


Reaching for the SDGs

The Untapped Potential of Tanzania's Water Supply, Sanitation, and Hygiene Sector

Executive Summary

TANZANIA



The background of the page features a series of overlapping, wavy, translucent blue bands that create a sense of movement and depth. The colors range from a light, airy blue to a slightly darker, more saturated blue, with the bands curving and flowing across the page.

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Abbreviations

BCC	behavioral change communications
B40	bottom 40 percent of the wealth distribution
CBO	community-based organization
COWSO	community-owned water supply organization
DAWASCO	Dar es Salaam Water and Sewerage Corporation
DHS	Demographic and Health Survey
EAC	East African community
JMP	Joint Monitoring Programme
MDG	Millennium Development Goal
MKUKUTA	Tanzania's National Strategy for Growth and Reduction of Poverty
NGO	non-governmental organization
SDG	Sustainable Development Goal
TASF	Tanzania Social Fund
T60	top 60 percent of the wealth distribution
TWPD	Tanzania WASH Poverty Diagnostic
WASH	water supply, sanitation, and hygiene
WSDP	Water Sector Development Program
WSS	water supply and sanitation

Tanzanian WASH Sector at a Glance

Access to safe, functional, and improved water points remains too low.



Only **60%** of Tanzanians get their drinking water from an improved source.

In 2016, **40%** of water points were reportedly **non-functional**, with many failing in the first year after construction.

About **two-thirds** of all piped water users in urban areas reported that they were **unable to access water** for at least one day in the previous two weeks.

The sanitation sector achieved gains in coverage in recent years, but still has a long road ahead.



Though almost all Tanzanians practice fixed-point defecation, over **80%** of rural Tanzanians rely on **rudimentary, unimproved sanitation** facilities.

In urban areas, despite a **13%** increase in total improved sanitation, overall coverage of sewerage networks remains **low** with less than **2%** coverage in 2016.

Hygiene promotion and WASH in schools and hospitals remain neglected goals.



About **22%** of households and **75%** of schools lack a functional hand-washing facility with available soap and water.

Over **half** of health facilities report routine water shortages, which can interfere with hygienic care.

Rurality and wealth have a notable impact on access to WASH services.



Rurality explains **45%** of lack of access to improved water, while poorer wealth status explains **50%** of lack of improved sanitation access.

Only **13%** of the population practices open defecation. However, of those, **75%** are in the **B40** of the wealth distribution.

Poor WASH undermines public health and human development.



Waterborne diseases stemming from poor WASH are an issue of concern. In 2017 some **4,985** cholera cases, including **99** deaths, were reported in Tanzania Mainland and Zanzibar.

Lack of WASH can interrupt healthy childhood development by increasing risk of enteric infections and reducing retention and absorption of essential nutrients. In Tanzania, **35%** of children under age five are stunted.

Executive Summary

Tanzania is the fourth most populous country in Sub-Saharan Africa, home to more than 55.6 million people.¹ The country's macroeconomic outlook is positive, with GDP growth of 6.5 percent per annum over the past fifteen years and significant reductions in poverty since 2007.

Despite this progress, 40 percent of its population, some 21 million people, lack access to improved drinking water and more than double that figure, almost 43 million people, lack access to improved sanitation. The country recently fell a long way short of reaching its Millennium Development Goal (MDG) targets for water and sanitation, which was “to halve the proportion of people without improved drinking water and sanitation in 1990 by 2015.” Now, the new Sustainable Development Goals (SDG) aim to reach *universal* access to safe water and sanitation by 2030, an aspiration that appears even more daunting.

“Reaching for the SDGs: The Untapped Potential of Water Supply, Sanitation, and Hygiene in Tanzania” is a summary report of the findings of the Tanzania WASH Poverty Diagnostic (TWPD) study led by the World Bank’s Water and Poverty Global Practices team. TWPD identifies the nature of challenges of water supply, sanitation, and hygiene (WASH) access in Tanzania and proposes ways to prioritize those challenges in moving forward to meet the new SDGs. It concludes that WASH must improve not only for the sake of the sector itself, but also because of the broader knock-on effects that it has on crucial dimensions of human development and poverty reduction.

TWPD discusses the country's current development and poverty context before moving on to the ways in which poverty and WASH overlap. It then examines the different dimensions of WASH deficiencies in the country, and how these differ along economic and geographic lines. Next, it delves into specific linkages between WASH and human development, with a focus on stunting—a nutrition issue of immense importance in the Tanzanian context. It then provides an overview of the bottlenecks in the institutional and policy context that thus far have been constraining greater progress in the sector. Finally, the report offers recommendations on how to speed progress toward national and global objectives with a focus on the bottom 40% of the wealth distribution (B40).

This Executive Summary provides an overview of the key messages and recommendations of the work conducted.

Key Messages

Message 1: Tanzania Faces Ambitious SDG Targets for Water and Sanitation against a Backdrop of Low Coverage and Slow Progress during the MDG Era

The SDGs call for universal access to safely managed water and sanitation by 2030. Beyond providing technologically improved water and sanitation facilities, the country will also need to meet rigorous standards on service quality. For instance, to have safely managed water, a household must have access to a technologically improved water source that is on premise and delivers uninterrupted and clean water, free of chemical and bacterial contaminants. To meet the sanitation target, a household will need an unshared, improved sanitation facility that has regular fecal sludge management and is equipped with a handwashing station with available soap and water (JMP 2017).

