UN-HABITAT

GWOPA
Global Water Operators' Partnerships Alliance

April 2024

Global Report on Localizing the SDGs: The Role and State of Water and Sanitation Service Providers

Inception report

IRC and Water For People

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Prepared by IRC and Water For People.
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Introduction

In March 2024, IRC and the GWOPA Secretariat/ UN-Habitat signed an agreement to collaborate in the development of a global publication on the State of Water and Sanitation Utilities.[1]

The Global Report will be published towards the end of 2024 highlighting the connections between the work of utilities and the local realization of the Sustainable Development Goals (SDGs). Water and sanitation utilities, along with other forms of service providers, deliver essential services that underpin the achievement of many of the Sustainable Development Goals. The impacts of their work go far beyond SDG6.1 and 6.2 with their specific focus on water and sanitation respectively related to economy, health, climate resilience and other societal outcomes.

Presenting an overview of the state of water and sanitation utilities around the world, the report will illustrate the latest numbers, governance, financing mechanisms, capacity and performance of utilities, as well as the key challenges they are facing. The report seeks to summarize the latest research findings and examples of utilities working to accelerate progress towards the SDGs. It will showcase the best financial, technical, ecological and social innovations from practice to demonstrate the possibilities for strengthening service providers.

In developing the report, IRC and GWOPA will draw on the resources of the GWOPA Secretariat and its Alliance, capitalizing on the wealth of data, case studies, and expertise of its members and partners.

Inception Phase and this report

The inception report is an elaboration of the concept note for the report as presented in IRCs proposal responding to the call for proposals. It includes proposing (reworded) objectives, an updated table of contents for the report and outline cotent for each of the proposed chapters.

The inception phase has also included:

- Establishing the report team at IRC and Water For People, putting sub-contracts in place, and developing contacts with the GWOPA secretariat
- A review of potential data sources and documentation to be utilized in the development of the report, including identification of likely sources of examples, including academic and practitioner outputs in databases, books, journals, magazines, conference proceedings, webinars and Communities of Practice of international (e.g. IWA), regional (e.g. AFWASA) and national (WISA) water & sanitation associations as well as members of GWOPA, such as PSI, SWA, UN-Water, RWSN & SuSanA, and with expert groups for the report

[1] this section draws on the announcement GWOPA/UN-Habitat and the International Water and Sanitation Centre (IRC) collaborate to prepare a Global publication on water and sanitation utilities – GWOPA published on the GWOPA website 28 March 2024

- style and branding. This includes defining the writing style, referencing guidelines, and branding guidelines that the report should follow. This includes further detailing a strong storytelling approach for the report.
- Revising planning and development of an updated and more detailed Gantt chart for the reports production

Objectives of the Global Report

The proposed updated objectives of the proposed Global Report, combining the original four into three tighter objectives that link clearly to the proposed report structure, are:

- To provide a **comprehensive overview** of water and sanitation utilities worldwide, using relevant statistics and case studies, including on their numbers, governance, financing mechanisms, capacity and performance (*i.e. to describe scale, key characteristics, and performance*).
- To illustrate the **connections** between the work of water and sanitation utilities and the local realization of the SDGs, and describe **innovation** (*i.e. to tell impact stories including the multiple and wide impacts of utilities and services*).
- To identify gaps and **opportunities** for water and sanitation utilities to further advance SDG achievement (i.e. to describe solution pathways or practical actions that can be taken at various levels). This will be presented within a systems framework. Utilities do not operate in a vacuum and the extent to which they can perform is strongly related to the enabling policy, institutions and regulations for their operation.

Scope and definitions

In this section we outline some key concepts and definitions that we propose to adopt in approaching the report which further clarify the scope of the report.

Service provider

Across regions and between countries the water and sanitation sector is remarkably diverse in a) what constitutes a service provider b) the services they are trying to deliver and c) the areas/ scale over which they are responsible for service delivery. The simplest definition of a water and sanitation service provider is the entity which sells the water to the household and the entity (not necessarily the same of course) who sells 'sanitation' to the household.

Public water and sanitation utilities

The report will principally focus on public water and sanitation utilities[2] being the predominant form of service providers but will also seek to learn lessons from private service providers and private providers in the supply chain.

SDG localisation

Water and sanitation utilities directly serve households, businesses and institutions. Water and sanitation utilities serve locally but can be found in a variety of forms, from national utilities with elements of decentralisation or deconcentration, to state or regional utilities

[2] Public water and sanitation utilities are majority owned and controlled by government. They may contract private sector operators and partners for short-periods or specific functions.

with branches, to city wide, city area wide, down to village level scale. They are important institutions in SDG localization, the process of working at sub-national contexts to realise the SDGs.

Approach

The publication will offer a blend of data and analysis, highlight exemplary practices, reflect contemporary policy discourse, provide guidance on emerging issues, and recommend management and policy strategies. The publication will utilize the resources of the GWOPA Secretariat and its Alliance, capitalizing on the wealth of data, case studies, and expertise of its members and partners. Additionally, the report will be prepared in collaboration with the broader UN-Habitat programmes and UN-Water members.

The proposed general process for making global estimates for the overview chapter includes:

- Identifying indicators (see Box 1 for initial list)
- Identifying key global sources that provide some comparable data across multiple countries using standard definitions e.g. IBNET country profiles include data on the number of water and sanitation for some countries
- Filling gaps in data sets using country level data (prioritizing countries with the largest populations) across regions and wealth groups (e.g. HICs, MICs, LICs), and where necessary applying weighting to estimate for variations in defintions
- Extrapolation to derive global estimates (e.g. based on population)

Box 1. Initial list of proposed indicators:

- Numbers of water and sanitation utilities, size (service area, turnover), and scope (of services) of water and sanitation utilities (disaggregated by country)
- Governance (roles and legal mandate, ownership, integration, Multilevel governance)
- Finance (business models applied, cost recovery)
- Capacity and Performance (empowerment, KPIs, staffing, youth, disability, and gender-responsiveness in staffing and services)

Review of resources

Some of the data sources that we expect to utilize in the development of the report may include:

- IBNET, which has been recently relaunched (also see annex 2)
- GLAAS which includes relevant national data with a focus on high level indicators and the enabling environment
- GWOPAs WOPs and operators database
- Reports of national utility associations, authorities and regulators
- Aquarating via IDB
- UNICEF/WHO Joint Monitoring Programme e.g. service level data
- GWIs annual tariff survey which is informative on the state of many utilities
- Regional benchmarking reports of regulator associations

At Annex 2 we include the results of a scan of possible evidence and documentation to be utilised in the initial development of the report. This is an initial list and not comprehensive, but illustrative of some of the data sources, analysis and examples that are available. As the report is developed we will manage links and citations using a Zotero library.

