



# UNLOCKING SUSTAINABLE FINANCE SOLUTIONS

## ETHIOPIA'S WASH FINANCE STRATEGY BRIEF

This policy brief offers a quick overview of the second version of Ethiopia's WASH Finance Strategy updated in June 2024. While it provides key insights, readers are encouraged to review the full Strategy for a comprehensive understanding of its conceptual model and approaches for implementation.

The WASH Finance Strategy offers an insightful perspective on the financial landscape of Water, Sanitation, and Hygiene (WASH) initiatives in Ethiopia.

Drawing upon international experience, key informant interviews, quantitative analysis utilising financial and economic models, and validation workshops with key stakeholders in 2022 and 2023, the strategy aims to maximise domestic resource mobilisation for WASH. It does so by exploring avenues such as expanding public funding, attracting additional financing, diversifying domestic finance, and promoting innovation. Furthermore, foundational issues critical for securing additional funds, including tariff optimisation, effective regulation, and robust accountability mechanisms, are highlighted for attention and action. In essence, the strategy emphasises the imperative of not only securing adequate financing, but also of embracing an inclusive approach to achieving universal access to WASH services in Ethiopia. The strategy delineates

the challenges, while presenting plausible solutions within the sector's financial landscape.

### WASH expenditure overview in Ethiopia

Over the six-year analysis period (2015/16 - 2020/21 G.C.), annual WASH expenditure exhibited a nominal increase **from ETB 43.7 billion (US\$ 795 million) in 2015/2016 to ETB 54.9 billion (US\$ 998 million) in 2020/2021**. However, in real terms (nominal values adjusted for inflation), it has shown substantial decreases, at an annual average of ETB 16.8 billion (US\$ 600 million).

Total government expenditure across all sectors in Ethiopia during the same six-year period amounted to an annual average of ETB 408 billion (US<sup>1</sup>\$ 14.6 billion). In contrast, total government WASH expenditure stood at ETB 10.4 billion (US\$ 373 million), constituting 2.6% of total government expenditure and approximately 0.42% of Gross Domestic Product (GDP). This falls notably below the benchmark of at least 4.86<sup>2</sup> of GDP required to achieve SDG 6 targets for SSA.

A detailed analysis of the WASH expenditure trend revealed that the primary source of funding for the WASH sector is government treasury revenue, mainly from taxes, accounting for approximately 43% of total WASH expenditure. Tariffs for service provision constituted the second most significant

<sup>1</sup> Average exchange rate from 2015 to 2021: 1USD =28 ETB, from National Bank of Ethiopia

<sup>2</sup> George Joseph; Hoo, Yi Rong; Wang, Qiao; Bahuguna, Aroha; Andres, Luis Alberto. Funding a Water-Secure Future: An Assessment of Global Public Spending (English). Washington, D.C.: World Bank Group

source of domestic funding, contributing about 11% based on available data, with an estimated 4% coming from direct community contributions.

Development partners also play a substantial role in WASH sector funding through grants and loans. The annual average expenditure share of development are 22.6% and 19.4% for grant and loan respectively.

The allocation of resources within the WASH sector is significantly skewed towards capital expenditure (CapEx), accounting for 79% of total expenditure, while recurrent expenditure makes up only 21%. The WASH expenditure could not be further disaggregated due to the structure of the government finance system chart of accounts. However, the imbalanced resource allocation

towards CapEx jeopardises the sustainability of investments in WASH, as it provides inadequate budget for maintenance costs. The heavy focus on capital investment in the WASH sector comes at the expense of post-construction expenses, posing a threat to sustainability. Despite the Ethiopia Water Policy's assumption that tariffs could cover operation and maintenance costs in rural cases and ensure full cost recovery for urban utilities, this is not the case in practice.

Furthermore, there is a significant disparity in financial allocations between rural and urban areas, with 11% of expenditure allocated to rural WASH, 77% to urban WASH, and 12% for program support in both rural and urban areas.

## Challenges that prevent finance from flowing to the WASH sector

A systems approach has been employed to analyse the ten critical foundations necessary for finance to effectively attract and mobilise additional financial resources for the WASH sector, addressing both the supply and demand aspects of funding.

