

Strengthening the Domestic Private Sector

Domestic Private Sector Participation in Water and Sanitation: The Niger Case Study

Taibou Adamou Maiga

March 2016







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Acronyms and Abbreviations

AFD Agence française de développement (French Development Agency)

AfDB African Development Bank

AFMNE Niamey country office distribution group list

ARM Autorité de régulation multisectorielle (Multisectoral Regulatory Body)

AU-SPE Association des usagers du service public de l'eau (Water Users' Associations)

CFA F Franc de la Communauté financière africaine (Franc of the Financial Community of Africa)

DANIDA Danish International Development Agency

DDH Direction/Directeur départemental(e) de l'hydraulique (Departmental Directorate/Director of Water)

DPS Domestic Private Sector

EDF European Development Fund

ENHA Entreprise Nigérienne d'Hygiène et d'Assainissement (Niger Hygiene and Sanitation Company)

EU European Union

FRE Fonds de renouvellement et d'extension (Renewal and Extension Fund)

FSM Fecal Sludge Management
FSTP Fecal Sludge Treatment Plant

GCPPP Cross-cutting solution area for Public Private Partnership

GWADR Global Water Practice

GWASA Global Water Practice Sub-saharan Africa - WSP ICT Information, Communication and Technology

MDG Millennium Development Goal

MHA Ministère de l'Hydraulique et de l'Assainissement (Ministry of Water and Sanitation)

PPIAF Public Private Infrastructure Advisory Facility

PPP Public-Private Partnership
RWS Rural Water Supply
RWSS Rural Water Supply System

SDC Swiss Agency for Development Cooperation

SDG Sustainable Development Goal

SEEN *Société d'exploitation des eaux du Niger* (Niger's Water Services Company)

SPE Service public de l'eau

SPE Service public de l'eau (Public Rural Water Supply Services)

SPEN Société de Patrimoine des Eaux du Niger (Niger's Asset Holding Company)

SWOT Strengths, Weaknesses, Opportunities and Threats

TA Technical Assistance
UN United Nations
US United States
VfM Value-for-money

WASH Water, Sanitation and Hygiene

WBG World Bank Group

WSP Water and Sanitation Program

WTP Willingness to pay



Executive Summary

I.

This report, developed for policy makers and sector development partners, highlights the manner in which the domestic private sector is successfully participating in the delivery of water and sanitation services in Niger. It outlines the factors for success as well as the challenges that need to be addressed to harness private sector resources and motivation for improved and sustainable services.

The Government of Niger started involving the private sector in service delivery in water and sanitation as early as 1998, when it carried out a vast reform agenda in public service delivery, alongside the telecoms, transport, and energy sectors. In 2001, urban water supply reforms resulted in the creation of two key entities: a public assetholding company, SPEN (Société de Patrimoine des Eaux du Niger), responsible for investment and debt service repayment of urban water infrastructure; and a private company, SEEN (Société d'Exploitation des Eaux du Niger), responsible for the operation of infrastructure and the marketing of water services. In rural Niger, the Public Water Supply Services Guide (SPE1) sets out the framework for the organization and management of rural water supply. The SPE Guide defines the roles and responsibilities of all stakeholders, including municipalities, technical services, operators, users' associations, and advisory support structures. At the end of 2014, 860 out of 1,154 rural water supply systems (75 percent) were managed by private operators on behalf of municipalities. Even though private sector participation in water supply has been a long-standing policy in the country, challenges persist.

There is a need to further strengthen the capacities of various rural water supply stakeholders, particularly *communes*, which contract and supervise the work of the operators. The capacities of operators and users' associations also need to be developed to pursue ensure the operational sustainability of the systems. Currently, 56 out of 83 private operators are companies, while the remaining 27 are individuals.

¹ SPE = Service public de l'eau

BOX 1: CHALLENGES OF INVOLVING THE PRIVATE SECTOR IN WATER AND SANITATION SERVICE DELIVERY IN NIGER

- Difficulty in mobilizing the private sector in rural and small towns because of lack of a business case and unclear rules of engagement.
- Weak capacity to contract party actors involved in rural water delegation (regulator, public sector, and private operator).
- The WSS regulation body is not yet fully operational.
- Lack of clarity of the roles and responsibilities of actors involved in the management of RWSSs.
- Sluggish development of the sanitation subsector in both urban and rural areas hampering private sector interest.

The technical assistance (TA) described in this Note has, over the past five years, supported the sector's stakeholders' efforts to work in synergy to foster the participation of domestic private entities in the management of rural water supply systems (RWSSs). The coordination among stakeholders has been facilitated through the convening of regular bi-monthly sector dialogues and an annual sector review meeting. In addition, the TA has supported the development and implementation of the SPE Guide, as well as the capacity building of actors.

The development of a regulatory and legal framework for the delegated management of rural water supply services has clarified the roles and responsibilities of key actors (communes, private operators, and consumer associations) involved in contract arrangements. Private sector parties now enjoy greater security as the contract duration has been extended from five to seven years, and the procurement of rural water supply services has been designed to cover more viable schemes (equalization of allotments).

BOX 2: SECTOR RESPONSE TO THE CHALLENGES

- Development of the Public Rural Water Supply Services Guide supported by the Agence française de développement (AFD).
- Training of different stakeholders on implementing the Public Rural Water Supply Services Guide with the support of the sector's development partners.
- Technical and legal assessment of publicprivate partnership options for the transfer of 19 small town systems to the public asset-holding company (SPEN) supported bythe World Bank Group (WBG).
- Development of a Fecal Sludge Management (FSM) Services Strategy for the City of Niamey supported by the WBG.
- Pilot project to apply ICTs in the management of rural water supply services supported by the AFD and the WBG.

Challenges have arisen from the growing complexity of systems and increasing sophistication of customers in small towns. Niger's rural areas feature some larger, more developed centers that require improved service quality. Managing the water supply in small towns is difficult for local operators, who often not only lack the financial resources, but also the technical and managerial skills necessary to meet the expected level of service. Consequently, they may install poor quality pipes and household connections, lack a working familiarity with the networks, incur huge technical and financial losses, and provide poor service and water quality.

Building on the relatively successful experience of reforms in the urban water subsector, the government decided to transfer small towns' systems to SPEN, which, in turn, would identify the best public-private partnership (PPP) option² for their management. As a result of these efforts, the Government and SPEN agreed to revise the current concession contract to integrate at least 19 additional rural water supply systems. The transfer process is still ongoing.

BOX 3: RESULTS OF THE SECTOR RESPONSE

- The regulatory and legal framework for rural water supply systems (RWSSs) has been clarified.
- Targeted municipalities and water users' associations better informed about their roles and responsibilities under the RWSS contract arrangement.
- The capacity of municipalities to handle the supervision of RWSS contract is increasing. The number of RWSSs grew from 625 in 2009 to 1,154 in 2014. The proportion of RWSSs managed by private operators also rose from 43 percent in 2009 to 75 percent in 2014.
- The increased awareness of municipalities about water and sanitation issues allows better dialogue between municipalities and the Ministry of Water and Sanitation (MHA).
- Improved, mutually beneficial dialogue between the MHA and SPEN for the revision of the current concession contractto consider the issue of small towns' water supply.
- Increased capacity of private operators. Before the reforms, on average, private operators managed four RWSSs; by December 2014, the number had risen to 10. At least two private operators are managing over 50 RWSSs, including one that operates 178 RWSSs and has invested up to US\$350,000 to improve and carry out extensions of an additional 64 systems.
- The lease *affermage* contract option was adopted by the City of Niamey for FSM.
- The City of Niamey committed to financially support, for the first three years, a private operator to be appointed to manage the sludge treatment plant and restore financial stability.