Proposed report style and branding

Writing style: formal, informative, and analytical, following characteristics of policy or academic report writing.

The report will adhere to the following guidelines and manuals:

- United Nations Editorial Manual
- Spelling | Department for General Assembly and Conference Management (un.org)
- Footnotes and other references

Key specific features of the report's writing style:

- Formal and precise language: The use of technical terms and precise language, such as "safely managed services," and "public service systems," lends a formal tone to the writing. The report will use the spelling guidelines of the UN Editorial Manual, and therefore base spelling decisions on the The online Oxford Dictionary (https://premium.oxforddictionaries.com/english, set to British English, and the glossary available at Spelling | Department for General Assembly and Conference Management (un.org).
- Structured and logical flow: forewords, background, executive summary, moving into four overall chapters outlining the global utility landscape, linkages with SDGs, innovation, technology and approaches, and finally moving to recommendations presented as solution pathways.
- Use of data and examples: The text incorporates data and examples, enhancing its credibility and informative nature.
- Goal-oriented: There is an aim to influence public policy and decision-making, and global practice in strengthening the role of water and sanitation utilities around the world, which is emphasized with argumentative elements.
- Storytelling: While maintaining its formal and academic tone, the text integrates storytelling elements to engage the reader with the evidence presented. By incorporating real-life scenarios, visuals (photos and graphics), challenges and outcomes from various geographies and stakeholders, it personalizes the abstract concepts of water and sanitation utilities around the world. The report will use elements from the outcome harvesting method, which means that storytelling focused narratives will address questions like:
    - Who changed what, when, where, which show a key shift or trend in the role of water and sanitation utilities in attaining the sustainable development goals?
    - Who contributed to this change and how?
    - Why is this change significant?
    - What sources (publications, blogs, photos, videos, events etc.) provide evidence to this shift?

This narrative technique helps to contextualize the issues within tangible settings, making the information not only more relatable but also memorable, thus effectively underlining the human and societal impacts of the policies and evidence discussed.

Overall, the style and format aim to be well-suited for its purpose, which is to inform, persuade, and facilitate understanding among an audience likely comprised of policymakers, experts in the role of water and sanitation utilities in the sustainable development goals, and other stakeholders in public health and environmental management.

Branding guidelines: the report will adhere to the **UN-Habitat branding guidelines.**

Revised report contents

An updated report structure, with key content by chapter is summarised in Box 3.

Box 3. Proposed report structure

1. Forewords
2. Background
3. Executive Summary

Chapter 1 - Global overview of water and sanitation service utilities

This chapter presents key data on water and sanitation service utilities, identifying trends and critical variations with context (regions, level of economic development, etc.)

- Numbers, size, and scope of water and sanitation utilities (while also identifying other forms of service provider)
- Governance (roles and legal mandate, ownership, integration, Multilevel governance)
- Finance (business models applied, cost recovery)
- Capacity and Performance empowerment, KPIs, staffing, youth, disability, and gender-responsiveness in staffing and services) (

Two issue focused chapters (about impact and enhancing impact) follow. Each chapter includes an overview of the issues and challenges, key practice and performance data relative to the issue, examples of good practices and opportunities.

Chapter 2. Water and sanitation utilities and the SDGs (role in SDG 6 and others including health, climate, biodiversity, cities, decent work and peace)

This chapter focuses on illustration of how service providers contribute to all SDG targets. This includes most obviously the water and sanitation/wastewater targets of SDG 6 (6.1, 6.2 and 6.3) that will likely be a primary focus, but also a second area, other targets under SDG6, that relate to IWRM, water quality, etc. where service providers may contribute positively or negatively. A third are the other SDGs (as noted above).

Chapter 3. Innovation, Technology and approaches (nature-based solutions, climate tools, relevant global approaches in service provision, reuse)

This chapter focuses on doing things differently, discussing examples and the potential for innovation including technological innovations and digitalisation within utilities. Scale and

sustainability are key issues. The extension of utilities into rural areas or the transition from humanitarian water supply to utility-services are additional approaches/ processes that could be included (these may also fall into Chapter 4 as solution pathways, tbc).

Chapter 4. Solution pathways
Recommendations at different levels to advance actions supporting utilities to play a full role in SDG implementation. These will be presented within a systems framework. Utilities do not operate in a vacuum and the extent to which they can perform is strongly related to the enabling policy, institutions and regulations for their operation.

Team and roles

Responsibilities within our team have been structured as follows:

Table 1: proposed team roles, IRC and Water For People

Team member	Role	Specific output
John Butterworth	Project management; coordination with GWOPA; author	Proposed lead author Chapter 2
Melissa Revotskie	Coordination (WFP); Author, review	Proposed lead author Chapter 4
Anna Libey	Database development and analysis; author	Proposed lead author Chapter 1
Cor Dietvorst	Researcher	Scan included in inception report, and to be further developed supporting report writing
Liza Rivera	Analyst, Supporting author	Latin America examples and case studies across chapters
Juste Nansi	Analyst, Supporting author	Africa examples and case studies across chapters
Richard Franceys	Analyst, Author	Proposed lead author Chapter 3; Asia examples and case studies across chapters
Valeria Cintora	Reviewer; Supporting author	Inputs to chapter 3
Sara Bori	Coordination on report production (e.g. style) and review process; launch strategy	Launch strategy
Tettje van Daalen	Copy-editing	Edited report

The team will work closely with the GWOPA secretariat and partners throughout the process. This includes early communication with the GWOPA alliance about opportunities to contribute to the work, including inputting on structure, providing content, reviewing and participating in the forumulation of messages. This might include holding a session on solution pathways as part of the EU WOP project phase 2 commencement.

IRC/ Water For People and GWOPA seek to include contributions where feasible from a wider group of experts engaged with the GWOPA network. To date the following expressions of interest have been received:

University of Melbourne (Anna Kosovac; anna.kosovac@unimelb.edu.au**)**
Areas of contribution may include:

- SDG incorporation into water utility management and policy
- case studies in Australia on SDGs in Water Utilities
- urban water systems expertise
- risk understanding in water systems and policy

IHE (Klaas Schwartz; k.schwartz@un-ihe.org)

IRC will prepare an announcement for further contributions that can be circulated via newsletters and to other potential contributors via our networks.