Ethiopia's goal of achieving universal water supply access by 2030 is hampered by significant financial, capacity and other challenges stemming from the following issues:

- Inadequate tariff setting practices and economic regulation, especially in the context of urban sanitation, but also for rural and urban water services.
- Unclear mandates and responsibilities of service providers, notably in rural water supply, which affects the accountability of woredas and WASH Committees (Community-level WASHCos) for ensuring the sustainability of water service provision.
- Business plan development by urban water utilities is a common practice in Ethiopia; however, it is often inadequately executed, and actual practices may not align with the prepared business plans.
- The WASH sector in Ethiopia faces limited participation from commercial banks as suppliers of finance.

- The quasi-monopoly held by state service providers in both urban and rural areas creates market distortions by hindering the entry of private operators.
- Loans disbursed by the Water Development Fund are often not repaid in a timely manner by utilities, and there is a lack of enforcement mechanisms, either by the utilities themselves or by the guarantors/regional states, to ensure the repayment of outstanding loans.

The finance strategy options and the proposed implementation plan aim to address some of these challenges and provide solutions to improve the financial landscape of the WASH sector in Ethiopia.

### The Finance Gap

Ethiopia's WASH Ten-year National Strategic Development Plan for the period 2021-2030 estimates that an annual average investment of ETB 50 billion (equivalent to US\$<sup>3</sup> 0.91 billion) will be required. However, this estimate did not incorporate the life-cycle cost approach and primarily excluded post-construction costs. When the life-cycle costs for rural and urban water are factored in, **the annual funding requirements increase to ETB 91.9 billion (approximately US\$ 1.67 billion)**. However, including the Sanitation related costs from the Ten-

<sup>3</sup> Exchange rate, 1 US\$=55 ETB, the 2024 average exchange rate

year MoWE plan and Total Sanitation to End Open Defecation and Urination (TSEDU) Ethiopia estimated cost, the total annual average required investment is closer to ETB 114.6 billion ( US\$2.1 billion)

Based on the WASH expenditure trend analysis, assuming that the annual resource projection for the WASH sector over the next ten years averages ETB

49.4 billion per year (around US\$ 898 million) under a business-as-usual approach, **there remains a substantial funding gap of ETB 65.2 billion per year (equivalent to US\$ 1.19 billion)**. This gap highlights the significant financial challenge that must be addressed to meet the objectives of the WASH sector's development plan.

**Summary Annual Finance Gap Estimates updated June 2024**

Source	Estimates for required annual investments (ETB billion)	Estimated annual expenditure in the sector for available resource projection (ETB billion)	Annual finance gap ranges (ETB billion)
WASH Ten-year National Strategic Development Plan (water and sanitation)	50	49.4	0.6
Life-cycle costs for rural and urban water done for this strategy	91.9		42.5
Total WASH costs including sanitation cost from the MoWE Ten-years Strategy Plan and TSEDU Ethiopia cost	114.6		65.2

**Main Sources of Additional Finance for WASH**

Several assessments have been undertaken to explore potential strategies for generating sustainable domestic funding to WASH services in Ethiopia. The analysis has identified a range of domestic finance options and estimated their potential for generating revenue, taking into account various assumptions and estimates.

The total resource mobilisation potential from all the considered sources varies, **ranging from a**

**conservative estimate of ETB 30.6 billion (approximately US\$ 498 million) to a more optimistic projection of ETB 70.1 billion (equivalent to US\$ 1.27 billion) annually.** This suggests that a significant portion of the financing gap can be addressed through these potential sources. However, to cover the full life-cycle costs necessary to meet the 2030 targets, substantial efforts will be required to secure additional annual funds.