Sanitation service delivery is another major challenge. The sanitation subsector suffers from timid private sector participation due to the poor development of sanitation services in the country. In urban sanitation, the TA initially focused on Niamey, with the expectation that the successful implementation of interventions would allow for replication in other towns and cities. An assessment is currently underway to determine the best option for engaging PPPs in fecal sludge management in Niamey.

 $^{^{\}rm 2}$ This includes using a domestic private operator with a capacity reinforcement agenda.



Drinkable water treatment plant of Goudel-Niamey.

Despite the progress achieved, many challenges remain that could undermine better service delivery and sustainability. Regarding rural management, it is important to continue strengthening capacities in the public sector to enable the professionalization of domestic private operators. Commune-level oversight, regulation and support of the operators' performance, are grappling with challenges in mobilizing optimal financial resources for the rehabilitation of assets and limited technical know-how to ensure operator accountability. In this regard, the Ministry of Water and Sanitation is exploring opportunities on how to engage with SEEN in boosting the skills of domestic private operators and improve the management of water supply systems in rural areas and in small towns.

Fecal sludge management is a relatively new concept for the public sector in Niger and, despite the progress made, there is a lot of new ground to cover. Although it is envisaged that a professional operator will be hired to run the sludge treatment facility, it is imperative that pit emptiers are aware of, and comply with, sector standards on workers' safety, public health, and the environment. It is also necessary to support behavior change programs for the community/ consumers, and develop contractual and regulatory mechanisms that incentivize the cooperation of the sludge treatment plant operator and private pit emptiers.

83 PRIVATE OPERATORS

In the rural water supply system out of which 56 are companies, while the remaining 27 being individuals.

860 RURAL WATER SUPPLY SYSTEMS

Out of 1,154 (75 percent) managed by private operators on behalf of municipalities by the end of 2014.

Box 4: LESSONS LEARNED BY WSP

- Limited staff and resources within communes mean that they are only able to effectively manage simple/non-complex RWSSs. For more complex small town systems, it becomes very difficult for municipalities to fulfill contractual obligations related to required standards, oversight, and investment in maintenance. Some communes would prefer to hand over the management of water supply in small towns to the urban assetholding company (SPEN).
- There is a growing cadre of credible local water supply service operators in rural areas that could benefit from a strategic partnership with SPEN rather than the *commune*—in the management of more complex small towns' systems.
- The willingness and potential exist, in both SEEN and SPEN, to help to professionalize the performance of domestic operators in the management of water supply schemes in small towns and in rural areas, as well as the submission of related reports.
- Although private sector participation can contribute to the sustainable operation of the sludge treatment plant in Niamey (given the current costs and willingness of consumers to pay for the service), it will require a viability gap subsidy of at least three years before the service provider is able to expand its market outreach and augment its revenues from the sale of wastewater by-products. There is willingness to pay by households for the
- collection and transportation of sludge from homes, but not the same level of commitment to bear the cost of taking the material to the treatment plant and for treatment. Currently, fecal sludge collection and transportation is a business undertaken by private firms and individuals. However, the service is not well organized and, therefore, such businesses only cater for some segments of the market. Likewise, it is not clear that incentives exist to encourage these providers to meet safety and health standards and use the sludge treatment plant, as they only significantly add to their operating costs without corresponding revenues from their customers. Capacity reinforcement of these firms and the establishment of legal frameworks and regulatory standards are necessary to govern the fecal sludge management sector to ensure environmental outcomes are achieved. It is also critical to consider whether it makes sense for the fecal sludge treatment plant operator to be responsible for the entire supply chain. Such responsibilities include the collection and transportation of sludge from households to the treatment plant and would involve this entity having a mechanism to subcontract various aspects of the service supply chain to firms/individuals and supervise.
- There is an opportunity within existing World Bank Group-financed projects to support follow-on capacity reinforcement and contract development among key sector players.

II Introduction

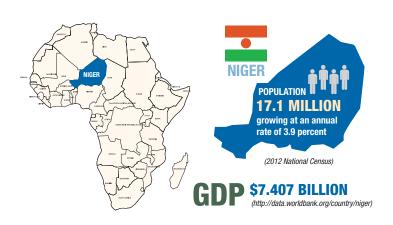
Niger has had a long history of private sector engagement in the water and sanitation sector:it dates back to 1982 when ENHA,3 a mechanical pits' emptier, offered its services to households in Niamey. Similarly, in 1998, the first private sector involvement in the management of rural water supply systems (RWSSs) was in the Tahoua Region through SONEXIE Ltd., under the Tarka Lower Valley Investment Program⁴ funded by the European Development Fund (EDF). In 2001, urban water supply reforms resulted in the establishment of a national assetholding company (SPEN) and the contracting of a private company (SEEN) to manage 52 centers. In the same year, formal management contracts were signed between rural communities and private operators to manage some RWSSs. For urban sanitation, the first management contract between the City of Niamey and private operators was established in 2003 for the management public toilets.

Over the years, the Government of Niger has continued to step up its efforts to clarify the broader regulatory and legal framework related to public-private partnerships (PPPs), in accordance with the West African Economic and Monetary Union's regulations. In spite of these strides, it is evident that each sector has specific institutional frameworks and challenges that need specialized interventions. The main

challenges in the water, sanitation, and hygiene (WASH) sector include the weak capacities of public institutions and the private sector in rural areas and small towns. This situation is having an impact on the quality of service delivery to the population despite the PPP option adopted by Niger.

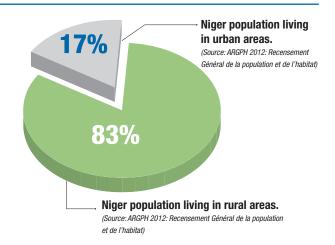
The World Bank's Water Global Practice, through TA provided by the Water and Sanitation Program (WSP), has been supporting Niger to reinforce the capacities of both private and public actors. The purpose of the TA has been to ensure improved operational policy application of the PPP frameworks in the context of water supply and urban sanitation in rural and small towns, which has not evolved much over time in relation to urban water services. The TA program consisted of training activities, market assessments, and options development studies to inform decision-making and consensus-building of different stakeholders on resolving some challenges facing these subsectors.

This Note seeks to describe the challenges and interventions addressed by the TA program and draw lessons for its implementation to ensure the improvement and sustainability of service delivery through private sector participation.





⁴ Programme de la basse vallée de la Tarka.



III Background

At the time of the program inception, Niger, one of the world's poorest countries, continued to face a number of challenges in meeting the national and global targets to increase access to sanitation and potable water, particularly in rural areas. Niger's population of 17.1 million is growing at an annual rate of 3.9 percent, with 83 percent of this population living in rural areas.⁵ It is estimated that about 56 percent (9.2 million people) of the population has access to improved water supply and 19 percent (3.1 million) has access to improved sanitation.⁶ These access rates hide conceal major disparities between rural and urban areas on the one hand, and across water and sanitation services, on the other hand. In urban areas, the Millennium Development Goal (MDG) target for water supply was achieved with 87 percent access, while in rural areas this access was 50 percent. For sanitation, the coverage reached 67 percent in urban areas and 7 percent in rural areas.