Revised workplan and activities

Phase 1: Data Collection and Analysis

Data collection and analysis activities related to the global overview will include:

- Further definition of indicators and identification of sources for data collection
- Collation of data from identified secondary sources, and development analytical tools
- Any additional primary data collection, e.g. survey and / or key informant interviews, if required to address gaps
- Documentation of database (using software and protocols to be agreed with GWOPA/UN-Habitat)
- Analysis and consolidation of data. This step is characterized by stakeholder engagement through analysis, validation meetings, and workshops.

In parallel, we will develop examples and case studies for use across chapters through:

- Further development of possible sources based upon expanding literature searches (as included at annex 2)
- A call for contributions targeted at utilities and other partners through GWOPA and other channels, and through the networks of lead authors and regional experts
- Further examples may be identified through the World Urban Forum event (Annex 1)

Phase 2: Report Writing and Editing

The report writing and editing will involve the creation of draft chapters, conducting peer reviews, developing visual elements including figures and images (in compliance with UN-

Habitat branding guidelines and usage of maps), and other related activities. Envisaged steps include:

- Development of chapter first drafts
- Peer reviews of first drafts with relevant stakeholders as agreed with GWOPA (we suggest open peer reviews, working with a version that is accessible to a large group of expert peer reviewers. Not only does it increase efficiency - not having to work with multiple versions - but the comment section can trigger discussion within the document - supporting sector learning in the production phase). Both IRC/ WFP and GWOPA to propose names including staff from UN-Habitat and data unit etc.
- Identification and development of figures and infographics
- Development of chapter second drafts
- Peer reviews of second drafts with relevant stakeholders as agreed with GWOPA
- Completion of final drafts
- Copy-editing of the final draft
- Submission for layout
- Final round of peer reviews with relevant stakeholders as agreed with GWOPA
- Final updates and proofreading of designed report
- Submission for publishing

Phase 3: Publishing, Launch, and Dissemination

IRC will work closely with GWOPA and other key stakeholders to assist in a timely and effective publication and launch process. We will draw on our experience of working on similar projects and the expertise of our dedicated communications team and as part of the report finalization process, will also advise on launch strategy. A launch strategy may include:

- Mapping of target audiences and channels/platforms (e.g. newsletters, learning hubs, websites, events) to reach them
- Working with GWOPA on a dedicated landing page for the report hosting key messages and resources
- Organising a global, online launch event where experts present and discuss key findings and share key messages.
- Prepare an outreach kit with critical messages and materials that can be used to promote the report. The kit focuses on social media promotion with relevant hashtags, key messages and a list of social platforms where the target audiences are most active.
- Identification of key country, regional and global events/webinars / conferences where the report can be shared and presented:
    - At relevant sessions by key speakers/panellists
    - In a joint blog or article profiling the report with event organisers
    - Through a series of promotional materials to share at the event (e.g. business cards with a QR code card with a link to a landing page)
- Media engagement plan and press releases: engage with media relations and issue press releases to relevant media outlets to generate coverage and raise awareness about the podcast series through e.g. announcement articles, op-eds, interviews in sector magazines)

Table 2. Updated workplan for subsequent phases

		2024										2025		
Key activities/key milestones	**Responsible**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**	**N**	**D**	**J**	**F**	**M**
Inception Phase														
1. Development of an inception report including structure and workplan	IRC	x	x											
Milestone a: Agreed final concept note, structure and workplan (29 April 2024)	IRC		x											
Data collection, analysis and validation														
2. Data collection including case studies	IRC			x	x									
Milestone b: documented database				x	x									
Report writing and editing														
3. Drafting of first draft report chapters	IRC				x	x								
Milestone c: First drafts of the global report submitted (by 31 July 2024)	IRC					x								
4. Review of the first draft	GWOPA and stakeholders					x	x							
5. Development of visual elements for report	IRC					x	x							
6. Guidance/ inputs developed for launch and dissemination strategy	IRC						x	x						
7. Revision of report (second draft)	IRC						x	x						
Milestone d: Submission of second draft (30 Sep 2024)	IRC							x						
8. Review of the second draft	GWOPA and stakeholders								x					
9. Revision of report and copy-editing (final draft)	IRC								x					
Milestone e: Submission of final copy-edited draft (30 Oct 2024)	IRC								x					
Consultation and validation key findings/ recommendations with stakeholders at WUF/ GWOPA global assembly										x				
10. Review of final draft	GWOPA									x				
Milestone f: Submission of final copy-edited draft (15 Dec 2024)										x				
Layout, publishing and dissemination														
11. Report layout	GWOPA										x			
12. Publishing of the Global Report	GWOPA											x		

13. Launch	GWOPA											x		
14. Support to dissemination activities as agreed in launch strategy	IRC											x	x	x

Annex 1: Proposal for session at the World Urban Forum, November 2024

The following proposal for a session at the World Water Forum was submitted.

Event model

How do you plan your attendance as orginizer of the event

Hybrid

Details

Title of event

On the frontline - water and sanitation utilities as Sdg accelerators

Produce summary o the event

Our session will gather WUF participants to discuss the critical role of water and sanitation utilities in delivering progress against multiple sustainable development goals, and all the five domains of SDG localization. The session will draw on upon the latest global research on the role, performance and challenges facing water and sanitation utilities. Leading up to the WUF, a comprehensive global review is being undertaken - with a specific focus on the links between utilities, the SDGs and localization - and key results will be shared for the first time through this session. The session will bring together authors of the global report and leaders representing key stakeholder groups, including utilities and their customers, to discuss and debate the critical issues in scaling and sustaining water and sanitation services by utilities. It seeks to promote understanding of the wide impacts of utilities on local societies and economies, and to identify and promote the most promote opportunities to wider and sustain impacts aligned with SDG priorities.
We will design an engaging interactive session for both in-person and online participants structured around 4 parts: 1) an inspiring introduction from a utility leader (or representation of utility association) that will be selected from the case examples being included in the global report (10 mins), 2) presentation and discussion of the key findings – relation to water and sanitation utilities and localization of the SDGs - through a visually engaging format. using a whiteboard type tool and polls to facilitate audience interaction both online and in-person, 3) talkshow style discussion framed by the report findings with a small panel of talkshow guests to debate the key challenges and opportunities facing water and sanitation utilities in the context of urban growth and change. This may include 2 of the report co-authors and two stakeholder representatives e.g. one representing a utility and one representing utility customers. The key results of the global report will be used to structure the talkshow with guests debating the key findings, chaired by a dynamic, professional (tv talkshow style) moderator. Live polls and the opportunity to ask questions will engage the in-person and online audience. 4) A closing section will include UN-Habitat / GWOPA representation and focus on how they aim to use the global report.
Our proposed moderator is a young professional and communications expert, Sanata Thera, with strong interests in the SDGs and water and sanitation. Our panel will include two authors of the global report from different regions e.g. Juste Nansi (Burkina Faso), Liza Rivera (Nicaragua), Richard Franceys (UK), and two key stakeholders e.g. from a utility or representative of utility customers or association (to be identified based on global report contributions).