However, Tanzania's performance during the MDG period sets a difficult task for meeting the ambitious SDGs. Globally, Tanzania is among the 17 countries that could not meet the water

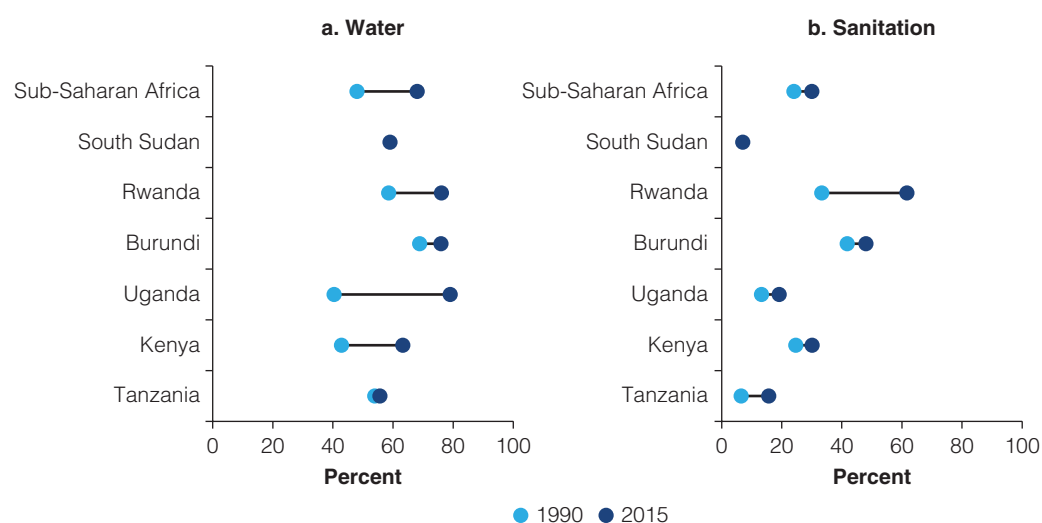
target and among the 69 that missed the sanitation target. Compared to its East African neighbors and the Sub-Saharan region, Tanzania had the smallest gains in improved water coverage during the MDG period and, despite making progress in sanitation, had the second-worst improved sanitation coverage (figures ES.1a and ES.1b). Tanzania is the second-largest economy in the East African Community (EAC) and has comparative advantages that could support strong economic growth: it is a resource-rich coastal hub and has good demographic dividends and political stability. Its shortcomings in the water and sanitation sector are somewhat surprising. Slow progress during the MDG era may make the SDG targets seem out of reach, but now the country has the opportunity to revise and revitalize efforts to ensure that all Tanzanians live in a safe WASH environment that bolsters their quality of life.

Message 2: Improved Water Services Are Largely Underdeveloped for Rural Dwellers and Unreliable for Too Many Urban Inhabitants

National improved water coverage is only 60 percent, meaning that some 21 million people lack access to a water source that is built with technology that prevents contaminants from entering the system. (See figure ES.2.) Rural areas have the worst improved water coverage—48 percent compared to 87 percent in urban areas. Many rural Tanzanians instead rely on traditional open-dug wells (24 percent) or surface water (18 percent). In urban areas, people who cannot access tap or borehole water may turn instead to costly, informal tanker trucks or water vendors.

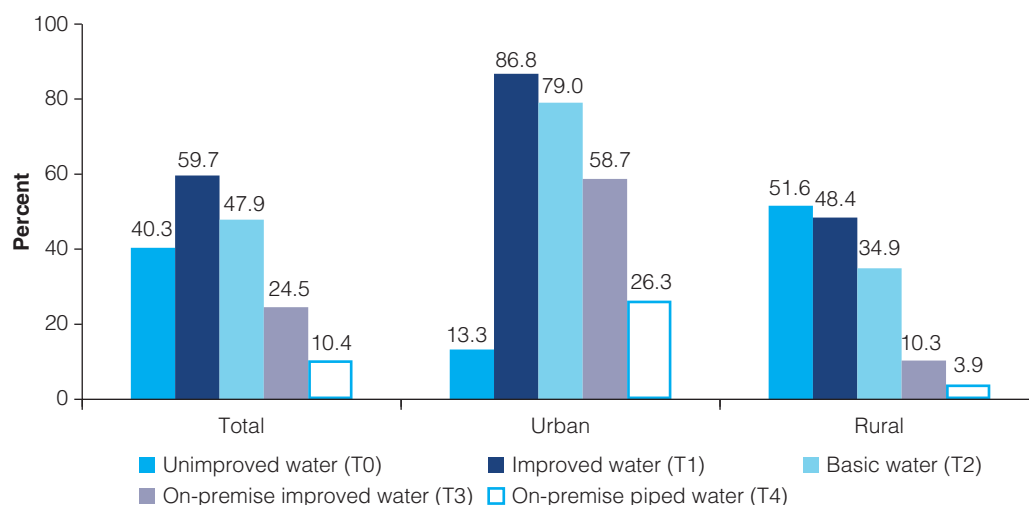
Furthermore, just 48 percent of the population has access to an improved water source that has a collection time of 30 minutes or less, and only about 25 percent have access to a water source on their household premises. Without proximal access to an improved source, many Tanzanians, particularly rural women, must travel long distances to retrieve water for drinking and other domestic needs, taking away valuable time from productive activities. On average, Tanzanians spend 36 minutes per trip to collect water. Assuming that water collection is a daily activity, with at least two trips per day, a household on average devotes more than eight hours per week to collecting water.