The potable water subsector is split into two main components: urban and rural. For urban water supply, the Government conducted reforms in 2001, which led to the establishment of two companies through PPPs: an asset-holding company (SPEN: Société de Patrimoine des Eaux du Niger), which is a public corporation in charge of sector development under a ten-year concession contract; and the contracting of a private operating company (SEEN: Société d'Exploitation des Eaux du Niger) in charge of operating and maintaining the facilities and managing commercial activities (billing and collection) under a 10year lease affermage contract. Water supply services are regulated by the Ministry of Water and Sanitation. The regulatory authority was set up in 2014, but is not fully operational since only the director has been appointed; other board members have not yet been named and the minimum requisite resources are lacking. SEEN's contract was renewed in 2012 for an additional 10 years in 2012 given its good performance, and SPEN's contract too

was renewed in 2014 for another 10 years. These reforms played a critical role in Niger's achievement of the urban water supply's MDG target.

In the rural subsector, reforms were conducted in 2010, with the adoption of the Public Rural Water Supply Services Guide, which aims to improve and maintain water services through delegated management and private sector participation. Three organs were set up to carry out the reform process: (a) communes are responsible for public water supply services within the confines of their territories and own the water supply structures built by the MHA; (b) private operators run and manage the water supply systems under a lease (affermage) management contract with the commune; and (c) the MHA is in charge of infrastructure investment. It also houses the regulator. According to the MHA's sector report for 2014, the country has 1,154 RWSSs, 860 (75 percent) of which are under delegated management and the remaining 25 percent still under community-based management. A progressive switch to a delegated management system for these schemes is planned. However, the management of water supply systems in growing rural localities is becoming a problem due to increasing demand for water and household connections, yet the extension of existing infrastructure remains very limited. Communes and private operators have failed to meet this challenge facingsmall towns, which has pushed the Government to plan for the transfer of 40 rural centers to SPEN. This means that SPEN and MHA need to revisit the existing concession contract and whether these centers will be managed by SEEN or by another private operator after a bidding process. In other words, the policies and legal framework for small towns need to be specifically recast.

There is low-key private sector participation in the sanitation subsector in Niger, other than in pit emptying activities and public toilet management. In cities, the sewerage system is limited to rainwater drainage due to the on-site sanitation option predominantly adopted by the urban population.

⁵ Niger's official census, 2012.

^{6 2013} Ministry of Water and Sanitation (MHA) data.



Official opening ceremony of water supply system in rural Niger.

The effects of urbanization combined with the impact of water and sanitation projects implemented to support the urban water reform resulted in increased clean water consumption and, consequently, greater volumes of wastewater. With the increase in the rate of access to onsite sanitation facilities, the volumes of fecal sludge have also risen substantially, but with no accompanying systems to manage them in cities. As a result, the management of fecal sludge from households and public latrines remains a serious concern, as it is neither well monitored nor organized, with the exception of compost from EcoSan latrines. However, the number of EcoSan latrines in Niamey is very small, representing a marginal volume. It is worth noting the presence of private contractors who

organize the collection and disposal of fecal sludge, which is unfortunately dumped on the outskirts of the city, not far from residential areas. This situation poses a serious public health hazard. For the less well-off, latrines or septic tanks are emptied manually by transferring sludge into a pit dug in the street, next to the sanitation facility.

Consequently, the Government has envisaged the construction of a sludge treatment plant with assistance from the World Bank. Since such a facility is a novelty, the Government of Niger is rightly concerned about its sustainable management and the introduction of a new framework to ensure that fecal sludge ends up in the facility where it can be appropriately treated and managed.

†††† 9.2 MILLION PEOPLE

Equivalent to 56 percent of the Niger population with access to improved water supply.

**** 3.1 MILLION PEOPLE

Equivalent to 19 percent of the Niger population with access to improved sanitation.

IV.

Sector Response

This section broadly describes stakeholders' interventions to tackle issues relating to private sector participation in Niger's water and sanitation sector. The focus is on WSP's contribution in involving the private sector in WASH service delivery.

WSP's TA seeks to inform the implementation of the Niger Government's policies on private sector participation in the management of small and medium-sized water supply systems and sludge management facilities to sustain improved services. The lessons learned from WSP's support will feed into the Government's management reform agenda for the water and sanitation sector by developing practical models, operational policies, and documented experience that can be used in future initiatives and, therefore, contribute to the long-term improvement of services for poor people. The reform was structured around three components: (i) roll-out and implementation of the rural drinking water supply services guidelines; (ii) the transfer of 19 RWSSs to the urban water supply assetholding company (SPEN) and onward delegation to a private operator; and (iii) PPP arrangements for the management of the sludge treatment plant in Niamey.

This section also examines four subcomponents: (i) clarifying the rural water supply (RWS) regulatory and legal framework and strengthening local actors to fulfill their roles and responsibilities in the management of RWSSs; (ii) supporting municipalities in PPPs for sanitation; (iii) supporting the MHA to transfer 19 RWSS to the holding company; and (iv) supporting the City of Niamey in fecal sludge management (FSM).



Millennium Development Goal (MDG) target achieved for access to water supply in rural areas, compared to 87% access in urban areas.

4.1 Clarifying the RWS regulatory and legal framework and strengthening local actors to fulfill their roles and responsibilities in the management of RWSSs.

After 10 years of the concurrent implementation of community-based and delegated management of RWSSs, the Government of Niger drafted guidelines⁷ for rural water supply service delivery, as well as application decrees and capacity reinforcement plans. Known as the SPE Guide, the document defines the regulatory and legal framework for managing rural water supply infrastructure. The SPE Guide is based on an assessment of two types of management, which shows that private sector involvement through the delegated management of RWSSs⁸ yields better performance in service delivery (continuity of service, faster repair turnaround times) compared to community-based management.

Despite the existence of these comprehensive guidelines, there is still some confusion on the roles and responsibilities of actors, resulting in conflicts between municipalities, water users' associations, private operators, and Departmental Directors of Water (DDHs). Subsequently, actors involved in implementing the SPE Guide have spent more time and energy in resolving conflicts rather than improving their networking and quality of service. In response, training modules have been developed by the MHA and used to build the capacity of actors involved in the management of RWSSs—mainly *communes* as asset owners; water users' associations as champions of the consumers' voice; private operators representing the utility; and regional and departmental directorates of water and sanitation as the oversight agencies.

Following the SPE Guide's recommendations, the WSP set out to develop a program to build the capacity of local actors in rural water supply management. A key element

⁷ The development of the assessment and guide was done with support of AFD.

⁸ In the case study, the delegated management model refers to a lease *affermage* contract with a private entity.

of this capacity building is to make data available and facilitate reporting on the performance of various rural water schemes. To this end, the WSP supported the MHA to pilot *mWater*, a mobile-to-web platform that allows water operators to easily update their system information and produce management reports for themselves, and avail the information to asset owners (*communes*) and regulators (MHA and district level administration). *mWater* has been successfully deployed in other West African countries such as Senegal and Benin. Niger's experience with *mWater* has been discussed extensively in *Strengthening the Water Supply and Sanitation Planning and Monitoring System in Niger*, a World Bank Group publication (May 2015).