Key objectives

- to share key draft findings from a new global review of water and sanitation service providers focused on their role in localizing the SDGs, and the 5 domains of SDG localisation (culture, economy, society, environment and governance)
- to gather inputs from participants, contesting or validating the key findings, and providing additional examples and ideas for completion of the report (to be published at end 2024 by GWOPA/ UN-Habitat)
- to highlight examples of successful urban service provision models and suggest pathways for scale

UN-HABITAT GEMS

SDG's

SDG1 Goal 6. Ensure availability and sustainable management of water and sanitation for all

Target

6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all

SDG2 Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable

Target

11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums

SDG3 Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Target

8.1 Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross

Relevance

Dialogue theme relevant to your event

Dialogue 3: Stronger together

Describe briefly why should your event be selected and what makes it both relevant and impactful

This will be the first opportunity for a wide group of stakeholders to see the findings of the global review that is being undertaken for GWOPA/ UN-Habitat on the role of water and sanitation service provides in localization of the SDGs.
Water and sanitation have their own SDG goals and targets but the report focused on the multiple dimensions and impacts of utilities.
Within the framework of the global Water Action Agenda - where GWOPA have committed to strengthening 100 utilities by 2023 - it will provide inspiration around practical examples of change at scale.
The report is specifically focused on SDG localisation, addressing how utilities contribute across all the domains of SDG localisation. Utilities can play a major role across culture, economy, society, environment and governance. They are key to climate resilience, and underpin growth of towns and cities.

Promotion and Monitoring

What is your outreach strategy to promote attendance at this event?

We will promote the event by
• Adding the event to the IRC WASH Events Calendar and promotin it as a featured event WASH events calendar
• Creating visuals and key messages to promote the event via IRC, Water for People, GWOPA and other social media channels on LinkedIn, Facebook and X in the weeks leading up to the event
• Promoting the event via IRC's monthly newsletter Amplify and via our key partners including the SWA, IWA, AFWASA etc

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Website
Twitter / X
Facebook
Instagram
Linkedin
Mass mailing to partners

What is your monitoring strategy to follow up on the outcome of the event?

We will seek to collect key data (email and orgs) of participants to follow up after the event, including providing links to the global report as it is published. A key outcome will be enhanced dissemination of the global report based on the WUF event.

Partners

First Organization	Country	URL
IRC WASH	Netherlands	https://www.ircwash.org

Second Organization	Country	URL
Water For People	United States of America	https://www.waterforpeople.org

Third Organization	Country	URL
GWOPA Secretariat	Germany	https://gwopa.org/

Panelists

Ms. Liza Rivera

Official Title	Country	Organization
Strategic Partnerships	Nicaragua	Water For People

Mr. Richard Franceys

Official Title	Country	Organization
Urban water and sanitation expert	United Kingdom	Consultant

UN-HABITAT GEMS

Mr.
Juste
Nansi

Official Title	Country	Organization
Africa Region, Director	Burkina Faso	IRC WASH

Mr.
Sanata
Thera

Official Title	Country	Organization
Communications expert	Mali	IRC WASH

Event Scheduling

Monday, 4 November
Tuesday, 5 November
Wednesday, 6 November
Thursday, 7 November
Friday, 8 November

Languages and other info

Which is the main language of presentation?
English

Do you require interpretation for your event?
No

Do you require catering services for your event?
No

Have you ever hosted an event at a previous World Urban Forum (WUF) or Habitat III Conference?
Not applicable

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Annex 2: Selected Resources

This section compiles an initial list of resources that we propose to utilize in development of the report. At this stage it is not comprehensive list, but illustrative of some of the data sources, analysis and examples that are available.

Project web page

GWOPA/UN-Habitat, 2023. Localizing SDG 6 : transforming access to water by strengthened capacity of operators closest to water provision**. #SDGAction50781. New York, NY, USA: UN Department of Economic and Social Affairs (UN DESA)**
This page includes a description of the Localizing SDG 6 initiative, of which the Global Report is one the activities. The initiative is expected to strengthen 100 utilities between 2023 and 2030, benefiting an estimated 100 million people. Besides SDG 6, the initiative also supports SDG 11.1 (basic urban services), SDG 5.5 (women's participation) and SDG 17.9 (North-South, South-South cooperation) and SDG 17.17 (public-private and civil society partnerships). The page includes deliverables, resources mobilised and progress reports.

Data sources

New IBNET**: the international benchmarking network for water and sanitation utilities.**
Box 2. Summary of IBNET data availability

- Country level data: profiles for 32 countries e.g. including estimates on number of utilities. Tariff data for 198 countries.
- Utility level data: data for 83 utilities from 34 countries

Summary of United Nations Industrial Development Organization (UNIDO) data on water utilities. In 2020, 37 countries responded with numbers of establishments (20,118), employees, female employees, wages & salaries, and output at producer's prices.

World Bank Water Data: Women in Water
This dataset illustrates gender gaps in employment drawing on survey results from the 2019 **Women in Water Utilities: Breaking Barriers** report, and additional surveys collected as part of **Equal Aqua** platform.

Overviews – Global

Adank, M., van Lieshout, R. & Ward, R., 2021. Utility-managed rural water services : models, pathways, drivers, performance and areas for support**. (Thematic overview paper / IRC) The Hague, the Netherlands: IRC. 45 p. : 3 boxes, 8 fig., 4 tab.**
Under which pathways can the 'utilitisation' of rural water supply take place, which factors drive these processes, what are the strengths and weaknesses of the resulting models of utility-managed rural water supply, and what are possible areas for support.

Agarwal, R. et al, 2023. Building inclusive and resilient citywide water & sanitation services : an evidence-based review of the role of small local service providers (SLPs)**. Washington, DC, USA: USAID URBAN WASH Project. 90 p.**
This study is based on a literature review and case studies to understand approaches for cities to formally leverage small local providers (SLPs) for delivering drinking water and

faecal sludge management (FSM) services to households in low-and middle-income countries (LMIC) contexts. Across cases from four cities/regions in Sub-Saharan Africa and three cities in Asia, the study considered the effects of these approaches on equitable access and adaptability of urban service delivery systems to future shocks.

