



# Water Supply and Sanitation in Senegal

Turning Finance into Services for 2015 and Beyond













The first round of Country Status Overviews (CSO1) published in 2006 benchmarked the preparedness of sectors of 16 countries in Africa to meet the WSS MDGs based on their medium-term spending plans and a set of 'success factors' selected from regional experience. Combined with a process of national stakeholder consultation, this prompted countries to ask whether they had those 'success factors' in place and, if not, whether they should put them in place.

The second round of Country Status Overviews (CSO2) has built on both the method and the process developed in CSO1. The 'success factors' have been supplemented with additional factors drawn from country and regional analysis to develop the CSO2 scorecard. Together these reflect the essential steps, functions and results in translating finance into services through government systems – in line with Paris Principles for aid effectiveness. The data and summary assessments have been drawn from local data sources and compared with internationally reported data, and, wherever possible, the assessments have been subject to broad-based consultations with lead government agencies and country sector stakeholders, including donor institutions.

This second set of 32 Country Status Overviews (CSO2) on water supply and sanitation was commissioned by the African Ministers' Council on Water (AMCOW). Development of the CSO2 was led by the World Bank administered Water and Sanitation Program (WSP) in collaboration with the African Development Bank (AfDB), the United Nations Children's Fund (UNICEF), the World Bank and the World Health Organization (WHO).

This report was produced in collaboration with the Government of Senegal and other stakeholders during 2009/10. Some sources cited may be informal documents that are not readily available.

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## An **AMCOW** Country Status Overview

## Water Supply and Sanitation in Senegal

Turning Finance into Services for 2015 and Beyond



## **Strategic Overview**

As a result of both the institutional reform of water and sanitation in urban areas in 1996 and the programmatic approach promoted by the Millennium Drinking Water and Sanitation Program (*PEPAM 2005-2015: Programme Eau Potable et Assainissement du Millénaire*), the performance of water supply and sanitation sector in Senegal is improving at a sustained pace.

The country, which is experiencing an economic crisis and budget constraints, benefits from the support of several committed external support agencies. The prospects for future funding thus remain positive.

Within the sector there are three challenges:

The first is that of rural sanitation, the only subsector to be significantly below the target set out in the Millennium Development Goals. In addition to the need to mobilize further financing for rural sanitation there is a need to evaluate past approaches in order to improve the impact of future interventions. The second challenge lies in following through the implementation of the 'third generation' of institutional reforms, a main aim of which is to transition from the current leasing arrangement to full private concession. If this path is taken the arrangement needs to identify a solution to secure water resources for the increasing demand for water in Dakar whilst preserving the subsector's positive social, technical, and financial performance.

The third challenge, linked to the third generation urban reforms, is to identify a set of urban sanitation solutions that better align revenue flowing to the Office National de l'Assainissement du Sénégal (ONAS) (or its successor) with operation and maintenance costs in order to create positive incentives for an expansion of sanitation coverage in urban areas.

This second AMCOW Country Status Overview (CSO2) has been produced in collaboration with the Government of Senegal and other stakeholders.

## Agreed priority actions to tackle these challenges, and ensure finance is effectively turned into services, are:

## Sectorwide

- Simplify and consolidate the institutional organization of the supervisory ministries.
- Link and systematize the monitoring and evaluation (M&E) of physical to financial activities undertaken by those stakeholders intervening in rural areas and ensure the financial monitoring conducted by the Ministry of Finance enables easier identification of subsector flows.
- Improve the reliability and forecasting of funding allocated by the government from its own budget.

### **Rural water supply**

- Further professionalize the operations of borehole users' associations (ASUFOR: Association d'usagers de forage).
- Effectively implement delegation of the maintenance of motorized water pumps to the private sector and, from now on, assist the Operations and Maintenance Directorate to realign its assignments and competences.
- Put in place a sustainable financing mechanism for the renewal of boreholes.

### **Urban water supply**

- Ensure that the institutional reform currently being prepared doesn't undermine either the positive performance of the subsector or its financial stability.
- Secure more water resources to supply Dakar.
- Ensure those interventions aimed at disadvantaged populations are targeted more effectively.

### **Rural sanitation and hygiene**

- Build the capacities of the Sanitation Directorate.
- Increase the funding allocated to the subsector.
- Ensure that the means of intervention and of financing facilities are better aligned.

### Urban sanitation and hygiene

- Mobilize the funding required to replace ageing networks and to achieve financial stability.
- Change the status of the National Office of Urban Sanitation (ONAS: Office National de l'Assainissement du Sénégal) from a Public Utility (EPIC) to one with a more autonomous and client-oriented status.
- Set up a licensing system for entities providing pit emptying services.



## Contents

	Acronyms and Abbreviations	6
1.	Introduction	7
2.	Sector Overview: Coverage and Finance Trends	8
3.	Reform Context: Introducing the CSO2 Scorecard	11
4.	Institutional Framework	13
5.	Financing and its Implementation	15
6.	Sector Monitoring and Evaluation	17
7.	Subsector: Rural Water Supply	19
8.	Subsector: Urban Water Supply	22
9.	Subsector: Rural Sanitation and Hygiene	25
10.	Subsector: Urban Sanitation and Hygiene	27
	Notes and References	30

## Acronyms and Abbreviations

AEP(A)	Water supply (and sanitation)	NGO	Nongovernmental organization
	(Approvisionnement en eau potable	ONAS	National Office of (Urban) Sanitation in
	(et assainissement))		Senegal (Office National de l'Assainissement
Afdb	African Development Bank		du Sénégal)
AMCOW	African Ministers' Council on Water	PAQPUD	Sanitation Program for Peri-Urban Areas of
ANSD	National Agency for Statistics and		Dakar (Programme d'Assainissement des
	Demography (Agence Nationale de la		Quartiers Péri-Urbains de Dakar)
	Statistique et de la Démographie)	PEPAM	Millennium Drinking Water and Sanitation
ASUFOR	Borehole Users' Association		Program (Programme d'Eau Potable et
	(Association d'usagers de forage)		d'Assainissement du Millénaire)
BPO	Objective-Based Program Budget	PLHA	Local Water and Sanitation Plan (Plan local
	(Budget programme par objectif)		d'Hydraulique et d'Assainissement)
CLTS	Community-Led Total Sanitation	RAC	PEPAM Joint Annual Review
CSO2	Country Status Overviews (second round)		(Revue annuelle conjointe du PEPAM)
DAS	Sanitation Directorate	REGEFOR	Management Reform of Rural Boreholes
	(Direction de l'Assainissement)		with Motorized Pumps (Réforme de la
DEM	Operation and Maintenance Directorate		gestion des forages ruraux motorisés)
	(Direction de l'Exploitation et de la	SDE	Senegalese Water (Sénégalaise des Eaux)
	Maintenance)	SONEES	Senegalese National Company for
DHP	Public Hygiene Directorate		Water Management (Société Nationale
	(Direction de l'Hygiène Publique)		d'Exploitation des Eaux du Sénégal)
DP	Development partner	SONES	National Water Company of Senegal
EPIC	Public utility company status (Etablissement		(Société Nationale des Eaux du Sénégal)
	Public à caractère Industriel et Commercial)	SPEPA	Water supply and sanitation public service
GPOBA	Global Partnership for Output-Based Aid		law (Loi sur le service public de l'eau potable
	(the World Bank)		et de l'assainissement)
HH	Household	UCP	PEPAM Coordination Unit
IEC	Information, education, and communication		(Unité de Coordination du PEPAM)
JICA	Japan International Cooperation Agency	UNICEF	United Nations Children's Fund
JMP	Joint Monitoring Programme (UNICEF/WHO)	USAID	United States Agency for International
LIC	Low income country		Development
MDG	Millennium Development Goal	WHO	World Health Organization
MTSEF	Medium-Term Sector Expenditure	WSP	Water and Sanitation Program
	Framework	WSS	Water supply and sanitation

Exchange rate: US = 489.02 CFA Francs.<sup>1</sup>

## 1. Introduction

The African Ministers' Council on Water (AMCOW) commissioned the production of a second round of Country Status Overviews (CSOs) to better understand what underpins progress in water supply and sanitation (WSS) and what its member governments can do to accelerate that progress across countries in Sub-Saharan Africa (SSA).<sup>2</sup> AMCOW delegated this task to the World Bank's Water and Sanitation Program and the African Development Bank who are implementing it in close partnership with UNICEF and WHO in over 30 countries across SSA. This CSO2 report has been produced in collaboration with the Government of Senegal and other stakeholders during 2009/10.