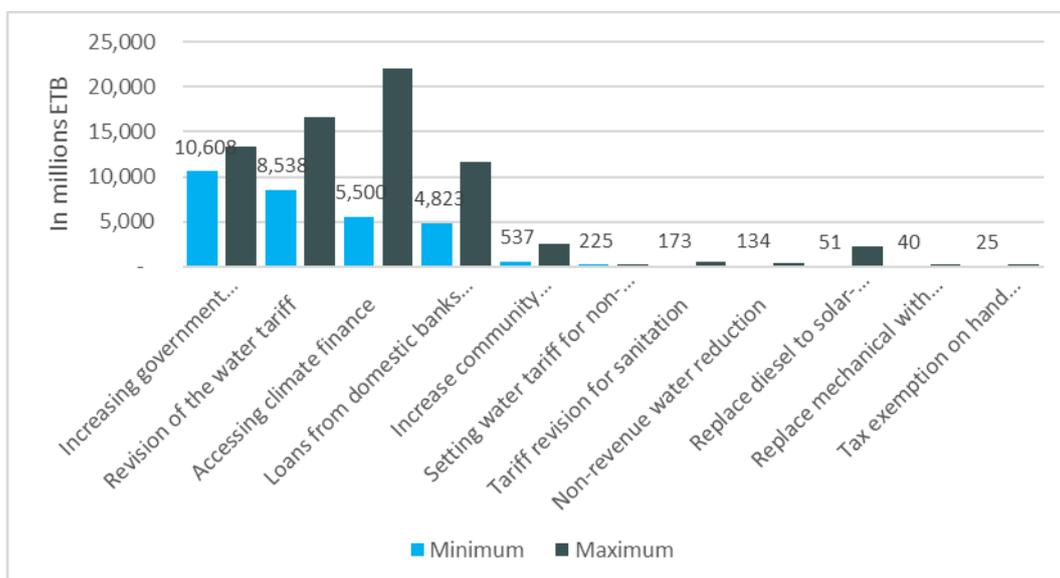


Chart 1 Summary of additional revenue that can be mobilised or saved annually from WASH finance options

## Revision of the Water Tariffs

Currently, many water and sanitation service providers in Ethiopia charge tariffs that fall short of covering even the basic maintenance costs of water and sanitation infrastructure. These tariffs are also inequitable, as they subsidise consumers who can afford higher rates, thereby hindering the expansion of services to those who are still without access. Increasing tariffs represents the most significant and relevant source of additional funds. An essential aspect of the strategy revolves around promoting equitable WASH services, particularly for marginalised groups like women, girls, the elderly, and persons with disabilities. This entails identifying who is being left behind and the reasons for it, while simultaneously enhancing the capacity of service providers and woredas to address these disparities and ultimately ensure targeted subsidies.

The adjustment of water tariffs to at least cover the costs of minor maintenance of water supply infrastructure, while remaining affordable to consumers, presents a promising option with the potential to generate substantial annual revenue. This adjustment can cater to a wide range of consumer categories, including urban, rural, and high-water usage segments. Proper tariff setting emerges as a crucial element in ensuring the financial sustainability of service providers and equitable access to services.

Potential resources derived from water tariff adjustments at the national level, encompassing both urban and rural consumers by the year 2025, can mobilise an estimated range of ETB 8.6 billion, with ambitious scenarios possibly raising revenues to ETB 16.6 billion.

## Accessing Climate Finance

Climate finance presents a unique opportunity to provide crucial support to the water and sanitation sector, enabling it to adapt to the impacts of climate change and reduce greenhouse gas (GHG) emissions. Within Ethiopia's Nationally Determined Contributions (NDCs), the budget allocation for "water, irrigation, and energy," covering power generation, energy access, irrigated agriculture, access to WASH, cross-cutting issues, and capital

investment, has been estimated at approximately US\$ 24.4 billion.

According to Ethiopia's NDC commitments, 20% of this funding is expected to come from the Ethiopian government, with the remaining 80% anticipated to be provided by climate funds. Consequently, the WASH sector has the potential to attract between US\$ 1 billion and 4 billion over a 10-year period, translating to an annual range of ETB 5.5 billion to 22 billion from climate financiers. However, realising this potential is contingent upon meeting several conditions, including effective implementation of the NDC implementation plan, building local capacity to design projects, submitting proposals to climate financiers, and possessing strong negotiation and advocacy capabilities.



*The extent of flood risk and damage to water pipelines of Mugwayn-Fiq-Hamaro Multi-Village Scheme, Somali Region (August 2023). The pipelines are likely to be washed away during the next heavy flooding event if urgent measures are not taken to protect them. Climate finance is needed to implement protective measures to improve resilience.*



## Increasing Government Budget Allocation to WASH

Increasing the government's budget allocation to the WASH sector, even through incremental steps, represents a crucial means of securing additional funding. Given the government's expenditure projections, a conservative estimate for the WASH sector indicates a potential annual allocation

ranging from ETB 10.6 billion to ETB 13.4 billion. However, it's essential that this allocation is accompanied by timely budget disbursement and effective expenditure at all administrative levels to maximise its impact.

### **Mobilising Repayable Finance through Domestic Banks and Microfinance Institutions**

Encouraging Ethiopian commercial banks, both public and private, to dedicate a portion of their loan portfolios to the WASH sector and harnessing funds from microfinance institutions offers a promising avenue for stimulating investment by small and medium-sized businesses in WASH infrastructure. Additionally, this approach can facilitate the provision of microloans to households, enabling them to access WASH services. In essence, creating a local market for WASH can generate significant resources, ranging from ETB 4.8 billion to a potential annual total of up to ETB 11.6 billion.