Figure ES.1: Changes in Access to Improved Water and Sanitation in the East African Community and Sub-Saharan Africa, 1990 and 2015



Source: World Development Indicators (database) 2017. <http://databank.worldbank.org/data/home.aspx>.

Figure ES.2: National, Urban, and Rural Water Access, by Tiers of Service



Source: DHS 2016.

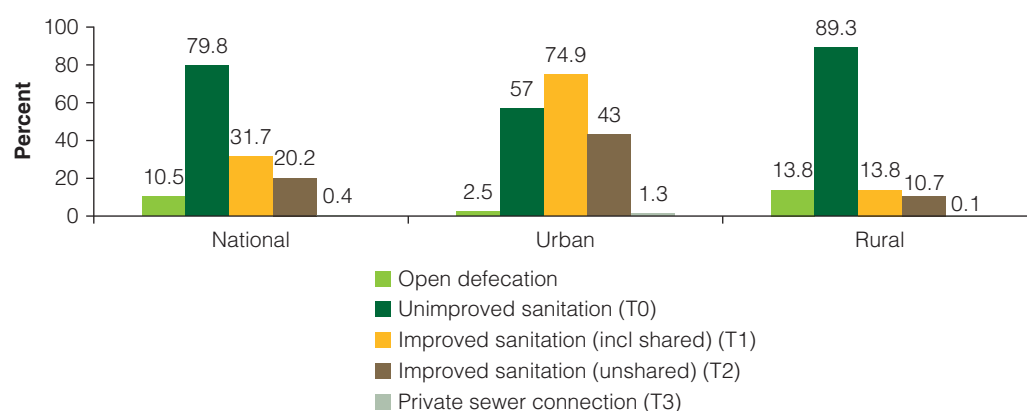
Note: Box ES.1 provides a full explanation of JMP definitions on tiers of service for water and sanitation.

Though urban dwellers tend to have better access to improved water services close to their homes, they too face challenges of unreliable service, high dependence on informal providers, and low water quality. For instance, two-thirds of piped water users report an interruption in service at least once every two weeks. These problems stem from financial and service delivery problems at the urban utilities. For example, DAWASCO, Dar es Salaam’s utility, suffers from high rates of non-revenue water, consistently exceeding 50 percent over the past three years. Figures like these may reduce the utilities’ ability to invest in expanding and improving services for the sprawling urban population. In Dar es Salaam, 18 percent of the bottom 40 rely on informal tanker trucks.

Message 3: The Longstanding Neglect of Sanitation Leaves 80 Percent of the Population Relying on Rudimentary and Unsafe Facilities

Improved sanitation reaches a mere 20 percent of the population nationwide (figure ES.3), meaning that the vast majority of Tanzanians, some 43 million people, are relying on rudimentary, unimproved facilities. At the same time, there are pockets of open defecation highly concentrated in the northeast of the country, with a total of 14 percent of the rural population (5.1 million people) lacking a toilet. In urban areas, less than 2 percent of the population has a sewer connection. Without a national policy on sanitation and clear designation of an agency to guide the rural sanitation sector, there is limited political will and coordination to effectively scale up sanitation interventions. Rural sanitation has benefited from some successful campaigns to reduce open defecation, but there is little progress in transitioning households to using technologically improved sanitation facilities. Thanks to sanitation champions such as the late President Julius Nyerere, open defecation was successfully reduced through initiatives such as the 1973 *Mtu Ni Afya* (“Health Man”) campaign. New campaigns such as *Choo Bora* (“A Good Toilet is Possible!”)—using behavioral change communication (BCC) and sanitation marketing approaches to encourage the uptake of improved latrines—have achieved some success in pilot districts (World Bank 2017). But large scale-up of improved sanitation remains unachieved.

Figure ES.3: National, Urban, Rural Sanitation Access, by Tiers of Service



Source: DHS 2016.

