

Tanzania

Draft SDG#6 Strategy for Urban Sanitation

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Abbreviations

CoP	Community of Practice
DAWASA	Dar es Salaam Water and Sewerage Authority
DAWASCO	Dar es salaam Water and Sewerage Corporation
GDP	Gross Domestic Product
ICT	Information and Communications Technology
IWRM	Integrated Water Resource Management
JWSRs	Annual Joint Water Sector Reviews
MDG	Millennium Development Goal
Mol	Means of Implementation
NAWAPO	National Water Policy
OD	Open Defecation
PPP	Public-Private-Partnership
SDC	Swiss Agency for Development and Cooperation
SDG	Sustainable Development Goal
SWAp	Sector-wide Approach
WASH	Water, Sanitation and Hygiene
WSDP	Water Sector Development Programme

Background

This draft SDG#6 strategy was developed during the 32nd AGUASAN workshop, held in Spiez, Switzerland, between June 26th and July 1st 2016. AGUASAN (www.aguasan.ch) is an interdisciplinary Swiss Community of Practice (CoP) that brings together a broad range of specialists to promote a wider and deeper understanding of key water and sanitation management issues in developing and transition countries. It builds on committed sector professionals from various specialised institutions involved in Swiss development cooperation, humanitarian aid and research. Since 1984, the CoP provides an exemplary, vibrant and most pertinent exchange platform and think-tank serving the water sector, and constitutes an essential link to the innovation and knowledge management strategy of the Swiss Agency for Development and Cooperation (SDC).

During the annual AGUASAN workshop, water and sanitation specialists from all over the world gather for five days to collectively reflect on a cutting-edge topic of the water sector. The workshops provide a joint learning experience and utilises the broad knowledge of the participants to elaborate strategies and conceptual tools of practical use for development work and sector interventions at local, national and global level. The 2016 AGUASAN workshop focused on means of implementation to achieve the dedicated water goal of the 2030 Sustainable Development Agenda (SDG#6). The workshop was structured around three country cases (Tanzania, Haiti and Macedonia), for each of which draft SDG#6 strategies were prepared. The strategies build on the current situation of the countries and include practical means of implementation inspired by practical examples presented and discussed during the workshop. In the case of the Tanzanian country case, two groups were formed to separately address the different issues of rural and urban areas. The draft strategies can be used to support local decision makers in shaping the national development plans.

Introduction

The structure of the present strategy mirrors the course of the 2016 AGUASAN workshop:

- The first section provides a broad overview of the country's current situation as well as the specific challenges and opportunities of the sector.
- The second part outlines the desired future state (vision) to be achieved by 2030.
- The third part draws a possible way to achieve the desired future state through a number of concrete Means of Implementation
- The document concludes with a synthesis reflecting the overall strategy for implementation

Overview of the current situation

Socio-economics

- Tanzania has 45 million inhabitants with diverse cultural backgrounds and more than 120 ethnic groups.
- 29.6% of the inhabitants live in urban areas, 70.4% in rural areas. The population density (inhabitants/km²) in rural areas varies between 1 and 25, around Lake Victoria between 250 and 1000. In regional capitals, on the other hand, it lies above 1000.
- The population is currently growing at 3.2%. Rural-urban migration leads to higher growth rates in the urban areas (4.2% compared to 1.9% in rural areas)
- The country has a GDP of 48.6 billion USD (GDP per capita of 920 USD). It is one of the fastest growing economies in East Africa with an annual GDP growth rate of 7.2% (2011-2013).

Environment

- Annual rainfalls vary between 550 mm and 3690 mm, temperatures between 20°C and 30°C.
- The last 40 years brought recurring droughts with negative impacts on agriculture and the water and energy sectors.
- Droughts are triggered by decreasing water levels, dry up of wetlands and transition of river flow regimes from perennial to seasonal.
- Available surface and ground water resources total up to 89 km³. Only 6% of the total internal renewable water resources are withdrawn (mostly for agriculture).
- Water-related ecosystems are affected by a combination of challenges, namely climate change, land-use change, pollution, siltation, dams and over-exploitation of water resources.