Another major component of the capacity development of local actors is the support provided by the WSP to train 27 communes in Maradi Region and private operators countrywide. An interactive process among the MHA, its regional and departmental directorates and commune mayors contributed to collectively finalize the terms of reference of the proposed training modules. To enhance outreach and improve the cost-effectiveness of the planned large-scale training, the approach adopted consisted of aregional training of trainers' workshop, followed by specific cascade training for different actors involved in the management of RWSSs. They comprised four groups: (a) district-level administration and village chiefs, considered as regulators that complement actions taken by the MHA (the official regulator); (b) local government at communelevel as assets owners; (c) private operators that manage the assets through a lease affermage contract; and (d) the water users' associations as the consumers' representatives. The training modules developed by the MHA already exist, and the WSP approach consisting of training regional trainers was well received. As a matter of fact, the Swiss Agency for Development and Cooperation (SDC) and Danish International Development Agency (DANIDA) adopted this approach for their own training programs in other areas of intervention.

Training sessions were conducted in the country's eight regions, with funding from numerous development partners (AFD, EU, WSP, SDC, AfDB, and Plan International). The aim was to clarify the roles and responsibilities of actors involved in the management of RWSSs, and to strengthen the operational capacity of *communes* and private operators.

4.2 Supporting municipalities to develop sanitation PPPs

This section deals with the management of public toilets through PPPs with domestic entrepreneurs. Since 2003, a number of investment projects or programs have supported the construction of public toilets for municipalities. The Ministry of Water and Sanitation has been encouraging the transfer of the management and operation of public toilets to the private sector, and the establishment of formal relationships with municipalities. This approach is currently used by municipalities to support the construction and management of public toilets in urban areas, and consequently promote the involvement of the domestic private sector in sanitation. Several development partners, including the World Bank, AFD, AfDB, SDC, and DANIDA have decided to buy into this approach.

4.2.1 Supporting the MHA to transfer 19 RWSSs to the asset-holding company

Given the increasing demand for improved service levels and complexity in managing water supply in fast-growing rural areas, the Ministry of Water and Sanitation considered the integration of a number of water supply systems in small towns into the urban water perimeter. SPEN, the public asset-holding company for urban water infrastructure, was mandated to take over 19 of 40 identified localities.⁹ The plan was to first transfer 19 RWSSs, and follow on with the remaining 21 RWSS in the second phase. Table 1 provides the rationale behind the MHA's decision to transfer the RWSSs to SPEN.

⁹ The term"localities"used here refers to rural water supply systems.

TABLE 1: CHARACTERISTICS AND INFORMATION ON THE 19 WATER SUPPLY SCHEMES

Indicators	Current Situation				
Infrastructure status					
Ensuring continuity of production through a power reserve	There is no standby generator in any of the centers and the energy available for the three centers is inadequate.				
Water quality	18 out of 19 centers do not have a chlorination system. The water quality is poor in 4 centers.				
Storage capacity	The storage capacity is inadequate for 16 systems, including one that is not working and another that does not have a storage tank.				
Water supply network	The water supply network is inadequate for all centers. The operating pressure is also low in all but three centers.				
Management of the systems					
Current management option	All the centers, except one, are managed through a lease contract with local private operators (10 operators).				
Average cost per cubic meter	The average cost per cubic meter is US\$0.8; despite this high cost compared with urban areas (US\$0.5), the recovery rate is approximately 100% in most of these centers.				
Opinion of the local authorities and population on the transfer	There is a buy-in by all the centers to shift to a formal lease management system to the asset-holding company, SPEN.				

The objective of WSP's support was to give advice to the client on the least-cost, most beneficial option to manage the 19 schemes identified for transfer to SPEN based on a detailed study of investment requirements, financial and tariff implications, and consultations with key stakeholders.

The TA sought to answer a few key questions on the planned transfer:

- (i) What is the current state of the assets and the systems' technical and financial performance?
- (ii) What rehabilitation and investments are necessary before these structures are transferred to the urban asset-holding company?
- (iii) Who (Government or asset-holding company) is best placed to finance rehabilitation and investment considering the financial impacton the asset-holding company and the ultimate price to consumers?
- (iv) What is the impact of this transfer to the financial stability of the asset-holding company?

(v) What are the implications, advantages, and disadvantages of including the transferred assets within the operations' ambit of the existing private operator?

4.2.2 What is the current state of the assets?

Assessments highlight the fact that all the systems require rehabilitation. They were initially designed to supply water to the population through stand posts, but not household connections, meaning that the water production and the distribution network need to be redesigned. Consequently, the storage tanks, the number of deep wells and the pumping equipment need to be updated to respond to the new standard of service. This new standard also requires that a water treatment component be added. In fact, there is no systematic control of water quality during the operation of RWSS. However, a quality check of the water is done for all new water supply infrastructure before it is handed over to the municipalities or to the communities.

4.2.3 What is the requisite investment to upgrade the systems and who are the financiers?

Approximately US\$22 million is needed to upgrade the 19 water supply systems for an estimated population of 500,000. The investment plan indicates that 60 percent of investments wereto be made from 2015 to 2020, 5 percent from 2020 to 2025, and 35 percent from 2025 to 2030. Out of the four options simulated, Government support for the first investment program (2015–2020) was considered to be the best option to secure SPEN's financial stability. The two other investments could

be financed either by SPEN, or SPEN and the private operator, depending on the type of the lease *affermage* contract with the private operator.

4.2.4 What is the impact of the transfer on SPEN's financial stability?

The impact of assets price on the structure of the sale price per m³ of water ranges from 1 percent in 2015 to 7 percent in 2020, regardless of the delegation mode selected. The tables below show the sale price structure per m³ of water in 2015 and 2020.

TABLE 2: STRUCTURE OF THE SALE PRICE PER M³ OF WATER IN 2015 BASED ON LEASE *AFFERMAGE* AND FINANCIAL ARRANGEMENT (IN CFA F/M³)

	Affermage Co Land (2015)	ontract of I	ndependent Pa	arcels of	Affermage Contract with SEEN (2015)			
	Rehabilitation by the Government of Niger	Price Structure	Rehabilitation by SPEN	Price Structure	Rehabilitation by the Government of Niger	Price Structure	Rehabilitation by SPEN	Price Structure
Asset price	79.07	22%	84.59	23%	79.07	23%	84.59	24%
Cost price /m³	225.72	63%	225.72	62%	214.86	62%	214.86	61%
Profit margin	54.67	15%	54.67	15%	52.04	15%	52.04	15%
Operator price	280.39	78%	280.39	77%	266.90	77%	266.90	76%
Sale price/ m³	359.46	100%	364.98	100%	345.97	100%	351.49	100%

TABLE 3: STRUCTURE OF THE SALE PRICE PER M³ OF WATER IN 2020 BASED ON LEASE *AFFERMAGE* AND FINANCIAL ARRANGEMENT (IN CFA F/M³)

	Affermage C Land (2020)	ontract of	Independent F	arcels of	Affermage Contract with SEEN (2020)			
	Rehabilitation by the Government of Niger	Price Structure	Rehabilitation by SPEN	Price Structure	Rehabilitation by the Government of Niger	Price Structure	Rehabilitation by SPEN	Price Structure
Asset price	82.01	21%	122.98	28%	82.01	22%	122.98	29%
Cost price /m³	252.89	64%	252.89	58%	240.73	63%	240.73	57%
Profit margin	61.27	15%	61.27	14%	58.31	15%	58.31	14%
Operator price	314.16	79%	314.16	72%	299.04	78%	299.04	71%
Sale price/ m³	396.17	100%	437.14	100%	381.05	100%	422.02	100%

4.2.5 Advantages and disadvantages of the options of maintaining or not maintaining these 19 schemes currently under SEEN

The integration of the 19 centers within the perimeter leased to SEEN would entail an increase of 8.31 percent in the private operator's price in relation to the ARM¹⁰ model's estimations.