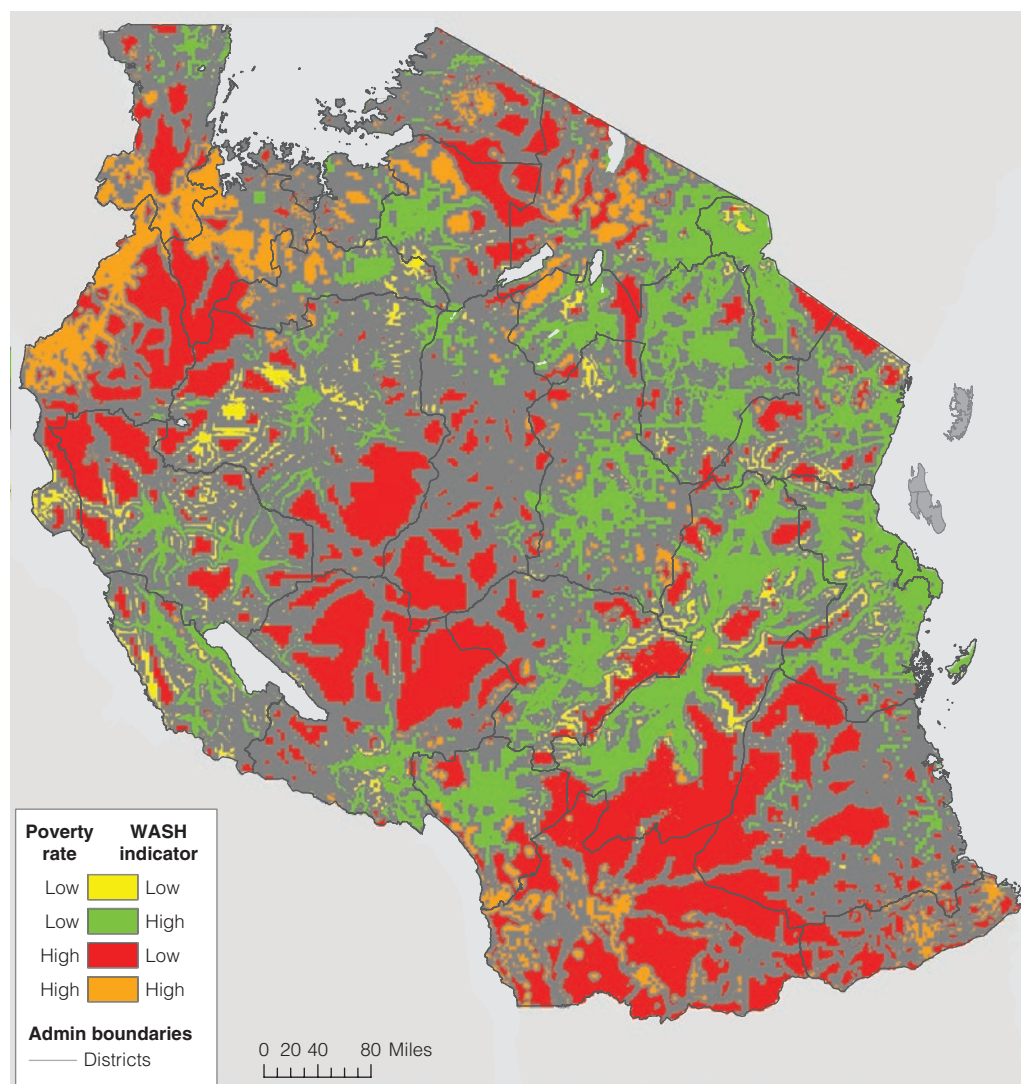
Note: Box ES.1 provides a full explanation of JMP definitions on tiers of service for water and sanitation.

In contrast, provision of urban sanitation services is delegated to too many organizations, with low accountability, and often misaligned responsibilities and functions. Responsibility for the operation of sanitation and hygiene facilities (cess pit emptying, cleaning of public latrines, solid waste collection, etc.) is divided among a plethora of organizations at all levels. Concerning oversight, five ministries— water, environment, health, education, and local government—have some responsibility for sanitation. Implementation is delegated to parastatal organizations, the private sector, NGOs, and CBOs. However, these organizations typically face limited capacity to implement at a large scale. This leaves the majority of Tanzanian cities with minimal treatment of sewerage. Dar es Salaam discharges it directly into the Indian Ocean and the Msimbazi River. While wastewater stabilization ponds do exist in the city, recent reports found that five out of seven of these were malfunctioning. Tanga port has a similar problem: 2,164 cubic meters of raw sewage are discharged directly into the Indian Ocean each day.

Message 4: Rurality and Poverty Are the Primary Drivers of Low WASH Coverage. The Sustained Deprivation of WASH Signals that Business-as-Usual Investments Are Not Showing Sufficient Return for the Country's Rural Majority Population

Spatial analysis shows substantial overlaps between rurality, high poverty rates, and low WASH coverage. Red patches on map ES.1 show overlap in high poverty and low improved water coverage in the dry season in Ruvuma in the South, Katavi and Mbeya in the West, and parts of Tabora and Kigoma in the North. Such patterns could be due to the fact that more than 90 percent of the poor live in rural regions. Business-as-usual investments are not overcoming service delivery barriers associated with rurality and poverty. The urban-rural disparity in WASH services is stark, with minimal progress in closing this gap during the MDG period. In Tanzania and in many countries throughout the world, urban households are better off than their rural counterparts because they have superior endowments in measures such as education, assets, and institutions (World Bank 2015). Implementing services for urban dwellers is typically easier than for rural residents, but with 70 percent of the national

Map ES.1: Cross-Mapping of Poverty Versus Percentage of Population with Access to Improved Water in Dry Season