The analysis aims to help countries assess their own service delivery pathways for turning finance into water supply and sanitation services in each of four subsectors: rural and urban water supply, and rural and urban sanitation and hygiene. The CSO2 analysis has three main components: a review of past coverage; a costing model to assess the adequacy of future investments; and a scorecard which allows diagnosis of particular bottlenecks along the service delivery pathway. The CSO2's contribution is to answer not only whether past trends and future finance are sufficient to meet sector targets, but what specific issues need to be addressed to ensure finance is effectively turned into accelerated coverage in water supply and sanitation. In this spirit, specific priority actions have been identified through consultation. A synthesis report, available separately, presents best practice and shared learning to help realize these priority actions.

## 2. Sector Overview: Coverage and Finance Trends

### **Coverage: Assessing Past Progress**

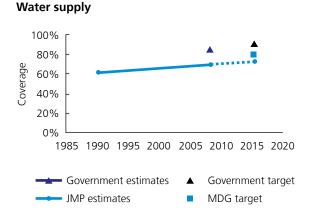
According to data from the Millennium Drinking Water and Sanitation Program (PEPAM), Senegal is on track to meet the national targets for drinking water. The access rate stood at 85 percent at the end of 2008 with the target set at 90 percent for 2015.<sup>3</sup> In contrast, the JMP figures (with an access rate of 69 percent at the end of 2008 for a target of 81 percent in 2015)<sup>4</sup> suggest that, if the current pace is sustained, the Millennium Development Goal (MDG) target for drinking water will be missed by 9 points (see Figure 1).

As far as sanitation is concerned, PEPAM estimates an access rate of 43 percent in 2008 for a target of 70 percent in 2015, whereas the JMP estimates a rate of 51 percent in 2008 for a target of 69 percent in 2015. Whilst there is a discrepancy between the estimates, they nevertheless both lead to the same conclusion: the target for sanitation remains a big challenge.

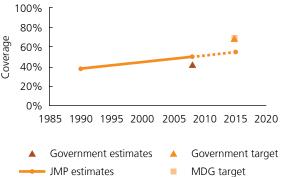
It is to be noted that the definitions and methodologies used by PEPAM and the JMP are not the same, which goes some way in explaining the differences seen in the estimates. In particular, for water supply, PEPAM calculates the access rate based on a comprehensive inventory of functioning water facilities and an estimate of the number of users per facility.<sup>5</sup> In contrast, the JMP estimates the number of people with access to the service based on a linear regression of the results of nationally representative household surveys, conducted by the National Agency for Statistics and Demography (ANSD) since 1986. For sanitation, there are two possible reasons why the PEPAM figures are lower than those of the JMP: first, PEPAM does not consider traditional latrines to be 'improved', whereas some of these are considered 'improved' by the JMP; second, the JMP, by using the results of household surveys or the national Census, includes those latrines constructed by households themselves, independent of projects, whereas PEPAM, through its field-based facilities monitoring system, includes only those facilities built by donors, nongovernmental

#### Figure 1





Sanitation



Sources: JMP and PEPAM.

organizations (NGO)/associations, local authorities, and housing cooperatives in planned settlements, and where these facilities are declared.

Lastly, it is important to note that Figure 1 is based on combined rural and urban figures. These national averages conceal large differences as rural areas are lagging behind urban areas as far as both water supply and sanitation are concerned (see Sections 7 to 10).<sup>6</sup>

## Investment Requirements: Testing the Sufficiency of Finance

The Senegalese government estimated the investment requirements for the water supply and sanitation (WSS) sector when PEPAM was launched at the beginning of 2005; this estimate has been updated several times since. It is based on the 2004 access rate and on the 2015 targets set by the government. According to these estimates, US\$624 million will be required to finance the investment program planned for the period 2005 to 2015 in the water supply sector, and US\$638 million in the sanitation sector. According to the PEPAM Joint Annual Review<sup>7</sup> at the end of 2009 (that is, virtually at the mid-way point) 60 percent of financing had been obtained for water supply and 54 percent for sanitation. While this is a significant achievement in securing financing the effects of this in the

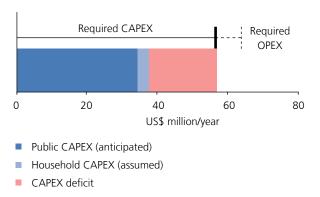
field, in terms of the expansion of WSS services, have not yet been fully realized in all subsectors.

In addition to overcoming the remaining gap in the Program's funding, another US\$41.2 million need to be mobilized each year for water and another US\$49.3 million each year for sanitation. It should be noted that these figures, which were estimated for the 2010-2015 period, are higher than PEPAM's original funding requirements given in Table 1 and Figure 2. This is because much of the original annual funding gap across the period has been pushed into the few years remaining to 2015. Thus, while Table 1 and Figure 2 show the capital financing required, the investment obtained and the resulting deficit for the entire PEPAM reference period, which is 11 years (2005-2015), the annual investment gap for the remaining years to 2015 has grown to US\$41.2 million for water and another US\$49.3 million for sanitation. This deferring of deficits to the latter years of a multiyear program is a common problem across countries.

The scope of the investment requirements covered by the government estimates is broader than that required for meeting the basic MDG service level requirements. In addition to including the costs of hygiene education and sanitation promotion, the investment program for Senegal includes capacity-building, greywater collection

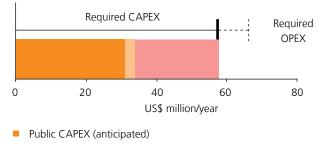
#### Figure 2





#### Water Supply

#### Sanitation



- Household CAPEX (assumed)
- CAPEX deficit

Sources: CSO2 costing and adapted PEPAM data (for the 2005-2015 period).

### Table 1 Coverage and investment figures<sup>8</sup>

	Coverage		Population requiring access	CAPEX requirements		Anticipated public CAPEX			Assumed HH CAPEX	Total deficit
	2008	2015		Total	Public	Domestic	External	Total		
	%	%	'000/year		US\$ million/year					
Rural water supply	76%	82%	180	31	28	7	19	26	3	2
Urban water supply	98%	100%	205	26	25	0	9	9	0	17
Water supply total	85%	90%	387	57	53	7	28	34	3	19
Rural sanitation	28%	63%	446	17	16	1	6	7	0	10
Urban sanitation	63%	78%	256	41	37	3	21	24	3	14
Sanitation total	43%	70%	703	58	53	4	27	31	3	24

Source: Adapted from PEPAM data (for the 2005-2015 period).

facilities in households, wastewater treatment (particularly industrial wastewater), public conveniences (toilet blocks in schools, health centers, and public places), rainwater drainage, and heavy maintenance work. For sanitation in particular, if limited to the MDG service level requirements, the total investment requirement would be lower but a far higher percentage of that requirement would need to be specifically allocated to improving household sanitation facilities. Until now the majority of funding for rural areas has been allocated to public and institutional latrines (representing 60 percent of facilities constructed since 2005) and not to household sanitation (40 percent of facilities built). For urban areas, nearly 40 percent of the finance invested since 2005 has been allocated to treating industrial wastewater, with another large part pertaining to greywater, whereas only a negligible amount has gone towards financing the construction of household latrines. For water supply, had the lower JMP coverage figures been used instead of the PEPAM figures, the investment requirements would have appeared higher, particularly for rural water supply.

In addition to the investment requirements presented above, around US\$16 million per year will be required to finance operation and maintenance (O&M) of current and future infrastructure, of which US\$9 million is required for sanitation facilities (CSO2 estimates, see Table 2). As in many countries, in Senegal there is an implicit assumption

## Table 2Annual OPEX requirements

Subsector	OPEX US\$ million/year
Rural water supply	3
Urban water supply	4
Water supply total	7
Rural sanitation	2
Urban sanitation	6
Sanitation total	9

Source: CSO2 estimates.

that a large part of these O&M costs (OPEX) will be met by users, either out of their own income, in the case of household latrines, or through water bills.