SPEN can use the profit margin of the new private operator, responsible for the 19 centers being considered in the negotiations relating to the private operator's price. Table 4 provides the unit cost per cubic meter based on the private operator selected.

On the basis of the delegation option (Table 5), if access to water by the population alone is considered, negotiations between the parties (Government, Ministry of Water and Sanitation, and SPEN) should prioritize the lease contract with SEEN for the centers and rehabilitation investments by the Government of Niger before the integration of the centers into the leased perimeters.

However, the above option would create a disparity in respect of the other rural water supply systems where the 19 centers count in the equalization of allotments made to private operators. In addition, the professionalization of rural operators through capacity development could

TABLE 4: PRIVATE OPERATOR'SPRICE BASED ON THELEASING MODE IN THE 19 CENTERS

Mode /Years	2015	2016	2017	2018	2019	2020
Private operator, independent lot of 19 centers	280.39	286.84	293.44	300.19	307.09	314.16
Private operator price, leasing (54 + 19 centers)	266.90	273.04	279.32	285.74	292.32	299.04
Private operator price, SEEN (54 centers, ARM source)	246.43	252.09	257.89	263.82	269.89	276.10
Variations due to the integration of the centers within SEEN	8.31%	8.31%	8.31%	8.31%	8.31%	8.31%

TABLE 5: INSTITUTIONAL OPTION SELECTION MATRIX OF OPTIMUM DELEGATION (DATA: 2015)11

	Rehabilitation by the Government of Niger	Rehabilitation by SPEN	
Lease with SEEN	Assets' price = 79.07	Assets price = 84.59	
	Cost price = 214.86	Cost price = 214.86	
	Profit margin = 52.04	Profit margin = 52.04	
	Private operator price = 266.90	Private operator price = 266.90	
	Sale price/m³= 345.97	Sale price/m³ = 351.49	
Lease with another	Assets' price = 79.07	Assets price = 84.59	
enterprise	Cost price = 225.72	Cost price = 225.72	
	Profit margin = 54.67	Profit margin = 54.67	
	Private operator price = 280.39	Private operator price = 280.39	
	Sale price/m ³ = 359.46	Sale price/m³= 364.98	

¹⁰ ARM (Autorité de Régulation Multisectorielle) is the former regulator.

¹¹ In addition to the analysis described above, WSP also prepared a field note that provides information on the management of water supply services in some medium-sized African cities, and policy choices in Benin, Burkina Faso, Kenya, Niger, Senegal, and Uganda. The field note was developed to assist in decision-making in Niger and other interested countries on the basis of the experience of small towns.

be a solution to the single private operator approach. These two aspects should be taken into consideration by policy makers.

The options for the Government of Niger for the transfer of 19 RWSSs to the assets-holding company were to:

- (i) Include these 19 RWSS in the lease perimeter operated by SEEN.
- (ii) Launch an open tender process that calls for the participation of SEEN and other domestic private enterprises.
- (iii) Launch an open tender process that calls for the participation of domestic private enterprises other than SEEN.

The Government selected the last option. The idea is to have SPEN and SEEN contribute to the capacity building training program of domestic private operators. The World Bank Global Water Practice is supporting this process in relation with other sectors (education and private sectors) through follow-up programmatic technical assistance that is already under implementation.

4.3 Supporting the City of Niamey in fecal sludge management

With FSM in Niamey posing a serious public health hazard, the MHA decided to build a sludge treatment plant through a World Bank-financed urban water and sanitation project. WSP was approached to support the City of Niamey to establish a PPP arrangement to manage the plant and improve the standards of pit emptying and fecal sludge transportation services. The system defined may also be used as the sludge management model in the other towns and villages in Niger.

Since the decentralization process was set in motion in Niger, local councils have been assigned more and more responsibilities in the management of public affairs. Although there has been no effective transfer of authority, the management of water and sanitation issues falls within the remit of the local councils. Outsourcing the management of water facilities by the local councils to private operators in rural areas has now become the norm (see section 4.1). WSP mainly seeks to support is to propose ways and means of implementing a similar system for FSM.



Water fetching from a standpostin rural Niger.

More specifically, the measures taken should serve to:

- (i) Conduct a SWOT (strengths, weaknesses, opportunities, and threats) evaluation and analysis of the current status of FSM in Niamey.
- (ii) Review legal instruments and propose additional regulations to enable the city to perform its role effectively with regard to health policing and implementation of the PPP framework.
- (iii) Study the capacity and willingness to pay of city dwellers for fecal sludge removal and treatment services.
- (iv) Propose a self-financing and PPP management system for the fecal sludge treatment plant and identify the required support to domestic private operators for sludge removal, as well as accompanying tools (contractual, technical and financial modeling, stakeholder capacity building, etc.) needed for its smooth operations.
- (v) Conduct a value-for-money (VfM) analysis comparing the risk-adjusted option of a publicly-managed FSM system versus the option of developing a PPP.

(vi) If the PPP has a higher VfM, propose upstream PPP arrangements for fecal sludge collection and transportation, paying special attention to mechanical and manual pit emptying.

From this support, it appears that it is better to have a PPP option for the city's fecal sludge management. Niamey chose the lease *affermage* option, with a capacity reinforcement program for both the municipality and the private operator. It is envisaged that regulatory and legal instruments will be reviewed to attract the relevant actors (particularly private operators) involved in this PPP option.

Adopted management option for the fecal sludge treatment plant

An important element to consider is the fact that the primary infrastructure investment isalready funded by the Government. Therefore, a concession contract will significantly disadvantage the municipality. The remaining options are third-party and lease management options. In view of the weak capacity of the City of Niamey with regard to managing a fecal sludge treatment plant, it would only be fair to appoint a private operator responsible for the end results and sustainability. In this case, leasing is the best option.

The World Bank Global Water Practice intends to continue lending its support to this initiative through the ongoing programmatic technical assistance and in consultation with the Public Private Infrastructure Advisory Facility (PPIAF), in order to pave the way for a full-fledged entry of the private sector in the scaling up of the initiative in Niamey and other cities in the country.

7 Outcomes

As a result of the sector stakeholders' support, considerable strides good progress have been made: the rural water supply regulatory and legal framework has been clarified to allow private sector participation (increased capacity of some municipalities and water users' associations, and the private sector); there is the systematic participation of the private sector in public toilet management; a capacity building process has enabled the domestic private sector to handle management challenges facing small towns; and, there is now a program to involve the domestic private sector in the cities' FSM.