Institutional framework

- The institutional framework for water resource management is characterised by a multiplicity of organisations with limited technical, human and financial capacities.
- The framework for water and sanitation supply is complex, both legally and in practice. It is based on a separation between the urban water supply and sewerage system on the one hand, and the rural water supply and sanitation services on the other. Sector reforms and adjustments in the institutional framework have been on-going for several years (National Water Policy (NAWAPO) in 2002, the National Water Sector Development Strategy in 2006 and the Water Supply and Sanitation Act and Water Resources Management Act in 2009).
- In Dar es Salaam, the responsibilities regarding water and sanitation are split up between two institutions: DAWASA (Dar es Salaam Water and Sewerage Authority) takes the function of an authority, DAWASCO (Dar es salaam Water and Sewerage Corporation) serves as utility.
- The most important internal stakeholders in the water and sanitation sector in Tanzania comprise the private sector (which plays an important role which the government aims to

strengthen), government at its various levels (including utilities) and civil society organisations.

- The use of a sector performance monitoring framework is agreed upon, but not tracked against baseline data for both expenditure and affordability. The latter also lacks information on the functionality of the system. The Water Sector Development Programme (WSDP, a multi-donor program to improve coordination and national ownership) has been established in 2005. Funding for the water sector has quadrupled since sector reforms started. Alongside, the sector-wide approach (SWa) includes much greater coordination of finance for the sector as well as taking a sector-wide view of performance monitoring and institutional development.
- There is a “universal access policy” for disadvantaged parts of the population that live in slums or informal settlements, but not for the poor population in general, or for the population that live in remote or inaccessible areas.
- The government actively promotes cooperative management and development of its international rivers, basins and lakes (IWRM).

Water supply

SDG target 6.1: Universal and equitable access to safe and affordable drinking water for all.

- In 2012, 16% of the population had access to improved water. However, the part of the urban population using improved water sources reduced from 92% in 1990 to 78% in 2012. The proportion of the rural population with access to improved water sources slightly decreased from 46% to 44%¹. The MDG was not reached.
- Obstacles for equal access to improved water were the inequitable distribution of water facilities between geographical locations, the urban-rural divide and social groups (inequalities between rich and poor groups).
- The provision of water access focused on facilities (hardware), thereby not paying sufficient attention to management structures (software). This resulted in non-functional facilities and high investments for rehabilitation.
- Access to wastewater treatment stagnated.

Sanitation²

SDG target 6.2: access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations.

- As shown below in figure 1, the total level of access to improved sanitation rose in Tanzania between 1990 and 2015 from 7% to 16%, and access to shared facilities from 4% to 12%. However, a small increase in the percentage of Open Defecation (OD) was also recorded (increase from 9% to 12%). This development over 25 years is comparable with that of other countries, although the rise in OD has given reason for concern.
- In rural areas, the percentage of improved and shared facilities increased comparatively little between 1990 and 2015, with a rise from 7% to 8% and 3% to 4%, respectively. Open defecation, on the other hand, increased from 10% to 17%.

¹ The reliability of the baseline data for 1990 is, however, limited.

² The group of urban sanitation used the Shit Flow Diagram Report of Tanzania (BRANDES et al. 2015) as a case study, where much information on the current urban sanitation situation can be found

- The urban part of Tanzania experienced a larger growth in the percentage of improved and shared facilities: both rose from 6% in 1990 to 31% in 2015, while OD remained constant at 2%.