### **Increasing Community Contributions to the Sector**

Gradually increasing community contributions for rural WASH investments has the potential to mobilise additional resources, with estimated annual amounts ranging from ETB 537 million to ETB 2.5 billion.

### **Replacing Diesel with Solar-Powered Water Pumps**

Replacing a portion of motorised rural pipe systems (RPS) with solar-powered pumps offers the prospect of substantial savings from ETB 51 million up to ETB 2.2 billion.

### **Setting Sanitation Tariffs**

Introducing tariffs for sanitation services, covering effluent collection, treatment, and disposal, is a crucial step in financing the sanitation service chain. These tariffs can play a significant role in covering operational expenses, which are expected to vary from ETB 173 million to ETB 536 million annually. The specific amount depends on the chosen wastewater treatment scenarios for each year.

### **Non-Revenue Water Reduction**

Implementing measures to reduce Non-Revenue Water (NRW) can result in significant cost savings for

water utilities. Even a modest 2% reduction in NRW can lead to annual total savings of ETB 167 million. When factoring in the costs required to achieve these NRW reductions, there is still a net saving of ETB 134 million.

### **Setting Water Tariffs for Breweries, Beverage and Bottling Companies**

As part of tariff revisions, a targeted approach involving proportional payment by industries with high water usage is being considered. Implementing water tariffs on beverage and bottling companies, including breweries and bottled water producers, presents a promising source of revenue. For example, levying a portion of the non-domestic tariff rate for water usage by these industries could potentially generate annual revenues in the range of ETB 200-300 million.

### **Tax Exemption on Hand Pumps**

Eliminating specific taxes, such as customs duty, VAT, surtax, and withholding tax on hand pumps, has the potential to generate cost savings for the sector, ranging from ETB 25 million to ETB 199 million per year. This action can significantly contribute to meeting the budget requirements for rural water services.

### **Replacing Mechanical with Smart Water Meters for Increased Billing**

To estimate potential cost savings resulting from the adoption of smart water meters, two scenarios were considered. In Scenario 1, the focus was solely on the top ten highest non-domestic water consumers among the 980 utilities. After accounting for all installation costs, this scenario is projected to yield an additional annual revenue of ETB 40 million. On the other hand, Scenario 2, which encompasses all customers of level 1, including 23 utilities, with their mechanical water meters being replaced by digital smart meters, is expected to generate an additional ETB 276.3 million in annual revenue.

### **Additional Measures for Domestic Finance for WASH**

The Strategy emphasises **the importance of implementing additional measures** to further strengthen the sustainability of the WASH sector. These measures include establishing asset

management mechanisms, which are crucial for improved maintenance and reducing NRW; enhancing the creditworthiness of service providers through performance-based mechanisms; improving the capacity and accountability of the Water Development Fund; facilitating access to foreign exchange; and fostering private sector involvement, especially within the sanitation value chain. While these measures cannot be precisely costed, they hold the potential to attract more funds to the sector and optimise the utilisation of existing resources.

**In summary, this Strategy identifies a range of domestic finance options with the potential to generate significant revenue for Ethiopia's WASH sector. When effectively implemented, these measures can contribute to the goal of improving access to safe water, sanitation facilities, and hygiene practices, thereby advancing the nation's development and overall well-being by 2030.**

### WASH Finance Strategy Implementation Plan

In conclusion, the WASH Finance Strategy Implementation Plan stands as a significant milestone in realising the vision of sustainable and

robust domestic financing for WASH services in Ethiopia.

It revolves around three strategic directions:

1. **Enhancing Efficiency and Reducing Costs:** Focusing on sustainability by identifying means to reduce costs and enhance operational efficiency.
2. **Expanding Funding Sources:** Exploring various avenues to broaden the funding base for WASH initiatives.
3. **Diversifying Financing Sources (Repayable Finance):** Aiming to diversify the financial portfolio of the sector, ensuring its resilience and self-reliance.

The Implementation Plan outlines the specific actions, initiatives, and activities necessary to achieve these strategic finance objectives. Each strategic direction is accompanied by well-defined initiatives, each with a timeline and a set of prerequisites, which encompass capacity development, legal considerations, budget allocation, institutional arrangements, assumptions, risk assessments, and a monitoring and evaluation framework, all of which are essential components for the successful realisation of the WASH financing strategy.



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