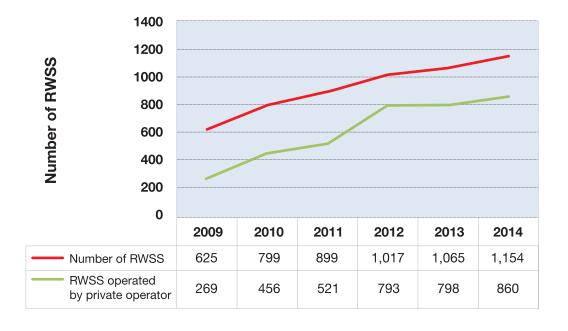
5.1 Private sector participation in rural water supply

Since 2010, when the rural water supply reforms clarified the regulatory and legal framework, the number of RWSSs managed by private operators has been increasing every year. In 2009, before the reforms, the number of RWSSs countrywide was 625, 43 percent of which were managed by private operators. Four years later, the number of

RWSSs has increased, with the enhanced participation of the private sector in the management of the water supply schemes (see Figure 1). The percentage of RWSSs under private sector management grew from 57 percent in 2010 to 75 percent in 2014. The clarification of the regulatory and legal framework has encouraged development partners and the Government to increase investmentsin water supply infrastructure. In fact, between 2009 and 2014, the number of RWSSs increased from 625 to 1,154 (see Figure 1).

Over time, the proportion of individual private operators has been on the decline in relation to that ofsmall companies. For example, in 2011, small companies accounted for 50 percent. In 2014, the figure had risen to 67 percent. Figures 1 and 2 indicate that the total number of private operators is decreasing, while the number of RWSSs managed by private operators is increasing. There is an average of 10 RWSSs per private operator, meaning that the business is getting more profitable.

FIGURE 1: PROGRESS OF RWSSS MANAGED BY PRIVATE OPERATORS



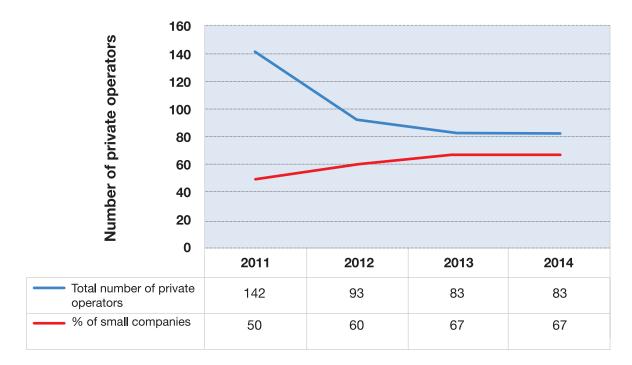


FIGURE 2: INDIVIDUAL OPERATORS VS SMALL COMPANIES MANAGING RWSSS

5.1.1. Increased capacity of municipalities and water users' associations

The training series and learning-by-doing approaches in several *communes* have led to improved capacities of municipalities to manage PPP contracts, despite the fact that additional efforts are required to continue their capacity building. Section 6 presents the lessons learned and way forward.

Confusion around the roles and the responsibilities of actors involved has been largely clarified. Many communes are now able to monitor their assets, manage contracts, and use the relative capacity of some operators to deliver service. For example, in Maradi Region, ELHYFROS, a private operator which runs more than 100 RWSSs, supported some communes (Serkin Haoussa, Issawane, Mayreyré in the Department of Mayahi) to replace nonfunctional generators and pumps on soft reimbursement conditions. Many communes were able to mobilize funds from private operators managing RWSSs to invest in network extension and equipment renewal (generators and pumps). From the last status report (December 2014), the

funds in the Renewal and Extension Fund (FRE)¹² created to set aside lease fee payments for future rehabilitation and expansion works were estimated to have grown to an impressive US\$2.5 million starting from scratch.

Water users' associations (AU-SPEs)¹³ are also improving their participation in the arrangement. Currently, fewer AU-SPEs are working as private operators' employees. They are now contributing to service quality control and reporting directly to the *communes* which provide them with the means to play their role as specified in the SPE Guide. This was not the case in the beginning (between 2011 and 2013) when an antagonistic atmosphere dominated the relationship between the operators and the AU-SPEs.

5.1.2 Increased capacity of private operators

Before the reforms, on average, private operators run four RWSSs. By December 2014, this number had risen to 10. There are at least two private operators managing more

¹² FRE= Fonds de renouvellement et d'extension

¹³ AU-SPE=Association des usagers du service public de l'eau.



Training session to private operators managing rural water supply -showing participation certificate.

than 50 RWSSs. The number of individuals managing RWSS is decreasing to the advantage of small companies that provide jobs to some people. In addition, private operators are spending less time on conflict management with water users' associations, and more time to develop their services in relation to the municipality and the Departmental Directorate of Water (DDH). According to MHA records, ELHYFROS, the operator working in several regions is managing 178 RWSSs: Maradi (73), Tahoua (20), and Dosso (85). SEPA, operating in Tahoua Region, is managing up to 53 RWSSs. In Maradi Region, SONEXOH, aprivate operator is managing 36 RWSSs; two other operators in Tillaberi Region, - PALLSOLAIRE and ENT. MB, are managing 36 and 25 RWSSs respectively. In Zinder Region, a private operator, ETHEM is responsible for about 20 RWSSs.

The data show that some private operators are gaining recognition in the market and investing their own equity to modernize some RWSSs or extend the network to withstand post-construction work. For example, over the past three years, ELHYFROS has invested up to US\$350,000 for the upgrade and extension of 64 RWSSs in the regions of Maradi, Tahoua, and Dosso.

This investment is composed of 36 percent in loans from local banks and 64 percent of its own funds. Over the same period, SEPA, the private operator, invested up to US\$200,000 of its own capital, without local banks' participation, to upgrade and extend the network of 12 RWSSs in the *communes* of Malbaza, Badaguichiri, Madaoua, Ourno, Kalfou, and Tabotaki in Tahoua Region. Similar activities have been noted in Zinder Region, where another private operator 'Entreprise Elhadj Yacouba' has supported communes in Mirriah, Takieta, and Damagam Takeya to renew the generators of five RWSSs. The money invested was collected on soft¹⁴ conditions as part of the Fund generated from water sales.

These amounts seem small but, in the context of Niger with the type of lease *affermage* contract, it represents considerable efforts from private operators. It shows that their level of commitment enables them to take risks to ensure the continuity and quality of service.

¹⁴ The term 'soft' means that the funds invested are collected slowly over one to two years from the renewal and extension fund.

In the sanitation sector, three out of sixteen pit emptying companies, most located in Niamey have increased their capacities, despite the fact thatno particular support was provided to them. The study on sludge management in Niamey highlighted two emerging companies out of three that are interested in managing the sludge treatment plant through a lease *affermage* contract with the City of Niamey, but have major technical and managerial capacity constraints.

5.2 Private sector participation in public toilet management

Currently, no monitoring information is available that makes a distinction between the status of public toilets, from existing data that combines both public and school toilets. However, it is important to highlight the systematic involvement of private operators in managing the assets built for *communes*. In some cases, private operators build their own toilets and run them. For the most part, these private operators compriseindividuals rather than small companies as is the case with water supply. All public toilets are currently managed by private individuals and this interest can be scaled upto public toilet infrastructure with an improved regulatory and legal framework to encourage professionals.