These considerations are only part of the picture. Bottlenecks can in fact occur throughout the service delivery pathway—all the institutions, processes and actors that translate sector funding into sustainable services. Where the pathway is well developed, sector funding should turn into services at the estimated unit costs. Where it is not, the above investment requirements may be gross underestimates. The rest of this report evaluates the service delivery pathway in its entirety, locating the bottlenecks and presenting the agreed priority actions to help address them.

## 3. Reform Context: Introducing the CSO2 Scorecard

In Senegal, the reform of urban water supply and sanitation in 1996 resulted in the establishment of three entities—the National Water Company of Senegal (SONES), Senegalese Water (SDE), and the National Office for (urban) Sanitation in Senegal (ONAS)—to which were attributed the responsibilities of the old national water company, Société Nationale d'Exploitation des Eaux du Sénégal (SONEES). This reform also led to institutionalization of the three consecutive multiyear sector programs (Water Sector Program 1996–2002, followed by the Long-Term Water Supply Project 2002–2005, then by PEPAM 2005– 2015) and, at the same time, to improvements in the legislative framework which enabled rapid development within the sector.

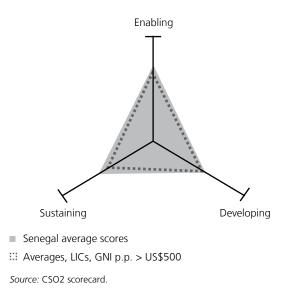
This brief introduction puts the service delivery pathway in context, which can then be explored in detail using the CSO2 scorecard, an assessment tool providing a snapshot of reform progress along the service delivery pathway. This scorecard looks at nine building blocks of the service delivery pathway, which correspond to specific functions classified in three categories: three functions that refer to **enabling** conditions for putting services in place (policy development, planning new undertakings, budgeting); three actions that relate to **developing** the service (expenditure of funds, equity in the use of these funds, service output); and three functions that relate to sustaining these services (facility maintenance, expansion of infrastructure, use of the service).9 Each building block is assessed against specific indicators and scored from 1 (poor) to 3 (excellent) accordingly.

The scorecard results for Senegal show a positive situation, not only for enabling conditions (political, legal, strategic, and programmatic context), but also for sustaining services. The country's performance as far as these two aspects are concerned is slightly higher than the average for Senegal's economic peer group—low-income countries with a GNI per capita above US\$500<sup>10</sup> (see Figure 3). As a result, Senegal is one of the countries often held up as a model within the West African subregion.

Whilst it is not surprising that Senegal is most often cited as an example in the West African subregion, in terms of developing access to water supply services, sanitation still lags behind, particularly in rural areas. Nowhere in Sahelian Africa has it been possible to find, then deploy on a large scale, a rapid, effective and economic intervention strategy for promoting sanitation to rural households; Senegal is no exception to this. Nevertheless, the promising results of the African Development Bank's recent program and the state authorities' openness to innovative approaches both bode well for the future.

### Figure 3





The average scorecard result for developing services in Figure 3 is equivalent to that of peer-group countries, mainly because the poor results for sanitation are offset by the relatively good performance of urban water supply.

Table 3 provides a summary of the main events in the WSS sector reform process in Senegal. Sections 4 to 6 highlight

progress and challenges across three thematic areas—the Institutional framework, finance, and monitoring and evaluation (M&E)—benchmarking Senegal against its peer countries. The related indicators are extracted from the scorecard and presented in charts at the beginning of each section. The scorecards for each subsector are presented in their entirety in Sections 7 to 10.

## Table 3Key dates in the reform of the sector in Senegal

Year	Event
1971	The Compagnie Générale des Eaux du Sénégal (CGE Senegal), a subsidiary of CGE France, is nationalized and becomes the Senegalese National Company for Water Exploitation (SONEES: Société Nationale d'Exploitation des Eaux du Sénégal) in charge of water supply and sanitation in urban areas.
1981	The General Directorate responsible for water within the Ministry of Facilities becomes a separate ministry in order to give impetus to the water sector as part of the International Drinking Water Supply and Sanitation Decade (IDWSS).
1983	Enactment of the Water Code (the decree implementing the provisions of the Water Code will not be promulgated until 1998). SONEES becomes a public service concession undertaking the technical supervision of projects.
1996	SONEES is dissolved and three new companies are created: National Water Company of Senegal (SONES: Société Nationale des Eaux du Sénégal), Senegalese Water (SDE: Sénégalaise des Eaux) and the National Office of Urban Sanitation (ONAS: Office National de l'Assainissement du Sénégal).
1996- 2002	The urban water supply sector is reformed and its performance improved as part of the Water Sector Program (PSE: Programme Sectoriel Eau). Management reform of rural motorized water pumps leads to the sale of water by volume and delegation of the service to users' associations.
2002	The PSE is prolonged by the Long-Term Water Supply Project (PLT: Projet Eau à Long Terme). The WSS sector is identified as a priority in the PRSP (Poverty Reduction Strategy Paper). ONAS launches the Sanitation Program for Peri-urban Areas of Dakar (PAQPUD: Programme d'Assainissement des Quartiers Péri-Urbains de Dakar) with the support of the World Bank.
2003	Water supply and sanitation, previously entrusted to the Ministry of Mines, Energy and Water, is divided between two ministries, one for rural and the other for urban WSS.
2005	Creation of a Sanitation Directorate, distinct from that for Water. Institutionalization of PEPAM, following on from the PLT, which constitutes a programmatic framework for achieving the MDG.
2000	Sanitation is set up under a ministry for the first time.
2008- 2009	Water supply and sanitation public service law (SPEPA); Sanitation Code; State-ONAS performance contract. Water and sanitation are reunited under one ministry before being separated once more.
2013	Final year of the SDE lease contract. An institutional reform, called the 3rd generation, should be put in place for urban water supply and sanitation.

## 4. Institutional Framework

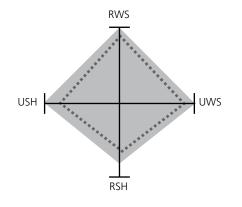
### Priority actions for the institutional framework

- Simplify and consolidate institutional organization at the supervisory (ministry) level, by reducing the number of national directorates.
- Ensure that the next phase of urban sector reform puts a realistic and sustainable solution in place to cope with the increase in demand for water in Dakar and its outlying areas and with the need to renew ONAS' capital assets. Make sure that this reform maintains the current financial stability of the urban water supply sector and promotes that of sanitation.
- Ensure that the implementing provisions of the SPEPA law are adopted.

In 15 years, **the institutional and regulatory framework** of the WSS sector in Senegal has been significantly reinforced, which has enabled the country to achieve good results in terms of the level of institutional development, slightly higher than the average of its country peer-group (see Figure 4). The WSS strategy for rural and urban areas is set out in the Sector Policy Document for Water Supply and Sanitation (2005) and in the Poverty Reduction

#### Figure 4

Scorecard indicator scores relating to institutional framework compared to peer group<sup>11</sup>



Senegal average scores
Averages, LICs, GNI p.p. > US\$500

Source: CSO2 scorecard.

Strategy Paper 2007–2010. These texts are based on the outline of the sector's programmatic framework as set out in the PEPAM 2005–2015. This framework sets targets for access to water supply and sanitation before 2015, defines an investment program, federates and drives all sector initiatives carried out on national territory, and shares out roles and responsibilities between the program's 'implementation agencies'.

At government level, water and sanitation, previously separated into two distinct ministries, were reunited in the first half of 2009 within the same ministry before being divided up again in the second half of that year between the Ministry of Urban Development, Housing, Construction, and Water (MUHCH: Ministère de l'Urbanisme, de l'Habitat, de la Construction et de l'Hydraulique) on the one hand, and the Ministry of Sanitation and Public Hygiene (MAHP: Ministère de l'Assainissement et de l'Hygiène Publique) on the other. The MUHCH supervises the four directorates of Urban Water (DHU), Rural Water (DHR), Operation and Maintenance (DEM), and Management and Planning of Water Resources (DGPRE), whereas the MAHP oversees the directorates of Sanitation (DAS) and Public Hygiene (DHP). The Ministry of Health and the Ministry of Education are also involved through the Hygiene Directorate and the Unit for Water and Hygiene in Schools, respectively.