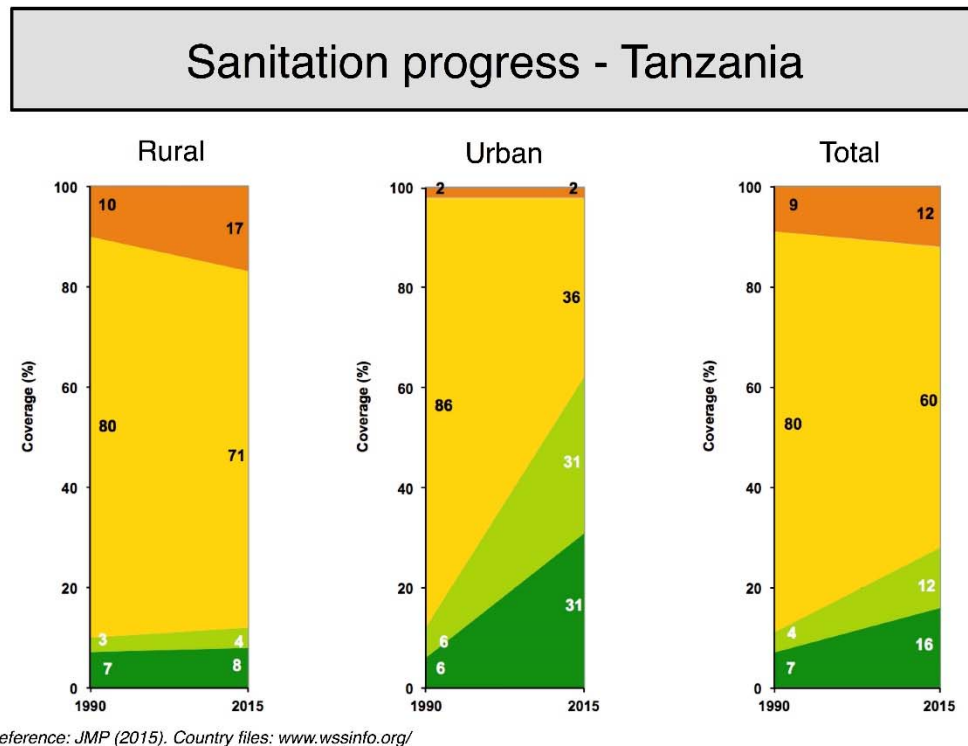


Figure 1: Sanitation progress of Tanzania

- Over 50% of human waste in Dar es Salaam is currently not safely managed
- Faecal sludge collected by private emptying and transport service providers constitutes 50% from household sources and 50% from non-household sources, such as commercial and institutional areas. Collected faecal sludge is not always transported to treatment facilities and sometimes dumped into the environment.
- Generally, poorer areas are more exposed to unsafely managed sanitation.

Challenges and opportunities

Tanzania is currently facing different challenges and opportunities. Those presented in this section are collated from input presentations in the workshop, as well as aspects discussed in the group sessions.

Policy and institutional framework

Challenges

- Faecal sludge management is currently not integrated in policies or regulations.
- There is a need for clarification and strengthening of pro-poor approaches for urban water supply, while there is no universal water and sanitation access policy for poor populations or for populations in remote or hard to reach areas. The institutional framework is currently under revision and will be adapted in the near future.
- There is a need for financial mechanisms/schemes to make WASH more affordable to disadvantaged groups.

- A consistent sector-wide monitoring framework is lacking, as inconsistencies and inaccuracies exist in monitoring and reporting mechanisms. Systematic use of data on access, infrastructure and functionality in planning and budget allocations is needed to overcome the present equity challenges and to improve the efficiency of resource use. Monitoring efforts need to improve and go beyond measuring only the hardware (facilities) or counting open defecation.
- Accountability mechanisms (joint sector reviews) at sub-national levels are inexistent or carried out on an ad-hoc basis.
- Cultural factors: social norms in Tanzania dictate non common use of toilets with the in-laws.

Opportunities

- Since 2005, a Sector-Wide Approach (SWAp) for the water supply and sanitation sector has been adopted, represented most particularly by the National Water Sector Development Programme (WSDP), which provides a comprehensive, sector-wide plan.
- WSDP has led to a quadrupling of funding for the water and sanitation sector.
- Institutional framework already largely in place: water policies and acts govern the sector.
- Annual Joint Water Sector Reviews (JWSRs) at national level have been conducted in Tanzania since 2006.
- JWSRs have quickly become key events in the annual calendar, attracting considerable lobbying attention by civil society and triggering a substantive public debate.
- The equity reports and the engagement of the sector civil society network (TAWASANET) in JWSRs are evidence that the forum acts as an effective accountability mechanism.

Financing

Challenges

- Less than 80% of the costs for operation and maintenance of drinking water are covered.
- For both urban and rural drinking water supply, the absorption (capacity to plan and deliver budgeted services) of external funds lies at only 50-75% of official donor capital commitments (three-year average).
- Investments in the sanitation sector are low (less than 2% of the budget of the Health department).
- Effective, efficient and equitable management of funds remains challenging.
- Public sector budgets in Tanzania frequently do not distinguish between investments in water supply and investments in sanitation.

Opportunities

- There is a shift from project-based funding to sector-wide funding. Improvements to procurement and budget management are critical.
- The National Water Sector Development Programme (WSDP) led to a quadrupling of finance for the water and sanitation sector

Challenges and opportunities specific to urban areas

Challenges

- Rural-urban migration and subsequent population growth.
- The private sector (responsible for the emptying of 50% of household facilities) at times draws on illegal practices.

Opportunities

- Access to improved sanitation facilities grew relatively strong in urban areas (compared to rural areas) between 1990 and 2015.