Baietti, A., Kingdom, W. & Ginneken, M. van, 2006. Characteristics of well-performing public water utilities**. (Water supply & sanitation working notes ; no. 9). Washington, DC, USA: World Bank. 115 p.**
This paper, drawing from 11 case studies, discusses the transformation of state-owned water utilities into modern, sustainable organisations, with a focus on urban communities. It highlights the importance of good management practices and the role of ownership in creating an incentive framework for performance improvement and service expansion.

Boulenouar, J. & Lockwood, H., 2023. Emerging findings in rural water service management**. Washington, DC, USA: USAID Rural Evidence and Learning for Water Project (REAL-Water). 56 p.**
Desk review of emerging trends in rural water services delivery, with a focus on 12 countries: Ghana, India, Kenya, Mali, Mozambique, Peru, Rwanda, Senegal, Tanzania, the Philippines, Uganda, and Zambia.

Boulenaar, J. & Lockwood, H., 2023. Professionalizing rural water : desk study. **Washington, DC, USA: USAID Rural Evidence and Learning for Water Project (REAL-Water). 91 p.** Several important trends provide the backdrop, against which rural water services are being managed and are evolving. Important gaps in knowledge about management models and their performance remain.

Campos, L. et al., 2023. Global report on sanitation and wastewater management in cities and human settlements. **Nairobi, Kenya: UN-Habitat. 192 p.**
Drawing from existing literature and primary data in 18 cities across Africa, Asia, Europe and Latin America, this report underlines the scale of the challenge in strengthening wastewater and faecal sludge management (FSM) at the global level, while also highlighting actions being taken by governments, development partners, city planners, utilities, service providers and researchers around the globe. The focus is on service levels, containment and treatment systems, treatment performance, policies and regulations and institutional arrangement, planning and investment, monitoring, and financial performance. The report showcases detailed case studies in 5 of the 18 focus cities, providing an overview of key elements of wastewater management and FGSM and how authorities support the three core functions of Citywide Inclusive Sanitation (CWIS) of: resource planning and management, responsibilities and accountability, including city and national level sanitation data management systems, climate resilience, and emerging innovations.

Caruso, B.A. et al., 2024. Priority gender-specific indicators for WASH monitoring under SDG targets 6.1 and 6.2 : recommendations for national and global monitoring**. New York, NY, USA: United Nations Children's Fund (UNICEF) and World Health Organization (WHO). 60 p.**
Fifteen priority gender-specific indicators are recommended.

Daniel, I., Ajami, N.K., Castelletti, A. et al., 2023. A survey of water utilities' digital transformation: drivers, impacts, and enabling technologies**. npj Clean Water ; 6(51).** DOI: 10.1038/s41545-023-00265-7
Digital technologies can help water utilities improve water security in the light of

urbanisation and climate change. This article presents the results of an online survey involving 64 utilities from 28 countries on the impacts of digital transformation on the water utility sector, its drivers, and key-enabling technologies. The water distribution system is the entry point to further adoption of digital technologies in the whole urban water cycle. Furthermore, technology adoption is driven primarily by economic benefits, followed by government regulation and hydroclimatic factors.

Edwards, D.B., Rosensweig, F & Salt, E. 1993. Designing and Implementing Decentralization Programs in the Water and Sanitation Sector, WASH Technical Report No. 89, Prepared for the Office of Health, Bureau for Research and Development, U.S. Agency for International Development by the Environmental Health Project, USAID, Washington.

Gasson, C., 2023. Too much, too little, too bad : stretching utilities in a new way **[video: 4:07m]. AIWW Wave.**
Leading Utilities of the World organized a workshop at Amsterdam International Water Week 2023 discussing two issues: (1) The question of changing demand patterns in water and (2) The circular economy and the energy of waste. Christopher Gasson, Global Water Intelligence, shares the collected insights, perspectives, ambitions and solutions. Also, he shares the global struggle with financing water security in climate change, with water going to be the largest investment theme.

IWA, GWOPA & Vitens-Evides International, 2020. Water operators partnerships : building WOPs for sustainable development in water and sanitation**. London, UK: International Water Association (IWA) and Global Water Operator's Partnership Alliance (GWOPA). 36 p.**
This review systematically collects and analyses experience on existing WOPs, providing advice on best practices, partnering preconditions and financing models.

Joseph, G. et al., 2024. Funding a water-secure future : an assessment of global public spending**. Washington, D.C., USA: Global Water Security & Sanitation Partnership (GWSP), World Bank. 378 p.**

Covers spending on water supply & sanitation (WSS), (which receives 76% of public spending), water transport, irrigation & hydropower. Greatest regional WSS spending gap of $ 73.5 billion is for Sub-Saharan African. Private sector only contributed 9% of WSS infrastructure investments in 2017. Given the presence of high levels of subsidies in the provision of WSS services, public money is targeted more towards the less deserving segments of the society.

Libey, A., Adank, M. & Thomas, E., 2020. Who pays for water? : comparing life cycle costs of water services among several low, medium and high-income utilities**. World development, 136(105155), pp.1-13 : 2 fig., 6 tab. DOI: 10.1016/j.worlddev.2020.105155**
Comparing water utilities in Kenya, Ethiopia, Cambodia, and the United States reveals a gap between the full costs of service delivery and budgets of $7–$43 per capita and budget gaps from 2.6% to 10,000%. Support from national government and donors for full life cycle costs is appropriate.

Lockwood, H., 2023. Is consolidation the answer to improving rural water services in low-income countries? : lessons from OECD country experience. **Washington, DC, USA: USAID, Rural Evidence and Learning for Water (REAL-Water). 11 p. [Read** discussion on RWSN Dgroup Sustainable Services]
This research brief summarises experiences with consolidation of rural water provision in

Africa and OECD countries. It then identifies priority areas of research that would strengthen emerging consolidation and aggregation efforts in low- and middle-income countries.

Mathur, K. et al,. 2020. Public utility reform : what lessons can we learn from IEG evaluations in the energy and water sectors? **Washington, DC, USA: Independent Evaluation Group, World Bank. 33 p.**
This synthesis provides a review of operationally relevant findings and lessons from World Bank-supported utility reforms in the energy and water sectors. It identifies two fundamental areas of utility reform – improving institutional accountability and strengthening financial viability. It identifies lessons for each sector and cross-cutting lessons on promoting financial and operational discipline (regardless of private or public ownership), and institutional governance and accountability.

Mumssen, Y. et al., 2018. Regulation of water supply and sanitation in Bank client countries : a fresh look**. (Water Global Practice discussion paper). Washington, DC, USA: World Bank. 113 p.**
The paper examines how lower-, lower-middle-, and middle-income countries (LMICs) could implement more effective regulation to deliver sustainable WSS outcomes by considering political, legal, and institutional realities. It provides an overview of three regulatory aspects—objectives, forms, and functions—to support practitioners as they consider their own regulatory reform options.

