 the Government of Senegal announced its intention to engage a private operator to handle the maintenance of 621 rural water systems in the central area of Senegal. The procurement process for the selection of the private operators is underway.

Urban Water Sector

In the mid-nineties the Government of Senegal launched a major reform of its water sector, leading to the creation of a national asset-holding company Société Nationales des Eaux du Sénégal (SONES) and the involvement of a private sector operator Sénégalaise des Eaux (SDE) through an affermage contract in 1996. The reform, reflecting strong government commitment and institutional capacity to pursue a PPP arrangement with the attribution of clear roles and responsibilities among public and private stakeholders, brought significant performance improvements in the urban water sector. This contractual and institutional framework initially established in 1996 and renewed for a subsequent five-year term in 2006, was supposed to expire in April 2011 (now extended until 2012). With support of its donor partners, the Government of Senegal is currently considering the evolution of the sector following the conclusion of SDE's affermage. In 2009 PPIAF supported economic and financial studies to assess the feasibility of alternative contractual and institutional PPP arrangements with a view of ensuring sustainable sector development over the period 2011–2025

The activity consisted of two studies on reforms in the water sector in Senegal. The first study aimed to increase the understanding of the overall water demand and sanitation services and households' willingness to pay for those services for the period 2009–2030. However, prior to the completion of the first study (December 2010), the Government of Senegal decided to move towards a full concession of water services by 2013. This means that the affermage contract with SDE will not be renewed when it expires in 2012. Ongoing discussions are held with actors in the water and solid waste management sector to find the implications of the government's decision.

The second study seeks to identify options to delegate the management of two major water supply infrastructures under construction in Senegal. It is currently being conducted with the support of the World Bank's Water and Sanitation Program (WSP).

Results of PPIAF's Activities in Senegal's Water Sector

Category	Outputs
Enabling environment reform	
<i>Analyses/assessments prepared</i>	<ul style="list-style-type: none"> • Public-Private Partnerships in the Management of Rural Boreholes in Senegal, 2009 • Households' Willingness to Pay for Water and Sanitation Services in Senegal, 2010 • Economic and financial feasibility of alternative contractual arrangements for the development of the water sector in Senegal over the period (2011–2025), 2010
Project cycle-related assistance	
<i>Transaction support</i>	<ul style="list-style-type: none"> • Preparation of a model contract and bidding documents for the selection of private operators, 2009
Capacity and awareness building	
<i>Workshops/seminars</i>	<ul style="list-style-type: none"> • Two workshops held in Dakar in March 2008 and February 2009 to build consensus around the PPP approach for the transfer of the maintenance of rural boreholes from the DEM to private operators • A consultation workshop on institutional reforms in the water sector was held in Dakar on December 14, 2009

Category	Outcomes
Enabling environment reform	
<i>Institutions created or strengthened</i>	<ul style="list-style-type: none"> • Both the DEM and the ASUFOR were strengthened, 2009
Project cycle-related assistance	
<i>Transactions facilitated or supported</i>	<ul style="list-style-type: none"> • In 2010 the Government of Senegal announced its intention to engage a private operator to handle the maintenance of 621 rural water systems in the central area of Senegal; Procurement is underway, 2009
Capacity and awareness building	
<i>Consensus achieved</i>	<ul style="list-style-type: none"> • This activity helped clarify the role of the private sector in the maintenance of rural boreholes, and led to a consensus on the benefits of transferring the maintenance of rural boreholes to private operators, 2009

Technical Assistance through the Sub-National Technical Assistance (SNTA) Program

The Municipality of Dakar is engaged in an ambitious investment program to improve the city's infrastructure and social services. In 2008 PPIAF supported the preparation of a Financial Management Diagnostic (Program Expenditure and Financial Accountability—PEFA) methodology for the city of Dakar. This assessment is the first of its kind to be conducted in an African municipality. This study was requested by one of our partners, AFD, which was exploring giving a loan to the city without sovereign guarantees.

The PEFA study provides a global evaluation of the local public finances system, with a focus on the weaknesses of such a system and on the shared responsibilities with the central government regarding the administration of public funds, tax collection, accounting systems, and human resources. It also enables a city or state to identify and prioritize the areas that need to be improved and for which an action plan can be implemented.

The PEFA study for the city of Dakar analyzed the comprehensiveness and transparency of its budget, the predictability and control in budget execution, and other indicators. The study recommended City officials to improve the fiscal management, allocation of adequate resources, and effective delivery of municipal services. The findings of the study were presented and discussed at a workshop that took place on January 28, 2009 in Dakar.

The PPIAF activity helped the municipality of Dakar obtain a €10 million loan on June 6, 2009 from AFD to support a public lighting program.

Results of PPIAF's SNTA Program's Activities in Senegal

Category	Outputs
Enabling environment reform	
<i>Analyses/assessments prepared</i>	<ul style="list-style-type: none"> Evaluation of the Management of Municipal Public Finances of the City of Dakar, 2008
Capacity and awareness building	
<i>Workshops/seminars</i>	<ul style="list-style-type: none"> Workshop to present the conclusions of the PEFA study held in Dakar on January 28, 2009

Category	Outcomes
Enabling environment reform	
<i>Plans/strategies adopted or implemented</i>	<ul style="list-style-type: none"> Action plan developed by AFD based on PEFA study approved by the Mayor and other local authorities in Dakar in January 2009
<i>Institutions created or strengthened</i>	<ul style="list-style-type: none"> City of Dakar strengthened, May 2009
Project cycle-related assistance	
<i>Transactions facilitated or supported</i>	<ul style="list-style-type: none"> An AFD loan of €10 million to support public lighting in Dakar