In urban areas, water services have been delegated to the a public company Société Nationale des Eaux du Sénégal

(SONES) which is in charge of the assets and investment in those urban centers that have been contracted out<sup>12</sup> as well as in the villages located near the Lac de Guiers water distribution pipeline. The concession contract for SONES runs until 2026. Sénégalaise des Eaux (SDE) is the delegated private company responsible for operating the public water service in those urban centers that have been contracted out. It is linked to the state through a lease contract and to SONES through a performance contract. The SONES and SDE come under the supervision of the Directorate for Urban Water Supply. The Office National de l'Assainissement du Sénégal (ONAS) is the agency charged with investing in and operating the (domestic and industrial) wastewater and rainwater treatment facilities in those urban centers within its contract scope on behalf of the state.<sup>13</sup> It has Public Utility Company status (EPIC: Etablissement Public à caractère Industriel et Commercial). It is linked to the state through a performance contract signed in June 2008 and comes under the supervision of the Sanitation Directorate. This institutional set up for the urban sector will shortly undergo further development as part of the so-called 'third generation' reforms. Indeed, for the water services within the contract scope, the government of Senegal would like to move from the current leasing arrangement to full concession to a private operator by 2013.

The role of the PEPAM Coordination Unit (UCP: Unité de Coordination du PEPAM), created in 2005, coordinates the activities carried out by the different PEPAM 'implementation agencies'; of directing donor finance more effectively; and of undertaking M&E of access to

water and sanitation, as well as operational, administrative, and financial M&E of projects/subprograms.

The local authorities—urban communes and rural communities—have responsibility for local planning and take on the role of contracting authority for small and medium scale water and sanitation projects, in collaboration with central and regional state technical departments. As far as their resources (which are limited) allow, they ensure that their investments in their territory are aligned and conform to local planning requirements. Infrastructure management and the construction of larger scale facilities (such as boreholes or treatment plants) are not decentralized, however.

There is no single institution responsible for the regulation of the whole sector. Regulation is mainly conducted through contracts and each of the different ministerial directorates is responsible for supervising its own area: the DHU is responsible for supervising and regulating the activities of SDE and SONES; SONES controls and regulates SDE's operation of the urban water supply; and the DAS and the DHP are responsible for sanitation and public hygiene. The 2008 law pertaining to the organization of the public water service and domestic wastewater sewerage system (called the SPEPA law) sets out the means of delegation and pricing of WSS services. It also makes provision for the institutionalization of an Inter-ministerial Committee of Monitoring and Control charged with technical and financial contractual regulation in the delegated urban centers; this is not yet in place as the implementing provisions of this law have not been enacted.

## 5. Financing and its Implementation

### Priority actions for financing and its implementation

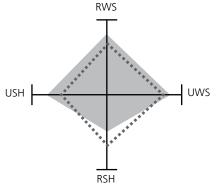
- Mobilize more funds for the urban water sector and particularly for rural sanitation.
- Complete the development of Local Water and Sanitation Plans (PLHA: Plan locaux d'Hydraulique et d'Assainissement), then ensure that local diagnostics and programming are reported to the central level in order to establish a national multiyear plan (in the form of a Medium-Term Sector Expenditure Framework, or MTSEF, supported by a Program Budget, or BPO: Budget programme par objectif).
- Improve the percentage of domestic commitments utilized by setting up a suitable mechanism for securing financial contributions from the state to supplement development partners' investment and by simplifying public procurement procedures.

The scorecard performance of Senegal in terms of indicators related to financing the WSS sector falls within the average for its economic peer-group (see Figure 5).

**Investment planning** at local authority level is supposed to be conducted through the Local Water and Sanitation Plans (PLHA). At present, the PLHA is mainly a standardized method for communities to carry out the inventory and review of infrastructure, but ultimately, it should also become an instrument for participatory sector planning and budgeting. Once all local authorities have a plan in

#### Figure 5





Senegal average scores

::: Averages, LICs, GNI p.p. > US\$500

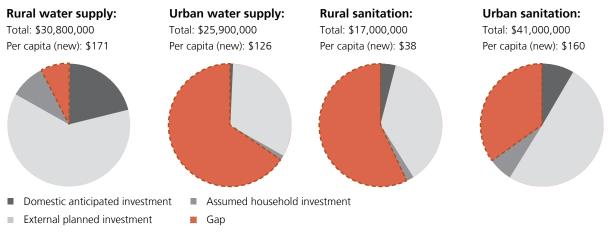
Source: CSO2 scorecard.

place (in January 2010, this was the case for two-thirds of the authorities), they can be consolidated and prioritized first at regional, then at national level to create the Medium-Term Sector Expenditure Framework (MTSEF), supported by an Objective-Based Program Budget (BPO).<sup>15</sup> This planning will better enable the available funding to be directed towards priority investments and locations. There is currently no link between activity planning at local level and the allocation of finance obtained from central level. Funds are currently allocated top-down to those areas not yet covered by donor projects, to those regions considered to have lower coverage than others, or following external support agencies' areas of intervention. As a result, improvements could be made to ensure greater equity in the allocation of funds.

At sector level, since 2005, there has been a good balance between the financing allocated to water supply and to sanitation: since PEPAM was launched, the two sectors have received similar amounts, also relative to their respective requirements. Despite this, large differences have been observed between rural and urban areas: for access to drinking water, in particular, urban areas have received three times less funding than rural areas although their needs are virtually the same (see Figure 6). This imbalance should be rectified over the course of the next few years—provided that the planned institutional reform doesn't create too much uncertainty.

For sanitation, it is the rural rather than urban areas that have been neglected, not only in terms of planned allocations but also in terms of actual commitments made since 2005. This can be partly explained by the high cost of

### Figure 6 Overall and per capita investment requirements and contribution from different sources



Source: CSO2 costing and adapted PEPAM data (for the 2005-2015 period).

sewerage systems in the urban centers managed by ONAS and by the low absorption capacity of the rural sanitation subsector (see Sections 9 and 10). For urban areas, until recently ONAS has tended to prioritize the region of Dakar, where the population is growing very rapidly, at the expense of other secondary centers. This situation should soon balance itself out with the new programs that are currently being designed. For rural areas, PEPAM's recent water and sanitation subprograms have been targeting the South of the country (Kolda, Ziguinchor, Tambacounda, Sédhiou), where access rates are lowest, with a view to reducing regional disparities.

International development aid finances more than 85 percent of investment in the WSS sector (with twothirds of finance coming in the form of loans); this clearly illustrates the high dependence of the Senegalese state on its development partners. Overall, no reduction in aid is anticipated despite the global financial and economic crisis. This aid takes the form of projects and programs supporting the PEPAM framework; however, a lack of coordination and standardization of the approaches adopted by the different actors has been noted and this is the main weakness identified at this level. There is no sector budget support (SBS) in the WSS sector in Senegal for several reasons, such as the instability and lack of institutional visibility at ministerial level (although the directorates remain relatively stable); the high number of PEPAM implementation agencies making the set up of SBS more complicated; the lack of transparency and forecasting in the management of public finances; and the existence of stable and reliable companies and offices in urban areas that ensure current financing is managed correctly.

The national budget. It is currently difficult to gauge sector allocations as there is no BPO or MTSEF in place as yet. In 2008, during the AfricaSan+5 conference, the government of Senegal committed to allocating 0.5 percent of its investment budget to sanitation (the eThekwini declaration). The state strongly reiterated its commitment in April 2010 in Washington by announcing that it wanted to allocate over US\$24 million per year to the WSS sector between 2011 and 2015, specifically aimed at the rural water supply and urban sanitation sectors.<sup>16</sup> However, it is feared that the state will not be in a position to respect these commitments as the economic crisis that has been affecting the state's public finances since 2007-08 is severely restricting its investment capacity. This can be seen in the low disbursement rate of internal resources allocated to the sector. By way of example, there was an average disbursement rate of 60 percent for rural water supply during 2006–09 and of 25 percent for rural sanitation over the same period. This constitutes a major constraint for the performance of these two subsectors. Delays in payment, and even payment cancellations, on the part of the public treasury are putting the progress of several programs at risk, even those financed by development partners.