5.3 Capacity building process for DPS to handle management challenges in small towns

With WSP support for the transfer of 19 RWSS to the urban asset-holding company, the MHA and SPEN sought the best investment option to upgrade and manage these systems. As a result, the MHA and SPEN agreed that: (a) the Government will finance infrastructure upgrades through investment projects; ¹⁵ (b) the concession contract limited to 54 urban centers will be revised to take into consideration the centers to be transferred to SPEN; (c) SPEN will manage these systems through a lease *affermage* contract between itself and domestic private operators; and d) a capacity building program targetingdomestic private operators will be implemented to enable them to deliver services according to the required standards. Additional support to MHA and SPEN is expected from development

partners for an addendum to the concession contract between SPEN and MHA; the lease *affermage* contract between SPEN and domestic private sector (DPS); and the content of the DPS capacity building program.

5.4 Program to involve the DPS in the cities' fecal sludge management

The City of Niamey decided to manage its fecal sludge through the PPP lease affermage option. The recruitment process of the private operator in charge of the management of the fecal sludge treatment plant is ongoing. Plans are underway to help to reorganize collection from households and transportation to the treatment plant. The analysis of the business model for the management of the treatment plant shows that the first three years will require accompanying measures from the City of Niamey to sustain the model. These measures will consist of subsidies for the private operator who will manage the treatment plant. The City of Niamey has agreed to allocate up to US\$75,000 per year to support the private operator for three years. This grace period will allow the private operator to develop the production and sale of sludge by-products, such as compost. The necessary safety measures will be taken in the contract arrangement to mitigate related risks.

The lease *affermage* contract will be issued under the following conditions:

- (i) The tipping fee chargeable to the waste disposal service providers will be a maximum of 155 CFAF/ m³. This rate has the advantage of including over 80 percent of the households' WTP.
- (iii) The City of Niamey will give the private sector a three-year timeline to attain a good pace in the re-purposing and sale of by-products with an appropriate budget.

US\$75,000

Amount allocated by the City of Niamey per year to support the private operator to manage its fecal sludge for three years.

¹⁵ World Bank Group and EXIM bank are tipped to support the operation.

TABLE 6: FINANCIA		_ OF THE SL	LUDGE 1	TREATMENT PLANT
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Ite	ms	Amount in CFA F/year
(1)	Total projected operating costs	58,020,480
(2)	Tipping fee chargeable to the waste disposal service providers (155 FCFA/m³, 460m³/d, 365 days)	22,245,600
(3)	Grant from the city of Niamey (as compensation while waiting for a profitable operation): [(1)-(2) +10%*1]	41,576,928

(iv) In the first three years, to protect the private sector from running a loss-making operation, the City of Niamey will subsidize the fecal sludge treatment plant (FSTP) with a profitable tipping fee (excluding depreciation).

The annual grant to be allocated to the private sector for a profitable FSTP operation will be 41,576,928 CFA F per year or 3,464,744 CFA F per month.

Considering the resources and, above all, the responsibilities of the City of Niamey, it is reasonable to assume that the latter will be able to bear these costs for a strong and improved FSM sector.

(i) Depending on the contract binding the private operator to the City of Niamey: if the contract exceeds three years, beyond this period, the private operator will rely on the re-purposing of the by-products to be profitable.

(ii) The parties tied by the PPP to operate of the FSTP will systematically hold an annual review. This session will be an opportunity to discuss operational data, financial statements, and suggestions for improvement.

During the first three years, the private operator will not be able to produce and sell compost from the treatment plant. In the business model, the assumption is that the operator will develop the composting component of the fecal sludge; it is only from Year 4 that the sale of compost can start being considered as income, thus allowing the municipality to stop subsidizing the operations of the treatment plant. It is also important for the city and the private operator to seek financing alternatives for the management of the treatment plant in the event that the expectations of the financial spin-offs from sludge treatment by-products fall through.

The MHA undertook a vast program of building FSTPs in all the country's regional capitals. This program will draw lessons from the FSM arrangements in the city of Niamey to document implementation procedures for other cities.

Lessons from Analytical Work

Many lessons have emerged from the analytical work conducted from 2013 to 2015. The following call for particular attention:

- (i) The Government is taking more time to make decisions, particularly when there is a change in policy makers (ministers, permanent secretaries, and directors-general), despite briefing notes and follow-up discussions.
- (ii) The capacity of municipalities is weak when handling complex water and sanitation infrastructure management.
- (iii) Some domestic private operators are emerging in the management of rural water supply systems.
- (iv) The existing WBG-financed projects provide opportunities to reinforce capacities of key players. Collaboration across global practices is therefore important to achieve a comprehensive integrated approach for better results.
- (v) The FSM business model (collection transportation and treatment plant) in Niamey requires a three-year subsidy program for it to become self-sustaining.

6.1 Mobility of key staff in the lead institution

The MHA had requested WSP to conduct studies on the transfer of 19 RWSSs to the urban asset-holding company, SPEN. The studies started in early 2013, but before their completion, a Government reshuffle occurred in late July 2013, with changes affecting key interlocutors (the minister, permanent secretary, and the urban water director-general). This situation caused a major shift in the approach and communication flow with the MHA. It took at least 10 months for the newly-appointed officials to take up the issue of the transfer of the 19 RWSSs to SPEN. A field note was prepared to inform decisionmaking. However, despite these efforts, decision-making on the way forward with SPEN concerning the investments to upgrade the RWSSs to acceptable standards for the asset-holding company have stalled. Continued dialogue between SPEN and MHA positively reconnected them to the 19 RWSSs' transfer agenda. The MHA is open to reviewing the concession contract with SPEN to facilitate this transfer. The necessary investments for the 19 centers will be sourced either from World Bank's additional financing on the urban water and sanitation project, or other donors. Though the process is currently ongoing, it is important to underscore the negative impact of the mobility of key staff in Government institutions on the reform agenda.

6.2 Capacity challenges facing Niger's municipalities and the regulatory body

According to the law, Niger's municipalities can benefit from the transfer of state powers in 19 areas, including water, sanitation, hygiene, environment and natural resources management, fishing, health, land, and properties. The MHA has transferred the water and sanitation infrastructure management function, without the direct support from the municipalities in terms of budget and staffing. However, the money generated from the management of this infrastructure is managed by the municipalities to pay for services provided by private operators and ensure major asset repairs and extension. A capacity reinforcement program was conducted to improve the communes' management abilities (see section 5.1.1), but due to many factors including the mobility of workers and council members, the results have been below expectations. Building institutions' capacities is a lengthy process that needs to be repeated and audited for recommendations on the way forward. Similarly, the Government needs to find alternative solutions for emerging issues along the process.

For water supply service delivery in rural areas, *communes* are the asset holders. According to the guidelines for water supply in rural areas, the *communes* subcontract the management of water supply assets through a lease *affermage* contract with private operators or communities. However, water supply systems for growing rural cities (small towns) are challenging *communes* with the current contractual arrangements. Both *communes* and private operators lack the appropriate skills and means to address







Photos showing private pit emptierson duty.

the growing demands of these entities. This explains the willingness of the identified municipalities to hand over the responsibility of small towns' water supply to SPEN. In the meantime, the municipalities' capacity reinforcement program should continue to address at least the rural water supply issue.