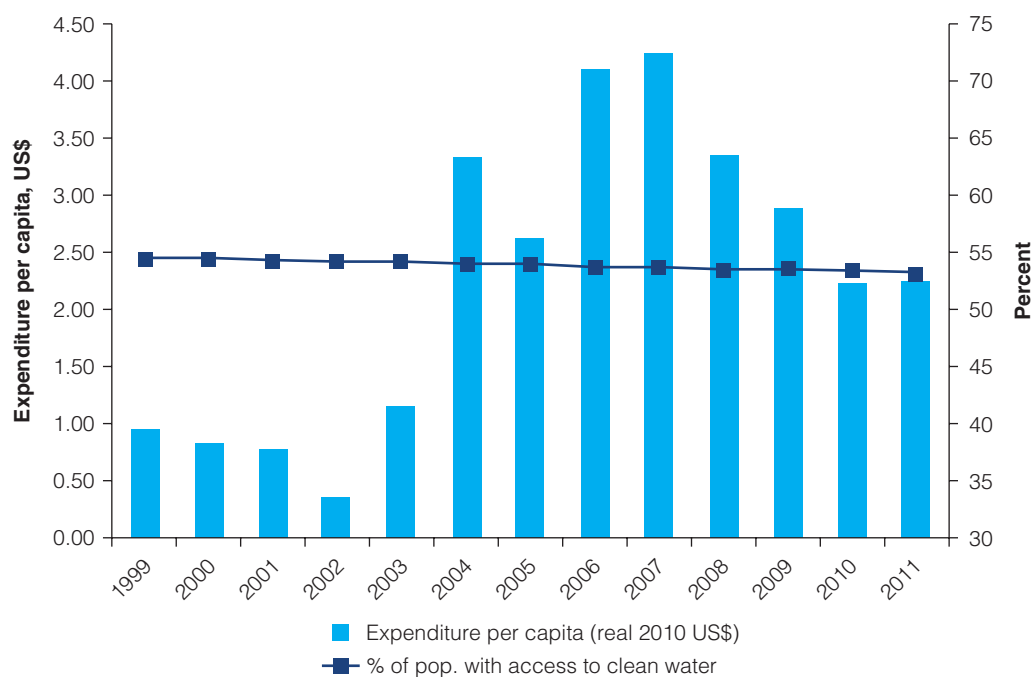


Source: Gething 2017.

population living in rural areas, the vast majority of whom are poor, the country needs to give special attention to designing interventions that can reach the poor as well as be sustainable in rural settings.

Despite large-scale investments in expansion of rural water services, coverage rates have not shown corresponding increases (figure ES.4). Of the 83,000 rural water points recorded in the national water point census as of 2014, 40 percent were found to be non-functional, with the likelihood of failure highest at 20 percent, their first year of operation. A more in-depth analysis of this water point data has shown that technology choice, hydrology, management, and location-based factors are to varying degrees responsible for the failures. Going forward, the country would do well to learn from these experiences to ensure that future investment provides more sustainable results.

Figure ES.4: Spending on Water versus Access



Source: Carlitz 2016.

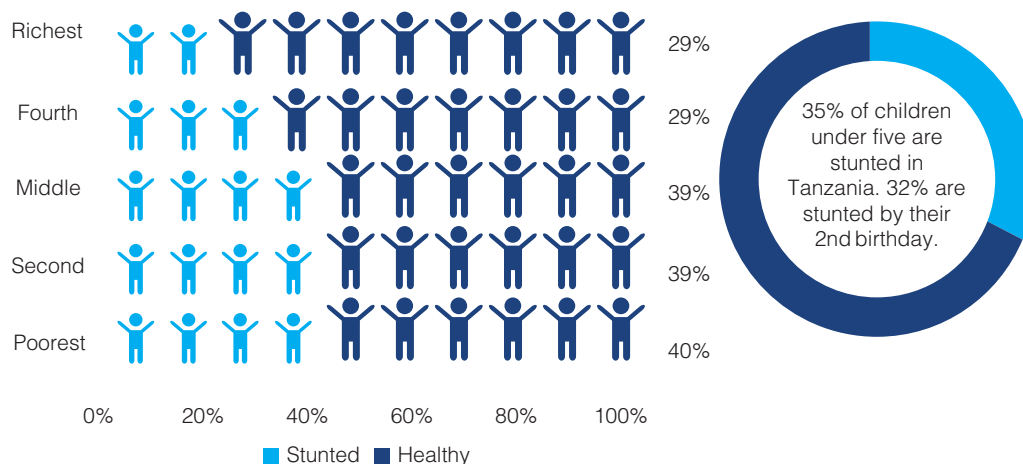
Message 5: WASH Investments Can Lead to Broad Knock-On Effects on Productivity and Human Development in Tanzania

Adequate WASH conditions are a cornerstone for improved human development and accelerated poverty reduction in Tanzania. In view of the multifaceted harmful effects of inadequate WASH, ensuring WASH access is critical for meeting multiple objectives across sectors. SDG 6 and its six targets are inextricably linked with a number of the other SDGs and targets including ending extreme poverty (1.1); ending forms of malnutrition (2.2); reducing infant mortality (3.2); and improving educational attainment (4.1).

Improving WASH can go a long way toward reducing stunting and enhancing life in a child’s early years. It is not just a matter of preventing the onset of water-borne illness and diarrheal disease. One of the most unexpected impacts of inadequate WASH is its contribution to chronic intestinal infection, which can lead to higher rates of stunting, a marker of undernutrition for children under five (figure ES.5). Stunting is not just about physical stature. It also hinders healthy early childhood development. Getting insufficient nutrients can limit a child’s cognitive capabilities, leading to lower schooling, earnings, and overall productivity later in life.

WASH beyond the household—in public spaces such as schools and health centers—holds particular importance for human development outcomes. One in three health centers in Tanzania does not have improved WASH facilities, which means that patients could pick up other infections during visits. In schools, substandard WASH can lower learning. Poor sanitation discourages girls from attending school during menstruation, and a lack of on-premise water takes time away from learning as teachers and pupils carry water back to school. It also reduces the likelihood of hand washing in an environment where children face high risk of picking up germs from one another and their surroundings during play and other interactions.

Figure ES.5: Proportion of Children under Age Five Stunted in Tanzania, by Wealth Quintiles



Sources: DHS 2016; World Bank 2017.