Description of the desired future state on SDG#6

The overarching vision

“100% safely managed sanitation by 2030”

The four parts of the vision

1. Containment: OD-free Dar es Salaam by 2030. 100% of the population use basic sanitation facilities at household level
2. Emptying and transport: City-wide coverage through safe and improved collection and transport with a public-private-partnership (PPP) approach to service provision
3. Treatment: Safe treatment of wastewater. The treatment methods are in accordance with the intended end-use
4. Safe re-use of wastewater/faecal sludge: Wastewater and faecal sludge are safely reused (which is helpful beyond the SDGs). Their uses can be in agriculture (as fertilizer), for energy provision (biogas, pellets), groundwater recharge, horticulture, parks, landscaping, or industrial purposes

Overarching expected outcomes

- Protection of groundwater sources
- Increase in resource recovery.

Addressed SDGs and targets

The four-part vision mainly addresses SDG target 6.2 but also relates to SDG#16 (good governance) and impacts on SDG#3 (healthy lives), SDG#11 (sustainable cities) and SDG#15 (sustainable ecosystems)³:

- Impacts of containment (aims to protect groundwater):
 - SDG#3 (healthy lives)
 - SDG target 6.1 (safe drinking water)
 - SDG target 6.3 (water quality)
- Impacts of emptying/transport (requires strong and efficient institutions):
 - SDG#5 (gender equality)
 - SDG target 6.1 (safe drinking water)
 - SDG target 6.5 (IWRM)
 - SDG#16 (good governance)
- Impacts of treatment of wastewater and faecal sludge (enhances the protection of both water quality and the environment):
 - SDG#3 (healthy lives)
 - SDG target 6.1 (safe drinking water)
 - SDG target 6.3 (water quality)
 - SDG target 6.5 (IWRM)
 - SDG target 6.6 (water ecosystems)
 - SDG#15 (sustainable ecosystems)
- Impacts of re-use of wastewater and faecal sludge (leads to resource recovery):
 - SDG#2 (end hunger)
 - SDG target 6.4 (water efficiency)
 - SDG target 6.4 (IWRM)

³ the impact of improved services along the sanitation service chain and its links to other SDGs of the 2030 Sustainable Development Agenda have been discussed in a brainstorming exercise.

- SDG#11 (sustainable cities)

Hence, the following indicators of SDG#6 are directly influenced by the vision:

- 6.1.1 Safely managed drinking water
- 6.3.1 Safe treatment of wastewater
- 6.3.2 Water bodies with ambient (environmental) water quality
- 6.4.1 Water use efficiency
- 6.4.2 Withdrawal of water is in balance with the availability
- 6.5.2 Transboundary arrangements
- 6.6.1 Extension of ecosystems (over time)

Recommended Means of Implementation

In order to address the abovementioned challenges and opportunities as well as to achieve the described vision, the present strategy recommends a set of Means of Implementation (Moi) relating to the improvement of policy coherence and the institutional framework; alternative financing mechanisms as well as technological approaches. The Moi were elaborated in group sessions based on presented practice examples and building on the participants' knowledge and experience.

Overarching Moi

- Communication and advocacy
- Behaviour change
- Capacity building
- Multi-stakeholder partnerships
- Marketing
- Minimum standards

Improvement of the political and institutional framework

- Utility reform that includes faecal sludge management and pro-poor orientation.
- Review of the national sanitation and hygiene policies in order to define service levels, pro-poor taxes and subsidies.

Finance

- Customised finance instruments (e.g. micro-credits).
- Performance-based loans/contracts for faecal sludge collection.
- Small-scale community-based service fee collection (faecal sludge collection).
- Public/private funds for large-scale faecal sludge treatment infrastructure.

Technology

- Promotion of container-based solutions.
- Exploiting the great potential of ICT (information and communication technologies) along the entire chain of faecal sludge management (e.g. for informing service providers about a containment that requires emptying, or for monitoring and planning purposes).
- Considering the most profitable end-use of treatment products when choosing appropriate treatment technologies.

Synthesis – Recommended SDG#6 Strategy for Urban Tanzania

The following table synthesises the results of the 2016 AGUASAN workshop for urban Tanzania. It draws on the content of the previous chapters and consolidates it in the form of a recommended SDG#6 strategy.

