National endeavours and setbacks on enhancing rural water supply operation and maintenance through key actors’ engagement in Ethiopia

Briefing note

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Contents

ISSUES AND CHALLENGES TO RURAL WATER SUPPLY OPERATION AND MAINTENANCE ....................... 3
BACKGROUND .................................................................................................................. 3
EFFORTS TOWARDS SOLUTIONS ................................................................................... 4
CONCLUSIONS AND RECOMMENDATIONS ........................................................................ 5
### Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EWTI</td>
<td>Ethiopian Water Technology Institute</td>
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<tr>
<td>PLSP</td>
<td>Private Local Service Provider</td>
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<td>WASH</td>
<td>Water, Sanitation and Hygiene</td>
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<td>WASHCO</td>
<td>Water, Sanitation and Hygiene Committee</td>
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<td>WDC</td>
<td>Water Development Commission</td>
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<td>WUA</td>
<td>Water User Associations</td>
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<td>WRM</td>
<td>Water Resource Management</td>
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Issues and challenges to rural water supply operation and maintenance

Rural water supply management, particularly operation and maintenance, has been one of the key challenges to sustain water supply services despite efforts by different WASH actors in Ethiopia. The non-functionality rate is estimated to average 19% with regional disparity ranging from 17.5% in Oromia to 48.4% in Somali according to 2019 National WASH Inventory II data (Draft Report on National WASH Inventory II & MIS, 2021). The lack of spare parts followed by water sources drying up and inadequate staffing and skills are the leading reasons for over half of the non-functionality. Though there has been some progress in reducing non-functionality of rural water supply from 25% to 19% from 2011 to 2019, the non-functionality rate is still high. Similarly average down time, the time between water scheme failure and maintenance, is over twenty days.

Different initiatives such as engaging and capacitating private service providers to provide spare parts and maintenance, recruiting water extension workers at the kebele (sub-woreda) level, institutional setup at the community level including the establishment and the legalization of WASHCOs (community representatives), the establishment of regional asset management systems (e.g., Afar Region), institutional capacity building through training and supplies, and facilitating access to loans have not brought much change. Some of the key reasons for slow progress towards effective and efficient operation and maintenance arrangements are lack of complementarity efforts/interventions and the lack of coordination at different levels of government. Interventions are projectized and time-bound, therefore ending before the maintenance system is sustained without external support. Any subsequent interventions rarely capitalize on the preceding interventions geographically.

Overall, a lack of clear understanding on which maintenance arrangements or models work best in rural water scheme management, weak capacity, and poor familiarization of the national policy and strategies are the key issues in sustaining rural water supply services in Ethiopia. Providing first-time access to rural water supply services is a huge challenge, and sustaining the availed services is another challenge that goes well beyond existing coordination and capacity.

Background

The number of rural water supply schemes in Ethiopia is increasing. A conservative estimate puts the total number of schemes at 200,000. Most of the rural water supply management is done by volunteer community representatives through volunteer committees called WASHCOs. These volunteers are not well trained for water supply service management.

Beyond more and more schemes being added, the ever-changing technology from simple hand pumps to submersible pumps, solar panels, and mechanical and digital generator set go beyond the technical capacity of community volunteers and caretakers.

Unfortunately, the decentralized water sector has limited maintenance staff, skills, and resources such as maintenance hand tools, budget, and transport to provide follow-up support and maintenance services to communities. Some woredas may have upwards of 1500 schemes, far too many for an understaffed woreda water office to support. Often, only 50% or fewer of the required woreda staff
for maintenance support are contracted, and woredas are constantly under finance stress due to under budgeting.

By recognizing the rural water supply management issues, government and key WASH actors have agreed to find solutions such as engaging private service providers, utilizing rural water supply services, setting up revolving funds for spare parts supply, and legalizing WASHCOs. All these proposed solutions are still at a pilot stage, have a fragmented approach, lack complementarity activities, and have no continuity beyond projects. Some initiatives are also in a silo, lacking communications among actors and creating duplication of efforts. Others lack continuity due to the project-based intervention design and planning and are vulnerable to slippage before their maturity due to lack of follow up support after a project’s duration. Furthermore, some initiatives lack completeness in terms of packaging support (designing activities that go together) and, hence, miss the balance among demand from the community, supply by service providers, and enablers such as policy, regulations, and capacity of service authorities.