Message 6: There Are Shortcomings in the Institutional Dynamic and Policy Framework that Limit Progress in the WASH Sector

A history of centralized delivery and the politicization of water have been the backdrop for different types of failings in rural and urban contexts. An incomplete decentralization process has led to a misalignment of roles and responsibilities as well as functions and functionaries affecting accountability relationships which in turn has adversely affected service delivery. Decentralization efforts in rural areas have created the institutions at local and community level in a *de jure* sense. However, the *de facto* centralized tendencies have often led to confusion of the respective roles and responsibilities in practice. For instance, Local Government Authorities (LGAs) are not being held accountable for providing technical assistance and financial support to community water committees (COWSOs) when needed due a lack of clarity in determining when such support is warranted. This is one of the factors that has led to the prevalence of non-functional water points across the rural landscape.

Donor interventions tend to focus less on institutional shortcomings and thus perpetuate existing dynamics. Misplaced focus in the water sector on new infrastructure construction rather than on maintenance also stems from the fact the donor contributions are structurally biased towards capital investments. The political capital gained from building new water points, rather than ensuring the maintenance or sustainability of existing ones, has traditionally been both the more popular and the easier approach. Tanzania as a historic “donor darling” has long been a recipient of aid and thus only more recently have sustainability considerations been more fully taken into account. Donors are now increasingly recognizing the importance of ensuring that the existing institutional structures also need strengthening, to ensure accountability and deliver improved services. They are also encouraged to “celebrate maintenance” to shift norms in the sector that have led to unsustainable infrastructure.

Political and electoral considerations often tend to dominate new construction decisions, leading to suboptimal public works. For instance, though the construction of new water points should be allocated according to an established formula agreed upon within the Ministry’s official documentation, quantitative analytical studies which have contributed to this diagnostic have

confirmed commonly discussed politicization of water, finding a significant correlation between allocation of funds and election cycles driven in part by favoritism and clientilistic practices (Carlitz 2007).

Sanitation meanwhile has seen the opposite problem, with an absence of national policy and few actors willing to champion the cause in the political space. Sanitation received prominence during the years of the Julius Nyerere government which helped Tanzania to make a significant dent in open defecation prevalence. However in the present day, institutional arrangements for sanitation in both the urban and rural contexts are characterized by a lack of “champions” to bring the issues front and center of the political agenda. A lack of appreciation of the potential for return on investment and the division of responsibilities for oversight between so many

Box ES.1: The Importance of Data

The Tanzania WASH Poverty Diagnostic has drawn on data from several sources to document as far as possible the country’s history and current conditions in terms of water supply, sanitation, poverty and health. Data sources include household surveys (primarily Demographic and Household Surveys [DHS] from 1996 to 2016); Joint Monitoring Programme (JMP) data on the MDG targets since 1990; the Rural Water and Sanitation Survey (RWS) collected under the supervision of the World Bank and the Water and Sanitation Program until 2014; poverty data calculations from the National Bureau of Statistics in collaboration with the Poverty Global Practice World Bank; and the Tanzanian Ministry of Water and Irrigation’s Water Point Mapping data from 2014.

Gaining an understanding of the overall picture through analyses of different data sources has sometimes been a challenge in and of itself because they provide different lenses on common problems. Lack of consistent and reliable data is a particular limitation in Tanzania in establishing trends over time and fixing attainable targets across sectors. There is also a need for representative household data at the district level to better undertake inferences at the level of local government authorities, the lowest administrative units) with more statistical precision. As for the WASH sector, SDG monitoring requires reliable water quality estimates at the district level. Water Point Mapping data from the Ministry of Water and Irrigation has also been undergoing iterations of cleaning in order to ensure the information is accurate.

Reliable data collection, verification, harmonized indicators in line with national targets, and data entry are key to providing concrete insights to stakeholders in a technical and politically neutral manner. In Tanzania, the collection and use of Water Point Mapping data in particular are on their way to being institutionalized. The data have been undergoing iterations of cleaning in order to ensure accuracy. Regular updating using improved technologies should be integrated into the mapping process.

different actors has led to a disordered institutional set up. The result of this is manifest in the absence of a clear national sanitation policy which needs to be addressed.

Finally, in spite of the availability of financial resources, considerable capacity limitations to plan, implement and monitor water supply programs plague the sector, thus affecting the expansion of safe access. For instance, the rural water supply and water resources sub-sectors were able to utilize only 52 percent and 46 percent respectively of all the allocations they received in FY 15-16 while sanitation sector was unable to use almost any of its financial allocations. Any new initiatives need to focus on improving the capacity of the institutions and policy framework in the sector so as to translate available finances into improved and cost-effective service delivery. If Tanzania brings these lessons into new initiatives, it has the potential to become an example which other countries can emulate.

Recommendations for Moving the WASH Sector Forward in Tanzania

Challenge #1: Creating a Roadmap toward Meeting Tanzania's SDGs for Water Supply, Sanitation, and Hygiene as well as other WASH-Relevant Goals

Recommendation 1: Integrate the SDG framework into poverty-reduction strategies and WSS programmatic approaches such as Water Sector Development Program (WSDP) II. Tanzania's National Strategy for Growth and Reduction of Poverty (MKUKUTA), first adopted in 2005, provides for embedding the MDG targets in poverty reduction efforts. The plan, which gave high priority to eradicating extreme poverty and promoting broad-based growth, has had significant effect, with national basic needs poverty declining from 34.4 to 28.2 percent between 2007 and 2011/12. The integration of the SDG targets into the WSDP II framework would be the first step to getting Tanzania on track toward the SDGs for WASH. We can consider the SDGs as providing Tanzania with a clean slate, promising a new beginning as the global community transitions from infrastructure to service oriented goals. Despite a lack of progress in the MDGs, the SDGs provide a new, more accurate set of definitions and standards to aim at. These new standards acknowledge water quality, safe waste disposal, and the importance of WASH in public spaces, particularly schools and health centers. Putting Tanzania's national statistics into the SDG framework can provide a helpful stepping stone toward this integration.