Target	Current state, challenges and opportunities	Vision	Means of Implementation
Containment	<ul style="list-style-type: none"> - OD-rates stagnated at 2%. 36% of the population use unimproved sanitation facilities - There is a need for a financial scheme to make WASH more affordable to disadvantaged groups 	OD-free Dar es Salaam by 2030. 100% of the population use basic sanitation facilities at household level	<ul style="list-style-type: none"> - Utility reform - Multi-stakeholder partnerships - Establishing customised financing instruments - Promoting container-based solutions
Emptying and transport	<ul style="list-style-type: none"> - Faecal sludge collected by private emptying and transport service providers constitutes 50% from household and 50% from non-household sources. Collected faecal sludge is not always transported to treatment facilities and sometimes dumped into the environment - Faecal sludge management is not regulated - There is a need for a financial scheme to make WASH more affordable to disadvantaged groups 	City-wide coverage through safe and improved collection and transport	<ul style="list-style-type: none"> - Utility reform - Multi-stakeholder partnerships - Performance-based loans/contracts for faecal sludge collection - Small-scale community-based fee collection - Use of ICT
Treatment	<ul style="list-style-type: none"> - Access to wastewater treatment stagnated - Generally, poorer areas are more prone to unsafely managed sanitation 	Safe treatment of wastewater, in accordance with the intended end-use	<ul style="list-style-type: none"> - Utility reform - Multi-stakeholder partnerships - Public/private funds for large scale faecal sludge treatment infrastructure - Treatment depending on most profitable end-use
Safe re-use of wastewater/ faecal sludge	<ul style="list-style-type: none"> - Access to wastewater treatment stagnated 	An increasing amount of wastewater and faecal sludge are safely reused	<ul style="list-style-type: none"> - Utility reform - Multi-stakeholder partnerships - Marketing - Minimum standards

References

The numbers presented in this report draw on the input presentations by the country case owners. The following sources were used:

BRANDES, K., SCHOEBITZ, L., KIMWAGA, R., STRANDE, L. (2015): SFD Report - Dar es Salaam, Tanzania - SFD Promotion Initiative. Dübendorf: Eawag/Sandec. URL:

http://www.susana.org/_resources/documents/default/3-2351-7-1448552001.pdf [Accessed: 27.07.2016]

JMP (2015): JMP Green Paper: Global Monitoring of Water, Sanitation and Hygiene Post-2015. Draft, Updated Oct-2015. Geneva: WHO/UNICEF Joint Monitoring Programme (JMP) on Water Supply and Sanitation. URL: <http://www.wssinfo.org/post-2015-monitoring/green-paper/> [Accessed: 27.08.2016]

JMP (2015): Progress on Sanitation and Drinking Water. 2015 Update and MDG Assessment. Geneva: WHO/UNICEF Joint Monitoring Programme (JMP) on Water Supply and Sanitation. URL: http://files.unicef.org/publications/files/Progress_on_Sanitation_and_Drinking_Water_2015_Update_.pdf [10.08.2016]

MINISTRY OF WATER (2006): Water Sector Development Programme (2005 – 2025). Dar es Salaam: United Republic of Tanzania.

MINISTRY OF WATER (2014): Water Sector Development Programme Phase II (2014/2015 – 2018/2019). Dar es Salaam: United Republic of Tanzania.

[http://www.tawasanet.or.tz/files/WSDP_II_Final_August_31_2014-_signed_\[1\].pdf](http://www.tawasanet.or.tz/files/WSDP_II_Final_August_31_2014-_signed_[1].pdf) [Accessed: 11.08.2016]

MINISTRY OF WATER (2015): Water Sector Status Report 2015. Dar es Salaam: United Republic of Tanzania.

MINISTRY OF WATER AND IRRIGATION (2006): National Water Sector Development Strategy 2006 to 2015. Dar es Salaam: United Republic of Tanzania.

NATIONAL BUREAU OF STATISTICS (2011): Tanzania Demographic and Health Survey 2010. Dar es Salaam: United Republic of Tanzania.

TAWASANET (2009): Out of sight and out of mind? Are marginalised communities being overlooked in decision making? Water and sanitation equity report, 2009. Dar es Salaam: Tanzania Water and Sanitation Network (TAWASANET).

WHO (2014): Investing in Water and Sanitation: Increasing Access, Reducing Inequality. UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water GLAAS 2014 Report.

WSP (2011): Water Supply and Sanitation in Tanzania: Turning Finance into Services for 2015 and Beyond. Washington: Water and Sanitation Program. URL:

<https://wsp.org/sites/wsp.org/files/publications/CSO-Tanzania.pdf> [Accessed: 10.08.2016]