Trimmer J.T., Qureshi, H., Otoo, M., Delaire, C., 2023. The enabling environment for citywide water service provision : insights from six successful cities**. PLOSWater 2(6):e0000071. DOI:** 10.1371/journal.pwat.0000071
This article identifies six cities across Africa, Asia, and South America that offered historical examples of success in inclusive piped water provision, resulting in high levels of access and service quality, including within low-income areas. A well-functioning water service provider was often a prerequisite for inclusive, pro-poor service provision. Elements such as clear performance indicators, customer feedback mechanisms, and strategies to sustainably finance operating costs contributed to cities' success. Second, inclusive water services often required explicit pro-poor policies and strategies, such as the removal of land tenure requirements for piped connections and community mobilization for participatory decision-making. [Based on a longer report: by Trimmer, J.T., Qureshi, H. & Delaire, C., 2023]

WHO & UN-Water, 2022. Strong systems and sound investments : evidence on and key insights into accelerating progress on sanitation, drinking-water and hygiene : UN-Water global analysis and assessment of sanitation and drinking-water (GLAAS) 2022 report**. Geneva, Switzerland: World Health Organization. 96 p.**
The report compiles data on drinking-water, sanitation and hygiene (WASH) from 121 countries and territories and 23 external support agencies (ESAs). It includes sections on: WASH and health; climate resilience of WASH systems; national coverage targets; finance; external support; leaving no one behind; human resources; gender; regulation; and data use.

WHO/UNICEF Joint Monitoring Programme, 2023. Progress on household drinking water, sanitation and hygiene 2000–2022 : special focus on gender. New York, N.Y., USA: United Nations Children's Fund (UNICEF) and World Health Organization (WHO). 172 p.
The report presents updated national, regional and global estimates for WASH in households for the period 2000 to 2022 (disaggregated for rural and urban areas) and has a special focus on gender. It finds that achieving universal coverage by 2030 will require a sixfold

increase in current rates of progress for safely managed drinking water, a fivefold increase for safely managed sanitation and a threefold increase for basic hygiene services. Each chapter examines available data related to gender and WASH, indicates how addressing gender inequalities can accelerate progress on WASH, and highlights opportunities for enhanced national and global monitoring in the future.

World Bank. 2019. Women in water utilities : breaking barriers**. Washington, D.C., USA: Global Water Security & Sanitation Partnership (GWSP), World Bank. 92 p. +** related database
Based on primary and secondary quantitative and qualitative data from 64 water utility companies in 28 economies, only 18 percent of workers were found to be women. This report identifies key barriers and bottlenecks that women face at each stage in the career cycle (attraction, recruitment, retention, and advancement), as well as ways of making policy and systematic changes toward greater inclusion of women in the water workforce.

Overviews – Africa

AMCOW & AUC, 2023. 2022 Africa Water and Sanitation Report : leveraging partnerships for assuring sustainable water availability for all purposes**. Abuja, Nigeria: African Ministers' Council on Water (AMCOW). 185 p.**
This document contains the 2022 Report on Implementing the July 2008 Sharm el-Sheikh Declaration (Assembly/AU/Decl.1 (XI)) as contributed to by 44 Member States through self-assessments. It highlights areas where Africa still needs to strengthen efforts to achieve the agreed-upon goals on water and sanitation. Main themes discussed are financing; WASH & wastewater; water infrastructure for growth & water resources management; climate change & disaster risk reduction; governance & institutions; and information management & capacity development.

Kumpel, E. et al., 2020. From data to decisions: understanding information flows within regulatory water quality monitoring programs**. npj Clean Water ; 3(1) ; pp. 1-11. DOI: 10.1038/s41545-020-00084-0**
This study evaluates the methods used to organise, analyse, and transmit drinking water quality data among 26 water supplier or surveillance institutions and two regulatory agencies in six countries of sub-Saharan Africa. Broad reforms are necessary to improve the use of these water quality data to manage water safety.

REACH/RWSN, 2023. Performance and prospects of rural drinking water services in francophone West Africa. Oxford, UK: REACH, University of Oxford. 48 p.
This study looks at the evolution of rural water supply policies in francophone West Africa and the performance of the delegation of rural water services. Since the 1980s, rural water services have been predominantly managed by community-based organisations. In parallel, many countries have followed a decentralisation process and transferred the mandate for rural water services to the local level. The six countries reviewed in this study (Benin, Burkina Faso, Mali, Mauritania, Niger and Senegal) were selected given their long experience with the delegation of rural water services at the local level, some of them since the 1990s; and recent reforms in some of these countries towards re-centralisation of rural water mandates and delegation of rural water services at a much wider regional scale (Mauritania, Senegal and Benin).

Twyman, B. et al., 2022. The water supply and sanitation regulatory landscape across Africa : content-wide synthesis report**. Lusaka, Zambia: Eastern and Southern Africa Water and Sanitation Regulators Association (ESAWAS). iii, 107 p.**
This overview of the water supply and sanitation (WSS) regulatory landscape across Africa, highlights the progress and challenges in meeting SDG 6. It examines the policy provisions, legal instruments, and regulatory arrangements in place, emphasizing the diversity of regulatory models and the need for context-specific 'best-fit' approaches. The document details the spheres of regulation, including service providers and delivery types, and explores the mechanisms for standards, monitoring, reporting, incentives, and sanctions. It underscores the varying focus on water supply versus sanitation services and the importance of effective regulation in improving service delivery. The report also discusses the regulatory environment, autonomy, transparency, participation, and the need for learning and adaptation within the sector. It concludes with recommendations for establishing and improving WSS regulation, stressing the role of a dedicated Africa-wide WSS Regulators Association. Annexes provide additional analytical frameworks, background data, and insights into regulated service delivery types and mechanisms. The report serves as a reference for countries aiming to institute effective WSS regulation and is a collaborative effort by Aguaconsult, Athena Infonomics, Emanti Management, and independent consultants, with inputs from key stakeholders across Africa.

UNEP & GRID-Arendal, 2023. Wastewater : turning problem to solution : a UNEP rapid response assessment. **Nairobi, Kenya: United Nations Environment Programme**. 128 p. DOI: 59117/20.500.11822/43142
This new report builds on the previous **Sick Water? report**, starting with the premise that wastewater is an important and valuable resource that can also help avoid costs of pollution and biodiversity loss. It aims to inspire policy and decision makers to be proactive in leading transformational change in sustainable wastewater management by closing the loop in the water cycle and realizing the opportunities to reuse the resources that can be recovered from wastewater.