Currently the MHA is supporting the City of Niamey to manage the FSTP through a PPP. Since it will be the first time this type of operation is being conducted in Niger, the question arises: is the best option having the municipalities take over FSM? If yes, what types of complementary measures are needed? In the case of the City of Niamey, capacity building activities were identified through South-South exchange and the clarification of roles and responsibilities of the actors involved. In addition, regular meetings among actors will assist in providing guidance to the municipality on FSM for possible replication in Niamey and other cities.

The Government of Niger dissolved the multisectoral regulatory body (ARM) and requested every line ministry to set up a regulatory body for its sector. The regulatory body under the Ministry of Water and Sanitationis not yet operational. The Ministry of Water and Sanitation is a stakeholder in the contractual arrangement involving SPEN, SEEN and the Government (concession and affermage contracts). In principle, the regulator must be

independent and not be part of any contract. The role of the ministry is to develop the regulatory framework and establish an independent regulatory body to implement the said framework. To guarantee the autonomy of a regulatory authority, it would be better to have this institution under the umbrella of a level higher than the line ministry, such as the Prime Minister's Office. The Government seems to be considering the option of creating one regulatory authority per sector or group of sectors. The regulatory authority for the telecoms and postal sectors already exists. For the energy sector, a bill is currently under discussion in Parliament. The main recommendation is to carry out a feasibility study for the creation of a regulatory authority for the water and sanitation sectors. The study will inform the Government whether to create an independent authority or to extend the law on energy to water and sanitation. This last option seems more viable—having a single water and energy agency to achieve economies of scale (cost savings) as both sectors have a similar composition (network: productiontransportation-distribution).

6.3 Emerging local private operators— Potential key players

As mentioned earlier in section 5.1.2, domestic private operators are emerging in the rural water supply systems' management. As the Government transfers small towns' water supply systems from *communes* to the urban asset-

holding company SPEN, a strong option would be to upgrade the skills the well-performing domestic private operators to manage these schemes through a lease affermage contract with SPEN (see section 5.3). The recruitment by SPEN of the domestic private operators to manage small towns' water supply accompanied by the capacity-building program will meet a double objective. First, it will professionalize these operators to raise the service provision level in both small towns and rural areas. The fact that local operators will continue managing small towns transferred to SPEN and also RWSS will help avoid frustrations that could lead to these operators' disinterest in managing rural centers. Conversely, it will encourage them to become more and more competitive to gain clients' confidence. Second, SPEN would have solid arguments allowing for the benchmarking of the results of the management of tertiary centers managed by SEEN with those managed by domestic operators.

In the sanitation sector, the authorities' willingness to build other FSTPs in Niamey and regional capitals (Niger's main cities) is a good opportunity to promote local entrepreneurs. Two pit emptying companies have expressed interest. Other companies involved in the marketing of agricultural fertilizers tare interested in the production of compost from the by-products of the FSTP. This vibrant private sector can be smartly used to resolve the issue of fecal sludge disposal and the application of environmentally-friendly green waste soil conditioner. Adopting this option requires the enhanced capacity building of these private companies for service delivery. As a follow-up activity, the Water Global Practice through PPIAF is providing technical assistance for capacity building of private operators.

Therefore, raising the potential of well-performing domestic private operators in the water and sanitation sector is a golden opportunity for policy makers to sustain service delivery in urban cities, small towns and in rural areas through PPP. As shown in the section 5.1.2, private sector finance is being slowly mobilized to improve service delivery in the water sector. This mobilization would be more successful through a win-win contract arrangement involving financing institutions (local or regional banks) using accompanying measures for capacity development.

6.4 Using the opportunity of existing WBG-financed projects for capacity development

The World Bank Group's portfolio in Niger has three capacity development projects: (a) The Skills Development for Growth Project; (b) Niger's Competitiveness and Growth Support Project; and (c) The Public Sector Capacity and Performance for Service Delivery Project. The MHA needs to have a comprehensive approach to conduct urban sanitation and small towns' water supply reforms to strengthen the capacities of the actors involved. The operational modalities can be defined in close consultation with these actors and the identified projects. The Water GP can facilitate the process.

6.4.1 The Skills Development for Growth Project

The project supports skills' development, meaning that people are trained in specific skills lacking in a particular sector, including water and sanitation. This opportunity can be tapped into by the MHA to train young people to become water and sanitation professionals in both private (private operators in water and sanitation) and public sectors (*communes* and regional water and sanitation directorates). The project is open to this type of activity; it is only a matter of developing training curricula in consultation between the project and MHA. This project was approached by the Ministry of Water and Sanitation to help develop the skills of some individuals for the sector's end use (municipalities, the private sector, and Ministry).

6.4.2 Niger's Competitiveness and Growth Support Project

This project can assist in the capacity building of water and sanitation sector's private operators in the through the 'Maison de l'Entreprise'. There is, however, a need to assess these private operators to determine the gaps are and develop specific curricula to overcome them for better service delivery. This action can mark the beginning of the certification process in the management of water supply public assets (water supply systems) and sanitation (sludge treatment plants). To undertake these actions, once again strong leadership is required from the MHA. Follow-up programmatic TA is already under implementation in close collaboration with the 'Maison de l'Entreprise' to support the emerging private operators in the water sector. SEEN

has been identified as a trainer to develop the technical profile of these operators.

6.4.3 The Public Sector Capacity and Performance for Service Delivery Project

The public sector capacity issue has been highlighted in section 6.2 remains achallenge despite actions undertaken. Building public institutions' capacity is a continuous process. With the envisaged reforms in the sector, there is a need to reinforce the capacity of the public institutions involved. These capacity reinforcement actions can be done through this project.

6.5 The Imperative of the FSM Business Model

The FSM business model (treatment plant) in Niamey requires a three-year subsidy program before it can become self-sustaining. The City of Niamey has committed to paying this subsidy in support of the reform. However, in the contractual arrangements, binding measures need to be taken to ensure that the operator will continue delivering the service after the subsidy expires.

VII. Conclusion

Although Niger's domestic private sector is successfully participating in water and sanitation service delivery, this participation is not well structured and supported by the Government to facilitate its emergence. Opportunities exist for the Government to promote the emerging domestic private operators with a view to raising their level of professionalism for better service delivery. Three World Bank-financed projects are open to supporting the capacity building of key players involved in PPPs for water and sanitation service delivery, namely: (a) The Skills'Development for Growth Project; (b) Niger's Competitiveness and Growth Support Project; and (c) The Public Sector Capacity and Performance for Service Delivery Project.

It is imperative for the Government to engage in sector consultations with stakeholders to define the way forward to improve the quality of service delivery through professional private sector participation.

- What should Niger strive for over the next five to 10 years vis-à-vis domestic private sector professionalization in WASH?
 - Are the current policies appropriate to ensure a secure environment for all stakeholders?
 - Is the regulation governing the sector service delivery fully operational?
 - Are quality standards to support the regulation well defined?

The clarity of Government policies and actions on the above issues are indispensable for high-quality service delivery, which will in turn contribute to achieving the UN Sustainable Development Goals (SDGs).



Workshop on sustainable management of water supply systems in rural area – use of ICT (Actors: MHA, Municipalities, Private operators).

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