



CALAVI- BENIN SLUDGE TREATMENT PLANT (STBV) © SONEB 2018

# WEST AFRICA MUNICIPAL WATER, SANITATION, AND HYGIENE ACTIVITY – USAID/MUNIWASH

## COST NEEDS ASSESSMENT FOR PLANNING WATER AND SANITATION INTERVENTIONS FOR MUNICIPALITIES IN BENIN

### DISCLAIMER

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## SUMMARY

In June 2020, the West Africa Municipal Water, Sanitation, and Hygiene (MuniWASH) Activity undertook a quantitative assessment of water and sanitation needs in 11 preselected municipalities in Benin. This assessment enabled USAID/MuniWASH to obtain cost data on needs for improved access to drinking water and sanitation services and select eight municipalities for the project's targeted interventions.

Using current municipal access rates and national access targets (100% water access and 75% sanitation access by 2025), USAID/MuniWASH quantified the demands to close the gaps. The funding requirements to extend water and sanitation service delivery to the entire population for the project's target municipalities, especially the poorest and most underserved, is approximately XOF 163 billion (the equivalent of \$ 292 million USD)<sup>1</sup>.

## BACKGROUND AND RATIONALE

USAID/MuniWASH is a water and sanitation project implemented in collaboration with the African Water Association (AfWA) and funded by the United States Agency for International Development (USAID). The project is working with municipalities in West Africa with a focus on Benin and Côte d'Ivoire.

After completing a consultation and selection process in Benin, the project chose the municipalities of Abomey-Calavi, Allada, Aplahoué, Avrankou, Bohicon, Cotonou, Ouidah and So-Ava for its geographic areas of intervention. In line with USAID/MuniWASH's objective to extend and provide water and sanitation services to the poorest and most underserved populations, the project team quantified the needs of the municipalities to achieve national objectives on the water and sanitation sector using a cost needs assessment to capture the infrastructure requirements for improved water and sanitation.

### Needs Assessment Approach in Benin

Benin's cost needs assessment is based on data provided by technical services (including eight municipalities, the National Statistics Institute, as well as ministries and national agencies<sup>2</sup>) in charge of water and sanitation coverage in USAID/MuniWASH target municipalities. From information on coverage and national targets, data was collected on projects for which funding is progress and/or finalized. The evaluation of the funding gap is based on reviewing a diverse set of technology solutions as options to fill the municipalities' needs. All the collected information was translated into investment costs based on population size projected over time to achieve the national targets.

### USAID/MuniWASH Key Findings

To effectively analyze the cost needs for water and sanitation, USAID/MuniWASH identified the coverage rates of the target municipalities' needs before estimating gaps to be filled in this sector. The Benin assessment also provided opportunities for future actions. The compiled data is summarized in Table 1.

Once water and sanitation access rates were compiled, the team used the following variables to measure municipal actions in service provision: existence of water and sanitation reference documents, presence of financial institutions in the municipality, and experience in financing water and sanitation. The team used three criteria (Non-existent, Expired,

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<sup>1</sup> The project estimated figures from data provided by different actors (local, national, and international).

<sup>2</sup> Ministère du Cadre de Vie et du Développement Durable du Bénin

Projet d'Approvisionnement en Eau potable en Milieu rural et d'Assainissement des Eaux Usées

Agence Nationale d'Approvisionnement en Eau Potable en Milieu Rural

Fond d'Appui au Développement des Municipalités

On-going) to measure each variable. The team also evaluated the potential of these municipalities to achieve the objectives.

All the municipalities included in the study have experience in developing and implementing service provision activities based on reference documents including communal development plans and multi-year water and sanitation action plans. Avrankou and Cotonou municipalities have on-going water projects and Abomey-Calavi, Bohicon, Cotonou, and Ouidah have on-going sanitation projects.

In terms of mobilized funding, water sector projects are underway in all communes except Avrankou and Cotonou. In the sanitation sector, only Ouidah, Cotonou, and Abomey-Calavi have not had any initiatives in the last two years. Possibilities for collaboration with financial institutions, particularly commercial banks, are greatest in Cotonou, Abomey-Calavi, and Aplahoue.

**TABLE 1: WATER AND SANITATION RATES (%) OF ACCESS IN THE TARGET MUNICIPALITIES**

	ABOMEY CALAVI	ALLA DA	OUI DAH	SO- AVA	APLA HOUE	COTO NOU	AVRAN KOU	SEME- KPODJI	BOHI CON
Water									
Global	49	67	53	89	37	86	39	68	60
Urban	43	25	43	6	15	100	49	70	47
Rural	6	41	11	83	23	0	31	69	13
Sanitation									
Global	53	12	37	3	15	74	16	50	21
Urban	82	19	58	4	24	74	19	70	35
Rural	28	7	20	1	10	0	11	30	14

*Source: Needs Assessment Report (USAID/MuniWASH, June 2020)*

In other municipalities, although banks are present, their insufficient numbers limit the possibilities for negotiation and competition to obtain attractive conditions for households and businesses to invest in water and sanitation infrastructure or equipment.