WHO & UNICEF, 2023. Progress on sanitation and hygiene in Africa 2000-2022**. New York, NY, USA: United Nations Children's Fund (UNICEF) and World Health Organization (WHO). 16 p.**
Snapshot of findings and key messages from JMP and GLAAS.

van den Berg, Caroline; Danilenko, Alexander. 2017. **Performance of Water Utilities in Africa**. © World Bank, Washington, DC. http://hdl.handle.net/10986/26186 License: CC BY 3.0 IGO

Overviews – Asia

ADB, 2017. Forging partnerships among water and wastewater operators**. Manila, Philippines: Asian Development Bank. 58 p.**
Between 2007-2017, the ADB WOPs Program had around 69 completed and ongoing partnerships in Asia and the Pacific. This publication provides a compendium of twinning arrangements from 12 countries covering asset management, nonrevenue water (NRW), wastewater management, public–private partnership and sustainability.

ADB, 2020. Asian Water Development Outlook 2020 : advancing water security across Asia and the Pacific**. Manila, Philippines: Asian Development Bank. 157 p.**
The AWDO assesses national water security across the Asia and the Pacific, with a focus on five key dimensions: rural, economic, urban, environmental, and water-related disaster.

ADB, 2022. Mainstreaming Water Resilience in Asia and the Pacific. Subproject 4: Water Organization Partnerships for Resilience. (ADB technical assistance subproject report). Manila, Philippines: Asian Development Bank. 13 p.
The US$ 3 million proposed subproject (Nov 2022 – Dec 2025) will expand ADB's ongoing Water Operator Partnerships (WOP) program that was launched in 2007. The aim is to support at least 8 successful twinning partnerships among water organizations.

Overviews – Europe and North America

Le Strat, A., 2022?, Enabling WOPs : mobilizing European actors for solidarity-based water partnerships**. Bonn, Germany: Global Water Operators' Partnerships Alliance (GWOPA). 35 p.**
This report examines these factors and presents recommendations to scale up WOPs in Europe by showcasing examples of enabling frameworks and best practices from countries and cities throughout Europe.

Country case studies

Brazil

Carvalho, R.C. de, Nahas, M.I.P. & Heller, L., 2020. Localizing Sustainable Development Goal 6 : an assessment of equitable access to sanitation in a Brazilian metropolitan region**. Sustainability ; 12(17) ; 6776.** https://doi.org/10.3390/su12176776
This article emphasises the importance of localising SDG 6 for effective implementation. It proposes a methodology to evaluate and monitor equitable access to sanitation services at the municipal level, using the Belo Horizonte Metropolitan Region as a case study. The study reveals significant inequalities in service access among municipalities and population subgroups, highlighting the need for localized strategies to achieve universal access to services.

Ethiopia

Chitelesi Mutswenje, M., 2023. Understanding the policy and strategy framework for the sustainable provision of piped water services for rural, small and medium towns in Ethiopia : the case of Itang town water and sewerage utility**. Loughborough, UK: Loughborough University. Thesis. DOI: 10.17028/rd.lboro.24486799.v1**
The Itang Town Water (and Sewerage) Utility is unique in that it provides water to a large number of refugees, funded by UNHCR, as well as to the nearby host community. Piloted by UNICEF, the Itang 'refugee-host community integrated service delivery model' has been adopted as a model for the Comprehensive Refugee Response Framework (CRRF) and is being replicated in Ethiopia and abroad. See also Box 4 in: Adank, M. et al., 2021.

Foppen, A.H., Holtslag, H. & Chekol, C.G., 2019. The utility approach : extended distribution for household water filters in Ethiopia**. (In: All systems go! WASH Systems Symposium, The Hague, the Netherlands, 12-14 March 2019). The Hague, The Netherlands: IRC. 8 p.: 1 fig.**
Making a range of good quality household water filters available to customers is an

additional service and an intermediate solution until water supply entities can supply safe drinking water 24/7.

Ghana

Bori, S. & Bonte, V.A., 2024. Rural service delivery models and providers in Western Ghana : data to inform reform**. The Hague, the Netherlands: IRC. 8 p. : 5 fig., 1 tab.**
This briefing note seeks to share key findings from a mapping conducted by the Ghana Statistical Service on water infrastructure, services and stakeholders in the Western Region. The findings inform the Community Water and Sanitation Agency's change journey into the national utility for rural service provision.

Dakyaga, F., Kosoe, E.A. & Alhassan, G., 2023. Everyday politics in collaborative governance of (non)networked water infrastructures in rural and small towns of Ghana**. Habitat International, 139, 102904. doi: 10.1016/j.habitatint.2023.102904.**
This study examines the politics in a state-community collaboration involving the provision, operations and maintenance of water infrastructures in rural and small towns of Ghana. The findings suggest that the constellation of actors and the uneven power relations inherent in collaborative governance arrangements tend to empower actors with the “powers over” and “powers to” empower non-state actors.

Greece

National water operational partnerships : short term exchanges between Greek operators**. Bonn, Germany: Global Water Operators’ Partnerships Alliance (GWOPA). 20 p.**
This brief describes two short term exchanges, both mentored by the Athens Water Supply and Sewerage Company (EYDAP). In both cases, the partnerships helped the local utility to provide an opportunity to address challenges that are common among the Greek water supply and sanitation sector.

India

Singh, S., 2022. Achieving Sustainable Development Goal 6 in India : transforming lives through localization**. 1st International Academic Conference on the Sustainable Development Goals : “Why is Matters”, 5-7 Oct 2022, Orem, Utah, USA. Orem, UT, USA: Utah Valley. 16 p.**
The adoption SDGs aligned with the Indian national development agenda concerning improved water and sanitation measures proved remarkably successful in the previous years. India has established an SDG localised model for adopting, implementing, and monitoring SDGs at national, sub-national, and local levels.

Indonesia

GWOPA/UN-Habitat & IHE Delft, 2024. National Water Operators’ Partnerships : An underused opportunity for locally-led water utility capacity development. Bonn, Germany: Global Water Operators’ Partnerships Alliance (GWOPA) and IHE Delft. 8 p.
Over the last 5 years, the WOP program Kemitraan Solidaritas, initiated and facilitated by PERPAMSI (Indonesian Association of Water Supply Companies), has established over 30 WOPs between Indonesia’s operators. The Indonesian case shows that operating within the

same tight-knit institutional framework, may also create conditions that further support the potential of national WOPs as an effective capacity development mechanism.