**The contribution of local authorities** is limited by the financial, technical, and human resources available. Nonetheless, a certain number of rural communities are supported in their WSS projects by the National Program for Local Development (PNDL: Programme National de Développement Local), as well as by nongovernmental organizations (NGOs), "decentralized cooperation"<sup>17</sup> and contributions from the associations of the Senegalese diaspora.

## 6. Sector Monitoring and Evaluation

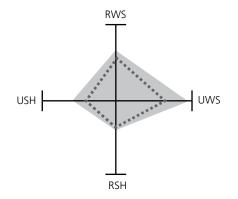
### Priority actions for sector monitoring and evaluation

- Make the standards and calculation methods used by PEPAM and the JMP more compatible in order to reconcile the access data for each subsector.
- Facilitate and systematize the monitoring of physical and financial activities by those actors intervening in rural areas.
- Within the Ministry of Finance, improve the monitoring of finance obtained and disbursed by funding source and by subsector and ensure there is consistency with PEPAM data.

A robust **M&E mechanism for the sector** is crucial for ensuring transparency, equity and efficiency in the allocation of available funds and for enabling this allocation to be redirected when necessary. Once the monitoring of financing is coupled with monitoring of physical activities, it becomes possible to verify whether the funds invested have resulted in the development and improvement in WSS services—in other words, to monitor the effectiveness of public expenditure. As can be seen in Figure 7, the performance of Senegal in related scorecard indicators is superior to that of its economic peer countries.

#### Figure 7

Scorecard indicator scores relating to sector M&E, compared to peer group<sup>18</sup>



- Senegal average scores
- III Averages, LICs, GNI p.p. > US\$500

Source: CSO2 scorecard.

The monitoring of facilities constructed is regularly and rigorously conducted by the PEPAM implementation agencies that collect data from the various projects and programs. For the water supply sector, there is a database that lists all the waterpoints in the national territory, as well as their functionality, and this is monitored throughout the year. For sanitation, the household surveys conducted every few years by the ANSD are the most reliable source of information. Between any two surveys, the access rate is updated by including those facilities built by different projects-although it is not possible to include facilities built by households independent of any project. The access rate is then adjusted once the results of the subsequent household survey become available. Until very recently, the ANSD household surveys used different standards and definitions to those used by either the PEPAM 'implementation agencies' or by the JMP, meaning that each produced inconsistent figures. However, a reconciliation of the procedures is now possible, as the process adopted for the next household survey has been defined in consultation between the ANSD and WSS sector institutions.

**The monitoring of financial activities** (commitments, disbursements, and percentage utilized) is not as effective. At sector level, monitoring by project and by subsector is mainly conducted by the PEPAM Coordination Unit (UCP). The Ministry of Economy and Finance also carries out financial monitoring, but this is not always regular or comprehensive. Furthermore, the budget headings in the finance law don't enable the four subsectors to

be differentiated. In addition, neither the UCP nor the Ministry is able to monitor the utilization of off-budget commitments (USAID, UNICEF, JICA, NGOs, local authorities or PNDL investment). Between US\$40 and 60 million has been invested since 2005 without having been included in sector finance monitoring at the national level. Moreover, the successive reorganization of the ministries means that it is impossible to calculate either the financing utilized prior to 2003 or the distribution of this finance by subsector, source, and funding type. As a result, it is difficult to evaluate the effectiveness of the public expenditure committed to the WSS sector over the last few years. Nevertheless, in 2010, the UCP undertook an analysis of the level of disbursement for the principle rural water supply operations compared to the planned implementation schedule-though an initial exercise that needs some further refinement, it has served to open up the debate on effectiveness.

Once all the monitoring data has been collected from the various PEPAM implementation agencies, it is verified by the UCP and compiled in the (quarterly and annual) progress reports, the quality of which is good and continues to improve year on year. These reports are published in a transparent manner on the PEPAM website (www.pepam.gouv.sn), online since June 2006, as well as forming part of each **joint annual review** (RAC: *revue annuelle conjointe*), which brings together all sector stakeholders, including development partners, regional technical department delegates and local authority representatives, the private sector and the civil society (consumer associations).

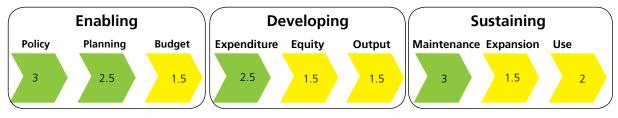
## 7. Subsector: Rural Water Supply

### Priority actions for rural water supply

- Further professionalize the operations of borehole users' associations (ASUFORs) by implementing a continuous training program.
- Accelerate the pace of delegation to the private sector of motorized water pumps maintenance and, from now on, support the DEM with its staff reorganization program and in the acquisition of new monitoring, back-up support and regulation skills.
- Put in place a sustainable financing mechanism for the renewal of boreholes.

#### Figure 8 Rural water supply scored





Source: CSO2 scorecard.

The CSO2 scorecard results for rural water supply are mixed, although on average they are higher than those of its economic peer-group of countries (see Figures 8 and 9). The financial commitments made by both the state and external support agencies have, nevertheless, enabled the subsector to progress.

According to PEPAM,<sup>19</sup> **the access rate** to drinking water in rural areas was 75.5 percent at the end of 2008, compared to 64 percent in 2005 (see Figure 10). The sector targets will probably, therefore, be met or even exceeded. According to the JMP,<sup>20</sup> however, the proportion of the rural population actually using improved facilities stood at only 52 percent at the end of 2008, raising uncertainty as to whether the 2015 target will be reached.

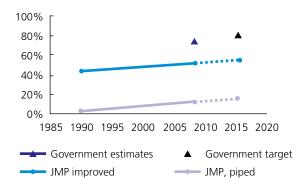
Of the US\$340 million required for the PEPAM investment program, 83 percent had already been mobilized by the end of 2009.<sup>21</sup> Nonetheless, **nearly US\$10 million still** 

**needs to be found annually** to fully finance the plan if the investment deficit is to be overcome over the next six years (2010–15). The annual deficit is lower, by approximately US\$2 million per year, if the entire reference period of the program is considered (2005– 10, shown in Figure 11). US\$3 million per year is also forecast as the requirement for O&M costs (OPEX), generally borne by the users through their payment for water.

The area benefiting most from this new financing is the South of the country, where the access rate is very low, as is the case in isolated areas. These regions, which are not easily accessible, have been afflicted by the Casamance conflict<sup>22</sup> as well as by hydrogeological or even sociological obstacles. Priority has been given to the construction of small piped systems to reduce the use of unprotected water sources (wells, rivers, and so on) which is widespread in these regions. In terms of service quality, the average rate of functionality for rural multivillage boreholes with motorized pumps (the principle means of accessing improved water sources in Senegal) has been fluctuating around the 90 percent mark for several years. This rate is higher than that seen on average in other countries in the subregion. In contrast, however, the physico-chemical quality of the water is a major issue in Senegal. This is especially true in the Central area of the country (Bassin Arachidier), where the salinity level and the fluoride, chloride, and iron content of the water often exceeds WHO standards. This is also the case in the isolated areas of the South due to the high levels of chemical pollution present in the groundwater table. Water guality, neglected for a long time, has now become the focus of attention. Sector stakeholders are now more aware of the issue: initiatives are in progress to find solutions to purify or transfer resources, and the National Hygiene Service, in partnership with UNICEF, has set up a project to monitor the quality of water used for domestic consumption throughout the country. It is worth noting that if the water guality were taken into consideration, the access rate to drinking water would have reduced significantly.

Large-scale reforms have been undertaken to improve the **sustainability of rural water services**. The SPEPA law has institutionalized the principles of delegated management and contract agreements, that were already successfully trialed between 1996 and 2004 as part of the Management Reform of Rural Boreholes with Motorized Pumps pilot project (REGEFOR: Réforme de la gestion des

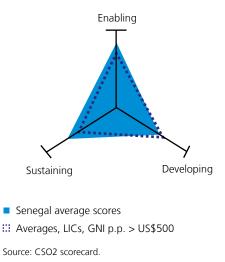
#### Figure 10 Rural water supply coverage



Sources: JMP and PEPAM.

