



**TANZANIA ASSOCIATION OF
ENVIRONMENTAL ENGINEERS**

LINKING YOU WITH ENVIRONMENT

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Introduction

According to UN-Water and UNESCO Publication, a quarter of the global population, 2 billion people, use unsafe drinking water sources¹, 3.6 billion people live without safely managed sanitation. And 1 in 3 people, 2.3 billion, lack basic handwashing facilities at home. Over 80% of wastewater is released into the environment without being treated or reused. And droughts could be the next pandemic². Almost three-quarters of all recent disasters are water-related, having caused economic damage of nearly US\$700 billion in the past 20 years³.

In Tanzania, people with improved sanitation is 57%⁴, safely managed sanitation is 37%, and access to handwashing facility 41.5%. Access to water supply is 73% (rural) and 84% (Urban). Approximately 12M pupils in schools. WASH in Schools is still challenging; only 68% of schools have improved drinking water sources, 34% have basic sanitation services, 17% have basic hygiene, and 67% have MHH services⁵.

For WASH services in healthcare facilities, national data indicates that 56% of HCF have basic water services, 51% have no sanitation services, and 35% are without access to Basic hygiene services⁶.

All of these are developmental struggles that the country is making towards addressing the WASH issues to its people and achieving the SDGs by 2030

a. Water Resource Management

Tanzania is considered to be water abundant. However, heterogeneous climate and geology contribute to significant seasonal, interannual, and geographic variability in water availability and water quality challenges. Water stress is moderate according to the Falkenmark Water Stress Index⁷ as total annual renewable water per person is approximately 1,680 m³, and only 13 percent of its total water resources are abstracted by major economic sectors, which is less than SDG 6.4.2 water stress benchmark⁸.

However, Increased population and demand for developing economy has increased water abstraction. As a result, 8 out of basin water stress. The flood irrigation and hydropower in most rivers have disrupted river flow regimes, reduced seasonal surface water availability, and threatened biodiversity.

¹ <https://www.unwater.org/publications/who-unicef-joint-monitoring-program-for-water-supply-sanitation-and-hygiene-jmp-progress-on-household-drinking-water-sanitation-and-hygiene-2000-2020/>

² <http://www.unesco.org/new/en/natural-sciences/environment/water/wwap/wwdr/2017-wastewater-the-untapped-resource/>

³ <https://www.unwater.org/water-facts/disasters/>

⁴ <https://www.worldbank.org/en/news/feature/2022/06/14/school-toilets-in-rural-tanzania-a-performance-game-change>

⁵ https://cdn.who.int/media/docs/default-source/wash-documents/wash-in-hcf/jmp-2022-wash-hcf-launch-optimized.pdf?sfvrsn=38e0b3f9_3

⁶ <https://www.who.int/publications/i/item/progress-on-wash-in-health-care-facilities-2000-2021--special-focus-on-wash-and-infection-prevention-and-control-ipc>

⁷ Cioffi, F.; Conticello, F.; Lall, U. Projecting Changes in Tanzania Rainfall for the 21st Century. *Int. J. Climatol.* 2016, 36 (13), 4297–4314.

⁸ Kashaigili, J. Tanzania. In *Groundwater Availability and Use in Sub-Saharan Africa: A Review of 15 Countries*; Pavelic, P., Giordano, M., Keraita, B., Ramesh, V., Rao, T., Eds.; International Water Management Institute (IWMI): Colombo, Sri Lanka, 2012.

b. Private Sector Participation in WASH

National Water Policy, 2002 requires the private sector to participate in water services provision and investment stewardship. Private sector participation in financing and managing water resources and water supply services is being explored. Incentives for private investments still need to be created due to inadequate political commitment and technical capacities to incentivise their investments. E.g., since the enactment of the PPP Act 2009, no Public and Private Sector water projects in Tanzania.