The cost needs for water and sanitation in the eight municipalities is summarized in Table 2 below. Cost needs for sanitation show a significant demand for toilets and a corresponding demand for vacuum trucks in the various municipalities.

Investment needs in the Benin water sector are based on the company project portfolio of the *Société Nationale des Eaux du Bénin (SONEB)*. The figures are consistent with the government's strategic vision. The total need for water and sanitation projects that cover USAID/MuniWASH municipalities is XOF 163 billion (\$ 292 million USD). These funds are needed to achieve water access in the eight target municipalities, with the largest components of funding required for Cotonou and Abomey-Calavi the two biggest municipalities in Benin.

**TABLE 2: SUMMARY OF COST NEEDS ASSESSMENT ON WATER AND SANITATION AND SANITATION**

Total Needs for the Eighth Municipalities in Bénin	Cost in XOF
<b>Sanitation</b>	
Cost of 54,548 Toilets/Latrines	58 530 000 102
Cost of 124 Trucks	5 580 991 660
Cost of the Treatment plants to be built	41 441 620 075
<b>TOTAL/Municipalities</b>	<b>73 895 383 429</b>
<b>Water</b>	
<b>TOTAL/Municipalities</b>	<b>89 500 000 000</b>
<b>TOTAL Sanitation and Water</b>	<b>163 395 383 429</b>

*Source: Costed Needs Assessment Report (USAID/MuniWASH, June 2020)*

## LESSONS LEARNED

USAID/MuniWASH started from the hypothesis that the water and sanitation cost needs assessments can assess municipalities' WASH planning and implementation capacity using the following key questions:

- What are the reference documents that guide water and sanitation service provision at the municipal level?
- What previous funding mobilization has been done to support improved water and sanitation access and what was its impact?
- Has there been any collaboration with commercial banks to finance water and sanitation sector? If so, how much funding was raised?
- How many poor and underserved populations were targeted by those investment and financial initiatives?

The team learned the following:

### Water and Sanitation Framework Document

Enhanced municipal planning capacity in drinking water supply and sanitation has enabled the municipalities to develop strategic actions to achieve the important objectives in this sector. By developing a framework document that is easily referenced, the municipalities can articulate their short- or medium-term strategic visions. However, along with such a document, they must update or define a new strategic direction before any investments are made.

### Experience in Mobilizing Funds

The water and sanitation cost needs assessment of the municipalities revealed that municipalities do not have enough experience to mobilize funds, and therefore, there is a need to use innovative forms of financing in view of the immense demand.

Promoting public-private partnerships could be a reliable alternative to traditional public sector funding. Prerequisites for implementing such a financing approach include an explicit definition of the roles and responsibilities of the different stakeholders (government services and private providers) as well as the choice of efficient, socially acceptable, and economically viable technology options.

## Presence of Commercial Banks

In medium-sized municipalities in Benin, the possibilities of collaboration with commercial banks are limited. Generally, there is only one commercial bank in these localities. It would be appropriate for WASH projects interested in financing water and sanitation infrastructures or equipment to consider different financing models (community, lines of credit, or other models) that facilitate investments. This may reduce the risks of potentially coercive conditions from a single funding actor in reference.

## Cost Needs for Underserved Populations

Infrastructure investment and financing initiatives typically have not targeted the poor and underserved. Despite the challenge of raising funds for this segment of the population, there is an opportunity to establish sustainable infrastructure for the benefit of poor and underserved. In USAID/MuniWASH's target municipalities, investment needs for the water and sanitation sector inclusive of underserved populations are estimated at around XOF 163 billion (\$ 292 million UDS).

## CONCLUSION

In Benin, the cost needs assessment of water and sanitation enabled USAID/MuniWASH to determine the investment costs necessary to cover needs in this sector in eight municipalities. To reach the objective of 100% coverage in water and 75% coverage in sanitation, it will be necessary to mobilize approximately XOF 163 billion (\$ 292 million UDS) for the municipalities of Abomey-Calavi, Allada, Aplahoué, Avrankou, Bohicon, Cotonou, Ouidah and So-Ava by 2025. USAID/MuniWASH's efforts to extend the provision of water and sanitation services is an opportunity to reach poor and underserved populations.

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