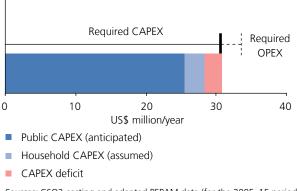
#### Figure 9

Average RWS scorecard scores for enabling, developing, and sustaining service delivery, and peer-group comparison



forages ruraux motorisés). The delegated managers borehole users' associations (ASUFOR: associations d'usagers de forage) or private operators—are entrusted with the management of these boreholes on behalf of the state and given a fixed-term operating license by the DEM. Today, ASUFORs have been set up for twothirds of the existing boreholes and have been trained in technical, financial, and accounts management of facilities. The reform has led to increased financial viability of facilities (revenue is largely sufficient to cover O&M

### Figure 11 Rural water supply investment requirements



Sources: CSO2 costing and adapted PEPAM data (for the 2005–15 period).

costs and some communities have even been able to build up savings for capital expenditure). The reform has also lead to improvements in the condition of infrastructure, and has sped up the rate of network expansion and the development of household connections.

Another reform that is currently in progress (the implementation of which is experiencing significant delays) is that of motorized water pump maintenance at boreholes. Whilst, up to now, maintenance has been the DEM's responsibility, it is anticipated that this will be handed over to a private operator, linked to the state through a maintenance contract and to the operator through a performance contract. Ultimately, once management for all boreholes has been transferred to the private sector, the DEM will redirect its activities towards monitoring, regulation, and providing back-up support.

The instigators of this reform hope that it will lead to the rapid development of a dynamic private sector, providing a good quality local service. The impact of these reforms on water tariffs remains uncertain and is a major area of concern for users.

The rural water supply subsector is characterized by a certain level of **inconsistency in interventions:** there are significant differences in the procedures used for decision making, public procurement, and disbursement, as well as in the tools used, messages transmitted, and the setting up of projects, which impact scheme implementation. The large number of actors intervening in rural areas works against the application of common principles required for instilling a sense of ownership, good governance, harmonization, and alignment (principles from the Paris Declaration on Aid Effectiveness).

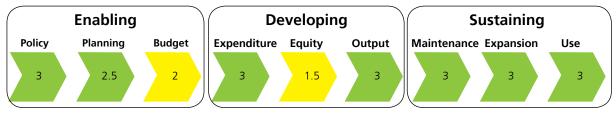
## 8. Subsector: Urban Water Supply

### Priority actions for urban water supply

- Ensure that the institutional reform currently being prepared does not have a negative impact on the sector's principles of financial stability, SONES's repayment of its debt, an affordable tariff for the most disadvantaged users or the achievement of the MDG. Include the development partners and users in this discussion.
- Secure more water resources to supply the capital, Dakar, and the Petite Côte in the medium to long term.
- Ensure those interventions aimed at disadvantaged populations are targeted more effectively through the use of social pricing brackets and social connections.

#### Figure 12

#### Urban water supply scorecard



Source: CSO2 scorecard.

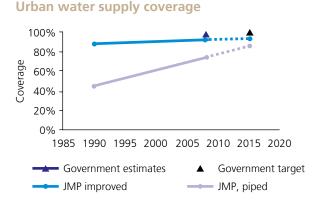
The scorecard indicates that Senegal's urban subsector is strong compared to its peer-group of subSaharan countries, particularly in terms of sustaining services (see Figures 12 and 13). In the Poverty Reduction Strategy Paper (Document Stratégique de Réduction de la Pauvreté {2007-2010}), the national target set for the subsector is an access rate of 100 percent, by 2015. The Senegalese government has also committed itself to halving the proportion of the urban population without a private connection to the distribution network; this is more ambitious than the MDG targets that also count other means of accessing drinking water. The target it has set is to connect 88 percent of households to the network in Dakar and 79 percent to networks in the regional centers by 2015. Senegal is well on the way to achieving these targets as, at the end of 2008, the overall access rate was 98 percent according to the PEPAM Joint Annual Review. According to the official declaration for the Sanitation and Water for All high-level meeting, standpipe or household connections stood at 94 percent, 87 percent of which were household connections.<sup>23</sup> The JMP estimates a slightly lower access rate: 92 percent (see Figure 14).

These positive results are mainly due to the social connections policy that SONES has implemented for over 15 years with the aid of donors—as per its contract with the state that requires it to prioritize the disadvantaged population. Over 145,000 subsidized connections were thus realized between 1996 and 2008, which is 70 percent of all connections carried out.<sup>24</sup> However, this policy primarily benefits the inhabitants of Dakar, who do not necessarily constitute the poorest households,

whereas fewer than half of the inhabitants of Ziguinchor and Tambacounda, in the south of the country, have access through household connections. The method used to identify and target those eligible for social connections is therefore being reviewed.<sup>25</sup>

According to PEPAM, the financial requirements for the urban water supply subsector stand at US\$286 million, half of which is needed for Dakar and its surrounding areas. This figure corresponds to US\$32 million per year if the investment deficit that needs to be made up over the next six years (2010–15) is considered; for the entire reference period of the program (2005–10), the annual deficit is lower, at US\$17 million, as shown in Figure 15.<sup>26</sup> At this stage, the prospects appear to be good, as the subsector is attracting donors, with SONES and SDE both being companies that perform well, have a high degree of autonomy and good management skills as well as the adequate capacity to absorb funding. However, the presidential decision (made at the beginning of 2010) to place urban water supply (and even sanitation) under a full concession will have an impact on the future of the subsector. In this context, it may be difficult to maintain the trust of donors or attract private finance. This is compounded by the fact that forthcoming investments will be large, which increases the risk of lending to the company in question.

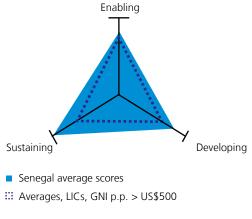
**Technical management** of urban water supply is one of the best in the subregion. There is continuous service, the



## Figure 14

#### Figure 13

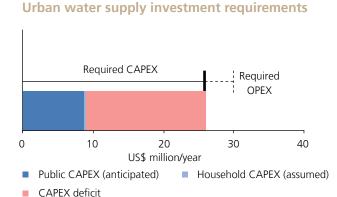
Average UWS scorecard scores for enabling, developing, and sustaining service delivery, and peer-group comparison



Source: CSO2 scorecard.

Figure 15

sole exception being some of the capital's outlying areas. The amount of nonrevenue water has stood at 20 percent for the past three years, with the target set at 15 percent. This is still satisfactory compared to other countries in the subregion. The action plan initiated by SDE for improving water quality has led to increased conformity with WHO physico-chemical and microbiological standards, particularly as regards iron content and the red coloring that this creates. Nonetheless, the presence of iron and fluoride is still a major issue in the suburbs of Dakar and the Bassin Arachidier, respectively.<sup>27</sup>



Source: CSO2 costing and adapted PEPAM data (for the 2005–15 period).

Sources: JMP and PEPAM.

**Financial management** is sound; in theory, the tariff framework ensures financial stability of the subsector. For domestic clients, the price has not increased since 2003<sup>28</sup> and the billing collection rate varies between 96 percent and 98 percent. In 2006 the political authorities chose to apply a price increase only to administrations run by the state (SDE's largest client) to spare domestic users. However, in the context of the current crisis, the state is finding it difficult to pay its bills, meaning that rising costs are not being sufficiently offset by an increase in SDE turnover. SONES and the government are currently considering the possibility of a price increase for all consumers, not only public administrations. If the increase does indeed happen, then it should not be applied to poor households. This supposes a revision of the current tariff system because it is not able to properly target, and therefore benefit, poor households.<sup>29</sup>

The main challenge facing SONES is that of **securing water resources** to supply the population of Dakar and the Petite Côte by 2025. New technical solutions are being considered, particularly the desalination of seawater, which is a costly option. However, at the moment, maintaining financial stability in the sector is a priority. This is a major issue that involves not only a pricing review, but also the institutional reorganization of the whole urban water supply and sanitation sector. If the decision to place urban WSS under concession is confirmed, this reform should be implemented at the start of 2014. The processes are still yet to be defined.