Challenge #2: Enhancing the Sustainability of Rural Water Services

Recommendation 2: In making further investment in rural water and sanitation de-emphasize construction and "celebrate maintenance" to enhance sustainability in the future. Part of the reason why so many rural water points failed has been the excessive focus on new construction, which led to the installation of water systems that the local communities do not have the capacity to manage. Data analysis of 83,000 water points as part of this WPD shows that 60 percent of failures in the first two to four years resulted from the wrong choice of pump type, suggesting that the choice of an appropriate technology is a key reason for water point failure. The limited management capacity of small and often poor communities in the B40 and lack of proper backstopping arrangements also contributed to the frequent water system breakdowns. All this has translated into large quantities of money being invested with lower than anticipated returns.

For these reasons, programs to enhance sustainability of rural water schemes should consider the following three steps. First, programs should ensure that technology choice takes into account the capacity of the community or their technical service provider to operate and maintain the system. Second, donors and governments should shift their focus from construction to the “celebration of maintenance,” focusing on the effective oversight of water scheme choice, construction and maintenance by central and local government and communities. Third, donors and the client should work together to further institutionalize the collection, verification, and use of data in analysis for policy planning and investments. Together, these steps will bring a welcome result for all parties involved, a higher return on funds invested in future.

Challenge #3: Improving Reliable and Affordable Access to Safe Water in Urban Areas

Recommendation 3: Address utility inefficiencies, the growth in dependence on informal private providers, and the need for expanded regulation. In urban areas, in particular in the major city of Dar es Salaam, a history of “hydraulic exclusion” that begun back in the colonial period shapes the dynamic of expansion of the water network to this day. Tanzanian cities typically have a small core area with a long-standing piped water network while large areas of the periphery are forced to rely on non-networked solutions, particularly in low income areas. Those most reliant on informal service providers (ISPs) are the poor, who often face the highest costs, despite their lower ability to pay. The ISPs are not subject to regulation. Therefore the quality of water they provide is unknown. Unregulated wells may also be depleting groundwater sources in disregard of broader water resource management concerns. Finally, ISPs often take their water supply from the utilities, thereby further reducing the utilities’ revenue at the same time as taking their customers.

The first priority for Tanzania’s urban utilities in expanding reliable water networks to the urban periphery is to reduce their rates of non-revenue water and enhance their fiscal management. Their service expansion can then be both poor-inclusive and financially sustainable. Despite ranking quite highly in terms of their capacity to serve the poor compared to other urban utilities in Sub-Saharan Africa (van den Berg and Danilenko 2017), Dar es Salaam’s DAWASCO has only recently begun recovering from consecutive years of 50 percent-plus levels of non-revenue water (Triche, Kariuki, and Makino 2012). DAWASCO has tried to employ pragmatic solutions in expanding improved coverage, using tanker trucks and standpipes for areas further out of the original network remit. But in order to ensure that network expansion does not mean unreliable supply, it first needs to ensure it has the revenues to pay for network maintenance.

In the medium to long term, both the utility and the population will benefit greatly from reduced reliance on informal providers. Though at present, 58 percent of the Tanzanian population pay nothing for water according to available data, 10 percent were devoting more than 5 percent of their total household expenditures to it in 2012. This was the highest in a recent JMP study (WHO 2017) of 11 countries worldwide. (The international standard is a maximum of 2 percent.) In Dar es Salaam, the B40 recently overtook the T60 in portion reliant on tanker trucks for their supply. Because water from informal vendors can cost as much as five times more than utility water, the integration of their customers into utility networks will ultimately mean greater revenue for the utility as well as lower cost basic services for the poor. In the short term, placing informal providers under the umbrella of regulatory institutions would begin to meet concerns of water quality and safety concerns. A longer-term approach would have the urban utilities strategizing to increase their recovery of costs and expand their network services to areas that are now informally served.

Challenge #4: Transitioning 89 Percent of Tanzania's Rural Population from Unimproved to Improved Sanitation Facilities

Recommendation 4: Formulate more coherent policy, more clearly define and assign responsibilities for sanitation, and identify sanitation champions. This report highlights that a key constraint on the success of previous sanitation interventions in rural areas has been the lack of a coherent policy and institutional framework. Responsibilities are currently divided between many different ministries. Though the Ministry of Health is meant to take the lead, its other responsibilities appear to be crowding out its ability to act on sanitation. As the evidence presented in this diagnostic shows, sanitation needs a clearer focus at the heart of health policy if coverage is to substantially increase. This should include learning lessons from past interventions on successes and failings and recognize the need for larger financing mechanisms, whether market-based or public sector. Demand creation needs to go beyond community-led total sanitation and toward encouraging the transition from unimproved to improved facilities. On the other side of the equation, there is a need to provide affordable and desirable supply of sanitation equipment and facilities. This may mean encouraging the involvement of private sector actors by making them aware of the potential financial returns and strengthening their capacity to meet demand for those who have varying capacities to pay. Meanwhile, a public sector approach may involve integration of sanitation interventions into social protection programming such as the Tanzania Social Action Fund (TASAF), which aims to aid the country's poorest citizens. Tanzania already has case studies of successful sanitation marketing (Cardosi, Mwambuli, and Indodi 2010), as well as evaluations of implementation challenges (Share Consortium 2016). The challenge of scale-up needs particularly close examination for both public and private efforts.