**Efforts towards solutions**

Since 2018, the National Initiative on Strengthening Water Supply System Management has been an initiative to facilitate and support a national platform on strengthening rural water supply operation and maintenance led by the Ministry of Water and Energy (MOWE) and supported by development partners such as IRC WASH, SNV, COWASH, USAID and UNICEF. This initiative has been convening, facilitating, and supporting different regular and ad-hoc rural water strengthening related events. The purpose of the initiative is to encourage learning, coordination, and advocacy for improved attention and resources for rural water supply operation and maintenance. Some of the activities the initiative has undertaken so far include:

1. Organizing learning visits for government representatives and key partners
2. Convening policy dialogue among policy makers between Uganda and Ethiopia
3. Facilitating regular meetings at national level involving key national government and development actors
4. Participation and presentation on different national and regional maintenance related events
5. Supported and presented at national maintenance workshop in January 2021 organized by the Water Development Commission (WDC)
6. Created a virtual Telegram group to connect key actors on rural water supply operation and maintenance
7. Facilitated and supported Afar Region maintenance strategy development workshop in March 2021
8. Shared learning on spare part supply, engaging private maintenance service providers, and access to loans for maintenance service providers

Some of the initiatives currently undertaken in the country include a pilot on sustaining rural water services through the engagement of Small and Micro Enterprises by MOWE in 40+ woredas, an initiative by SNV, in collaboration with the Tigray Regional Water Bureau, on engaging private local service providers (PLSPs), town water utility based spare part supply in SNNPR, a revolving fund based spare part supply in Tigray Region, piloting private service providers and enhancing WASHCOs/WUAs and caretakers by USAID Sustainable WASH Learning Partnership, piloting rural water utilities for multi-village schemes by UNICEF in collaboration with MOWE, the Ethiopian Water Technology...
Institute (EWTI), and other partners, issuing proclamations, directives, and guidelines by regions towards WASHCO legalization in Amhara, Oromia, SNNPR, Afar and Benishangul-Gumuz, recruiting kebele water extension workers in Tigray and Benishangul-Gumuz, the development of an operation and maintenance strategy framework and subsequent manuals by MOWE, restructuring of the water sector starting from the federal to the woreda level by establishing the Water Supply & Sanitation Infrastructure Administration Directorate, and the ongoing water resource management (WRM) policy revision.

Since harmonizing and integrating these different efforts are critical, with MOWE’s, an implementation guideline on rural water supply system management has been worked on at the national level. This guideline is intended to guide every actor working towards strengthening operation and maintenance of rural water supplies with flexibility to accommodate context specific interventions (i.e., geography, technology, socio-economic conditions, etc.).

Conclusions and recommendations

- Due to the multi-faceted nature of the rural water supply services problems, the entry point for the solutions needs to be scanned wisely. Having the right (dedicated) institutional arrangement with the right capacity, including staffing (number of schemes vis-a-vis exiting staff in woreda), skills, and resources (budget) at all levels (national to woreda) is the foundation for every effort to sustain and replicate improving rural water operation and maintenance.

- Coordinate the different initiatives on strengthening rural water supply operation and maintenance is critical for learning and minimizes duplication of effort. Any initiative needs to scan the existing initiatives and should be designed in a complementary way both in terms of intervention and geographic location. Strengthen at least regional and national coordination and learning platforms/networks of actors in line with rural water supply maintenance, management, and sustainability.

- Professionalize rural water supply maintenance through enforcing WASHCO legalization for point sources and rural utilities for multi-village schemes is the direction the sector needs to head towards. Professionalized maintenance services may also require more service charges than what communities/users are currently paying for water services and could even be beyond the affordability of communities. Hence, subsidy or facilitating loans is an area to be looked at to not compromise equity and demand for improved services due inability to pay.

- Provide continuous support and coaching to legalized WASHCOs, WUAs, unions, and federations until they properly take off to support improved services is needed. Note that the arrangement and the name of the legalized entity to govern schemes vary from region to region. For example, in SNNPR they are WUAs and federations, while in Oromia they are associations, unions and federations.

- Properly document and share best practices.

- Design interventions beyond engaging the private sector, but also on how to sustain them in the business including business diversification, economy of scale, etc.

- Avoid implementation disparity among different WASH actors. For example, the free provision of maintenance services and spare parts that distort a market for business service providers needs to be avoided.

- Maintain two-way communication from woreda through regional and national levels with a focus on how to sustain rural water services through improved maintenance arrangements.