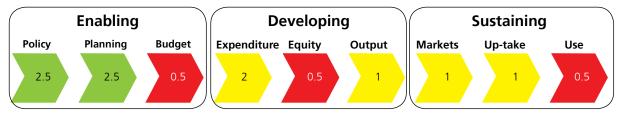
## 9. Subsector: Rural Sanitation and Hygiene

### Priority actions for rural sanitation and hygiene

- Reinforce the human, material, and financial resources of the Sanitation Directorate.
- Increase the funding allocated to the subsector.
- Ensure that the means of intervention and of financing facilities are better aligned.

In Senegal, rural sanitation is the subsector that is confronted with the greatest challenges (see Figures 16 and 17).

### Figure 16 Rural sanitation and hygiene scorecard



Source: CSO2 scorecard.

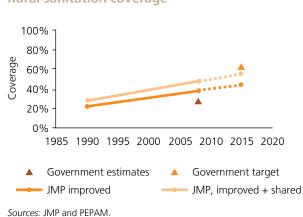
Initially, the target set for rural sanitation was to move from an access rate of 17 percent in 2005 towards a rate of 59 percent in 2015. These figures have, however, been recalculated to align them with the standards defined by the JMP: the baseline rate was set at 26.2 percent in 2005, with a target of 63 percent in 2015. Despite the requirement, put in place in 2006, for all water supply projects to include a sanitation component, the pace of facility construction is a lot lower than anticipated: the access rate in 2008 was estimated to be 27.6 percent (38 percent according to the JMP)—in other words, it is unlikely that the subsector target is reached (see Figure 18).

This **very slow progress in the rural sanitation access rate** is due to several factors: on the one hand, the cost of the facilities is considerable as the technical standards are high, inflation is rising at a rapid rate and obtaining supplies of building materials from Dakar is difficult; on the other hand, there is little willingness from users to pay. The Sanitation Directorate (DAS) has therefore decided to relax the technical standards and to review the methods of financing the facilities, as well as the means of intervention, for forthcoming programs. As a result, the PEPAM investment program has been reevaluated to US\$187 million, 60 percent of which still needs to be raised; this equates to US\$18 million per year if the investment deficit that needs to be made up over the next six years (2010–15) is considered; if the entire reference period of the program is considered (2005–10), this becomes around US\$10 million per year (as shown in Figure 19). Over US\$2 million per year are also required to cover maintenance costs, which will mainly be borne by households.

There are other factors that help explain the lack of progress in rural sanitation, including: the lack of management capacities and the ability to utilize funding within the Sanitation Directorate, which is still a small structure; the difficulties of (pre-) financing the small enterprises that build facilities and experience cash flow issues; and the fact that the facilities to be built are spread over a wide geographical area.

The construction of public conveniences is progressing at a good pace but sustainable management methods (in schools, health centers, public places or communities) still need to be defined to ensure sustainable investment.

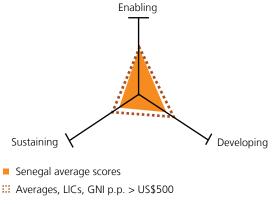
The DAS's **sanitation promotion** policy consists of combining awareness-raising with household subsidies. The initial subsidy, set at 90 percent of the cost of the facility (household latrine), has been revised down on the assumption that households will contribute more in terms of materials and labor. In parallel to this, a new initiative launched by the DAS, with UNICEF funding, and taken up by other actors, consists of testing the Community-Led Total Sanitation (CLTS) approach in areas not covered by on-going or future planned projects. This approach focuses on sanitation promotion and collective emulation with no household subsidy. Whilst its success in Senegal is yet to be confirmed, notably in terms of the construction of improved facilities on a large scale, the CLTS approach is nevertheless interesting because it focuses its efforts on



#### Figure 18 Rural sanitation coverage

#### Figure 17

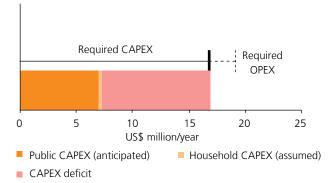
Average RSH scorecard scores for enabling, developing, and sustaining service delivery, and peer-group comparison



Source: CSO2 scorecard.

providing much needed hygiene education to the rural population and increasing demand for sanitation. Up to now, sanitation promotion activities and the training of local craftsmen have been implemented as part of different projects, with no harmonization or coordination. To remedy this situation, as well as to share learning from past experiences, a Steering Committee was set up in 2009. This Steering Committee also ensures better integration of hygiene promotion into WSS interventions, in particular the practice of handwashing with soap.

## Figure 19 Rural sanitation investment requirements



Source: CSO2 costing and adapted PEPAM data (for the 2005-15 period).

## 10. Subsector: Urban Sanitation and Hygiene

### Priority actions for urban sanitation and hygiene

- Mobilize the funding required to replace ageing networks to reduce both the number of malfunctions and O&M costs.
- Achieve financial stability within the subsector.
- flexibility in the management of resources, make public procurement procedures less cumbersome and enable better control of its performance.
- Set up a licensing system for entities providing pit emptying services to improve regulation of the market.

In Senegal, the access rate to improved sanitation stood at 63.4 percent at the end of 2008 (69 percent according to the JMP); this is slightly lower than forecast but still on track to meet the target set at 78 percent for the subsector for 2015 (see Figure 20).

In the capital, the rapid progress that has been made is a result of both the campaigns promoting social connections to the sewerage system and the Sanitation Program for Peri-urban Areas of Dakar (PAQPUD, 2002-08). The latter is based on acknowledgement of the fact that a sewerage system is neither a realistic or affordable solution for the outlying areas of the capital. Indeed, this technical option is highly cumbersome and any network extension only serves to increase ONAS's operating costs. The decision to promote on-site sanitation and small bore sewers was therefore made, accompanied by an awarenessraising campaign and subsidies to reduce households' contribution to the capital cost. In seven years, PAQPUD has benefited over 500,000 people, or 25 percent of the capital's peri-urban population. This campaign has been extended by means of a new program financed by Global

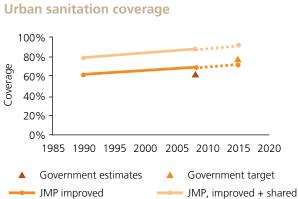
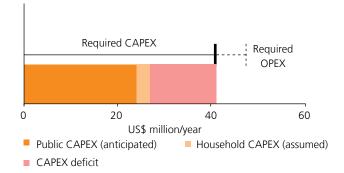


Figure 20

Sources: JMP and PEPAM.

### Figure 21 **Urban sanitation investment requirements**



Source: CSO2 costing and adapted PEPAM data (for the 2005-15 period).

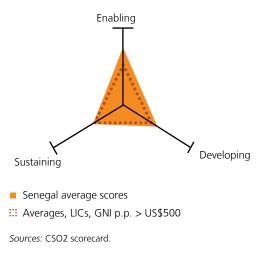
Partnership for Output-Based Aid (GPOBA) with subsidies paid out based on the results of those operators charged with building the facilities. The PAQPUD approach is currently being replicated in five secondary centers with funding from the EU.

The development of on-site sanitation should have a highly positive impact provided that there is a dynamic pit emptying services market in the urban centers and, further down the line, that there are adequate treatment plants where trucks can empty their sludge and/or ways of promoting the agricultural use of sludge. Whilst the situation is improving in Dakar, this is not yet the case for secondary centers.