The setup of a clearer institutional structure, with an identified champion at its helm, would greatly aid the transition from unimproved to improved sanitation as part of a national strategy, integrated with health. A nodal institutional arrangement would help to clearly define responsibilities for sanitation regulation and provision.

Challenge #5: Making Sanitation Safer in Urban Areas through Onsite and Offsite Sanitation Solutions that Include Fecal Sludge Management

Recommendation 5: In urban areas, adopt citywide sanitation approaches that recognize that different solutions are suitable in different contexts. Diverse experiences across developing country contexts suggests that citywide inclusive sanitation would succeed in Tanzanian cities, with their rapidly expanding population mostly in low-income areas. Donors and other country governments can share knowledge on the most effective designs, mixing onsite and offsite sanitation solutions in urban contexts. In cities with densely populated informal settlements where sewerage pipes are either too expensive to lay or disruptive of existing infrastructure, onsite improved sanitation solutions such as DEWATS can be employed in order to ensure that waste is safely disposed of and treated. Such solutions are poor-inclusive, well suited to cities such as Dar es Salaam that have a history of extremely limited networked sanitation. Sewerage network expansion remains extremely low at under 2 percent nationally, and as most public funds continue to be invested in cities, the result is that the wealthy are being served before the poor. Facilities for wastewater treatment also need urgent investment attention. In Dar es Salaam, for example, five out of seven wastewater stabilization ponds were found to be malfunctioning. Without proper treatment, expansion of networks will create environmental and health-related hazards.

The unimproved to improved facility transition also needs to occur for at least 25 percent of the urban population who lack improved access. During the rainy season, flooding can lead to

the overflow of unimproved latrines, their contents easily contaminating drinking water. With the World Health Organization reporting some 4,985 cholera cases, including 99 deaths in Tanzania Mainland and Zanzibar in 2017, waterborne diseases are still very much a concern. These illnesses hit Low Income Areas the hardest.

Challenge #6: Enhancing Early Childhood Development through WASH Services

Recommendation 6: Design WASH interventions with a “nutrition-sensitive” lens and seek to integrate WASH into multi-sectoral strategies addressing education, health, and nutrition outcomes. Better WASH conditions can help children thrive and fulfill their full potential to be engaged and productive citizens and leaders of the future. As this diagnostic demonstrates, substantial evidence in Tanzania supports the link between unimproved sanitation and stunted growth in children under five, particularly in their first 1,000 days. With unimproved sanitation so common in both urban and rural areas of Tanzania and the harm to health so clear, this diagnostic recommends the integration of WASH into health, education, and nutrition strategies for early childhood development. In addition, the country needs committed financial allocations and robust expenditure strategies to fully implement the National Sanitation Campaign (NSC). The diagnosis reveals that WASH interventions are most effective in combination with other strategies that include enhancing the mother’s wellbeing. There is room for more exploitation of synergies with large countywide social protection programs such as the Tanzania Social Fund (TASF) to expand sanitation to distant villages and the extreme poor.

For instance, designing WASH interventions with behavior-change components that address handwashing, household water treatment, food hygiene, open defecation, and other behaviors that affect exposure to fecal bacteria could help reduce enteric infections that lead to undernutrition. Further gain would come from monitoring indicators beyond infrastructural access, such as behaviors and water quality deficiencies that contribute directly to the contracting of enteric infections and waterborne diseases. Targeting WASH interventions to areas that have high prevalence of stunting or expectant mothers and children would be nutrition-sensitive. Through cross-sector interventions like these, the country could move more quickly toward other SDGs such as Goal 6 relating to child health.

Challenge #7: Improving the Slow, Inefficient, and Unreliable Financial Flows between National and Local Institutions

Recommendation 7: Facilitate efficient, transparent, and predictable financial flows between WSS actors—from donor, to government, to community—to promote sustainable governance. Primarily in rural WSS interventions, the diagnostic has uncovered a mismatch between the investments made and the level of change achieved. Within the Tanzanian government, a more transparent, rapid, and simple flow of funds and data between all levels of government would ensure more efficient service provision to the end user. These financial flows would be aided by clarity of institutional role on the ground.

Following a political economy analysis, the WPD recommends a facilitation of financial flows between all levels of the “sustainability chain,” that is, from donor to government and from national offices down to local and community providers. This could be achieved through three basic steps. First, continue to strengthen the relationship between donors and government in order to facilitate communication and data flow and raise data quality. Second, work for clearer communication between central government, LGAs, and communities, which would help to ensure that funding and technical support moves when required from one to another. Third, invest more in tracking of financial flows between all levels to garner more accurate measurement of impact and a clearer understanding of “what works.”

Tanzania's WASH challenges in the SDG era may seem daunting. The WASH Poverty Diagnostic seeks to provide relevant analysis that can help create a solid foundation for first steps toward the goals.

Note

1. Data are from World Development Indicators (database). 2016. World Bank, Washington, DC. <http://databank.worldbank.org/data/home.aspx>.

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