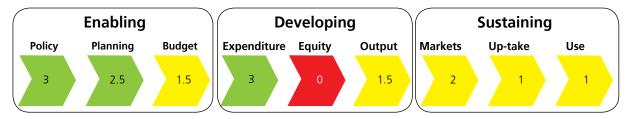
The subsector's financial requirements were recently revised to be US\$450 million, which equates to nearly double the budget established in 2005. Sixty percent of this figure has already been obtained. It is worth highlighting that this figure includes the management of industrial wastewater, greywater, rainwater, and the construction of public conveniences. The net financial requirement for the treatment of domestic wastewater and excreta only is around US\$82 million (that is, US\$13.6 million per year for the 2010–15 period, or US\$31 million per year based on a period running from 2005 to 2015, see Figure 21). A further US\$6 million per year needs to be added to cover O&M costs, which are supposed to be partly met by the users of the service through a sanitation surcharge. A large percentage of external funding is given in the form of loans, and subsidies are rare, which can seem somewhat paradoxical given the low profitability of the sector.

### Figure 22

Average USH scorecard scores for enabling, developing, and sustaining service delivery, and peer-group comparison



The sustainability of the infrastructure is not assured. In the towns managed by ONAS, the sanitation surcharge included in the water bill covers most of the operating costs and the cost of renewing small equipment, but no more. The level of the sanitation surcharge charged to the public administration was increased in 2009 and the state has committed to giving ONAS a subsidy to help it ensure financial stability. In the context of the current budget crisis, the state is not, however, in a position to respect its commitments, which is preventing ONAS from renewing its ageing networks and electromechanical equipment—a requirement that is becoming ever more urgent.



### Figure 23

### Urban sanitation and hygiene scorecard

As the sanitation surcharge is already levied on all consumers connected to the drinking water network, any extension to the network inside these towns results in higher costs for ONAS without generating additional resources. This leads to further financial instability within the subsector and reduces the capacity of ONAS to maintain or renew the existing networks. It is, therefore, within the interests of ONAS to extend its scope to new centers without building new networks: instead promoting on-site and semi-private sanitation, along the same lines as PAQPUD. Furthermore, ONAS could delegate operation of its networks to the private sector (functionality, maintenance, and running repairs) to reduce its costs. Unfortunately, the state of the infrastructure does not make this option very attractive to private stakeholders.<sup>30</sup>

Both the negotiation of the State-ONAS Performance Contract in 2008 and the updating of the financial model drew attention to these issues, but the prospects for the future remain uncertain. Any significant increase in the sanitation surcharge charged to users is made difficult by the low capacity of the households to pay. Even if the development partners' contribution were to be increased (the management and absorption capacities of ONAS are continually improving), its Public Utility Company status (EPIC) prevents ONAS from taking out business loans and uncertainty over its future in the context of the on-going reforms is also a potentially limiting factor.

## **Notes and References**

- <sup>1</sup> Forecast of the average FCFA-US\$ exchange rate for the 2009–11 period, United Nations Operational Rates of Exchange.
- <sup>2</sup> The first round of CSOs was carried out in 2006 covering 16 countries and is summarized in the report, 'Getting Africa on-track to Meet the MDGs on Water and Sanitation'.
- <sup>3</sup> Sources: PEPAM Coordination Unit (Unité de Coordination du PEPAM, UCP. 2009. Rapport de la Revue Annuelle Conjointe du PEPAM, for the 2008 access rates; and Government of Senegal. 2006. DRSP2 2007-2010 for the 2015 targets. The same sources are used for Sections 7 to 10.
- <sup>4</sup> See UNICEF/WHO Joint Monitoring Program. 2010. Progress on Sanitation and Drinking Water: 2010 Update. The same source is used for Sections 7 to 10. The JMP estimates for Senegal are based on a linear regression of nationally representative household surveys that have been carried out by the National Agency for Statistics and Demography (ANSD) since 1986.
- <sup>5</sup> This standard in Senegal is 150 people served by a well, handpump or community connection; 300 people for a standpipe; 10 people for a household connection or household latrine.
- <sup>6</sup> Within this report, the term 'urban' relates to the scope of intervention of SONES (for water supply) and for ONAS (for sanitation); this is more limited than the administrative definition used by ANSD. The only exception relates to the JMP statistics that are based on the ANSD accepted meaning.
- <sup>7</sup> See UCP. 2010. Rapport de la Revue Annuelle Conjointe du PEPAM.
- <sup>8</sup> The totals have been rounded up.
- <sup>9</sup> The CSO2 scorecard methodology and its structure are detailed in the regional synthesis report.
- <sup>10</sup> World Bank Atlas Method.
- <sup>11</sup> The relevant indicators are as follows. All subsectors: targets in the national water supply and sanitation program or the CSLP; subsector policies/strategies agreed

and approved; RWS/UWS: institutional roles defined; RSH/ USH: institutional lead appointed.

- <sup>12</sup> In the initial contract, the scope of SONES (as well as that of SDE) included 56 urban centers (all of the main communes) and just under 300 villages mainly located near the pipelines. New centers were the focus of a study by SONES in 2008/2009 with a view to integrating these into its scope.
- <sup>13</sup> ONAS manages sanitation services in the following urban centers: Dakar, Pikine, Guédiawaye, Rufisque, Saint Louis, Kaolack, Thiès, Louga and Saly, to which M'Bour, Richard Toll, Touba, and potentially others will be added by 2015.
- <sup>14</sup> The relevant indicators are as follows. All subsectors: programmatic Sector-Wide Approach; investment program based on MDG needs assessment; sufficient finance to meet the MDG; percent of official donor commitments utilized; percent of domestic commitments utilized.
- <sup>15</sup> There is currently only one MTEF for RWS, developed in June 2010.
- <sup>16</sup> See Government of Senegal. 2010. Déclaration officielle pour la Réunion de Haut Niveau, Initiative Assainissement et Eau pour Tous, Washington, April 23, 2010.
- <sup>17</sup> A relatively common phenomenon in Francophone West Africa: exchange of technical or financial support between institutions of the global North and South, other than central governments.
- <sup>18</sup> The relevant indicators are as follows. All subsectors: annual review setting new undertakings; subsector spend identifiable in budget (UWS: including recurrent subsidies); budget comprehensively covers domestic/donor finance; standards and definitions used for household surveys consistent with JMP; RWS/RSH: domestic/donor expenditure reported; UWS: audited accounts and balance sheets from utilities; RWS/RSH: periodic analysis of equity criteria by CSOs and government; UWS: pro-poor plans developed and implemented by utilities; RWS/UWS: nationally consolidated reporting of output; RSH/USH: monitoring of quantity and quality of uptake relative to promotion and subsidy efforts.

- <sup>19</sup> See UCP. 2009. Rapport de la revue annuelle conjointe.
- <sup>20</sup> See UNICEF/WHO Joint Monitoring Program. 2010. Progress on Sanitation and Drinking Water: 2010 Update.
- <sup>21</sup> See UCP. 2010. Rapport de la revue annuelle conjointe, April 2010.
- <sup>22</sup> The Casamance Conflict has seen independence fighters wage low-level war against the government since the start of the 1980s. The area is still not totally secure today.
- <sup>23</sup> Government of Senegal. 2010. Déclaration officielle pour la Réunion de Haut Niveau, Initiative Assainissement et Eau pour Tous, Washington, April 23, 2010.
- <sup>24</sup> See UCP. 2009. Rapport de la revue annuelle conjointe, April 2009.
- <sup>25</sup> See SONES. 2008. Etude de ciblages des pauvres dans les branchements sociaux.
- <sup>26</sup> See UCP. 2010. Rapport de la revue annuelle conjointe, April 2010.

- <sup>27</sup> The main sources for this and the following two paragraphs: UCP (2009, 2010) Rapports de la revue annuelle conjointe 2009 and 2010; and (2009) Rapport d'avancement du PEPAM; SONES, SDE (2009, 2010) presentation of the annual activity reports during the joint sector review of 2009 and 2010; interview with the SONES Planning Director.
- <sup>28</sup> In practice, the fact that there have been no price increases since 2003 has led to this financial stability being eroded.
- <sup>29</sup> See Government of Senegal. 2009. Etude de la volonté de payer les services d'eau potable et d'assainissement et prévision de la demande en eau potable et en services d'assainissement sur le périmètre de l'hydraulique urbaine – rapport d'enquête. This study shows that, in reality, the social bracket benefits relatively richer households and that the poor fall into higher pricing brackets.
- <sup>30</sup> See Sanitation Directorate (DAS). 2010. Etude institutionnelle sur le secteur de l'assainissement urbain (version provisoire).

## Notes







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