Kenya

Githu, I.W., 2022. Where community management works : the evolution and professional management of piped water supplies in rural Kenya**. (ETD – Doctoral Dissertations). Baltimore, MD, USA: Johns Hopkins University, School of Advanced International Studies.**
The research shows that there is clear added value for having institutional and organizational arrangements that support the emergence and operation of professionally managed community water schemes.

GWOPA, 2022. Water operators' partnership case study : VEI B.V., The Netherlands – Nakurua County ((NAWASSCO, NARUWASCO, & NAIVAWASCO) Kenya**. Bonn, Germany: Global Water Operators' Partnerships Alliance (GWOPA). 42 p.**
The WOP aimed to promote benchmarking activities, increase water and sanitation coverage, increase water supply, improve distribution management (NRW), and establish a strong customer-support mechanism.

GWOPA, 2022. Water operators' partnership case study : Dunea, The Netherlands - Homa Bay County Water & Sanitation (Homawasco), Kenya**. Bonn, Germany: Global Water Operators' Partnerships Alliance (GWOPA). 42 p.**
The WOP between Homawasco and Dunea aimed to contribute towards increased sustainable access to and use of improved water supply, sustainable sanitation, and proper hygiene practices among low-income urban dwellers in Homa Bay County.

USAID URBAN WASH Project, 2024. Small local service provision for water service delivery in Western Kenya : inception report**. Washington, D.C., USA: USAID URBAN WASH Project. 74 p.**
Includes a short overview of the provision of water services in Kenya and research questions on how utilities can engage with small local providers (SLPs).

Malawi

Banda, E.M. & Mwale, F.D., 2018. Utility performance in supplying water to informal settlements: A case study from Malawi**. Utilities Policy ; 55 ; pp. 151-157**. DOI: 10.1016/j.jup.2018.09.009 [paywall]
Focusing on non-revenue water (NRW), revenue collection efficiency, and repair costs, this study assessed a utility's performance in Malawi in selected informal settlements. Results suggest that the presence of informal settlements does not necessarily amplify and may actually reduce NRW. Collection efficiency on average is high. Repair costs are extremely high. Utilities may benefit from continued investments in informal settlements with innovations to water supply infrastructure.

Mali

GWOPA, 2022. Water operators' partnership case study : World Waternet, The Netherlands – Société Malienne de Gestion de l'Eau - Potable SOMAGEP-HER**.** Bonn, Germany: Global Water Operators' Partnerships Alliance (GWOPA). 28 p.

The main objective of the WOP was to strengthen SOMAGEP HER so that it can provide sustainable water services to the urban poor in Mali. The main expectation was that by improving the entire organization (leadership, human resources, finance, customer services, asset management and Non-Revenue Water), SOMAGEP HER's revenue and bankability would increase. Hence, it would enable SOMAGEP-HER to attract external financing for infrastructure investments.

Nepal

Ogata, R., Khatri, N. & Sakamoto, M., 2019. Illuminating utility benchmarking data with analysis and consumer feedback : insights from Nepal**. Journal of Water, Sanitation and Hygiene for Development ; 9(2) ; pp. 356-362**. DOI: 10.2166/washdev.2019.159
Benchmarking based on performance indicators, water quality tests, and a consumer survey was conducted for 26 larger and older town water supply services in Nepal. Recommendations on operating ratio, biological contamination, supply time and benchmarking are provided.

Pakistan

Khan, N.A., 2019. **Report on localization of SDG 6 clean water and sanitation in Sindh**. Karachi, Pakistan: SDGs Support Unit, Government of Sindh and UNDP Pakistan. 45 p.
This document provides basic SDG 6 data for Sindh province, Pakistan and investment needed to reach SDG 6 targets.

Tanzania

Dakyaga, F. et al., 2023. Geographies of infrastructure : everyday governance of urban water supply beyond the utility network in Dar es Salaam**. Water Alternatives, 16(3): 769-792**
Explores the diverse water sources and governance arrangements that exist beyond the utility network in the city, and how they affect the water distribution and access for urban residents.

GWOPA, 2022. Water operators' partnership case study : VEI, Utrecht, The Netherlands – Mwanza Urban Water Supply and Sewerage Authority (MWAUWASA), Mwanza, Tanzania**. Bonn, Germany: Global Water Operators' Partnerships Alliance (GWOPA). 38 p.**
The project aimed to improve the operational and financial performance of MWAUWASA, through on-the-job training in the development/implementation of an NRW Reduction Plan, GIS, online reporting system, Asset Management, hydraulic modelling, management and leadership training and policy/study development (such as a pro-poor strategy).

Uganda

Marshall, K., 2023. Uganda institutional framework for water supply**. Washington, DC, USA: USAID Rural Evidence and Learning for Water Project (REAL-Water). 18 p.**
Includes an overview of the legal framework, policies and service statistics as well as the evolving framework for water provision and monitoring.

GWOPA, 2022. Water operators' partnership case study : Vitens Evides International (VEI) – National Water and Sewerage Corporation (NWSC), Kampala, Uganda**. Bonn, Germany: Global Water Operators' Partnerships Alliance (GWOPA). 46 p.**

The project aimed to assist NWSC implement the Asset Management Strategy and help establish and implement a comprehensive asset management system that enhances business continuity and supply reliability while optimising the cost of acquisition and management of infrastructure. The methods, tools and practices developed and tested in Kampala were later to be replicated in the other regions.

Other - Guidelines

Andres, L. et al., 2019. Doing More with less : smarter subsidies for water supply and sanitation**. Washington, DC, USA: Global Water Security & Sanitation Partnership (GWSP), World Bank, 135 p.**

How can scarce public resources be used most effectively to achieve universal delivery of water supply and sanitation services. It analyses the prevalence and performance of subsidies in the sector, then guides policymakers on improving subsidy design and implementation to improve their efficacy and efficiency in attaining their objectives.

Cabrera Flamini, A., 2019. Water utility management : operational tool - simulation game : trainer's manual. (BEWOP tool series). Bonn, Germany: Global Water Operators' Partnerships Alliance (GWOPA) and IHE Delft. 56 p.
A learning tool to develop awareness and knowledge of the processes of strategic planning within utilities. The game draws from real cases and practical experience of experts, which allows participants to experience utilities' decision-making dilemmas in a safe environment. Access the Utility Management Simulation Game.

Lombana Cordoba, C. et al., 2022. Utility of the future : taking water and sanitation utilities beyond the next level 2.0 : a methodology to ignite transformation in water and sanitation utilities. **Washington, D.C., USA: Global Water Security & Sanitation Partnership (GWSP) World Bank. 92 p**. Accompanied by a Toolkit and Training Program
The UoF methodology works in parallel on two dimensions to improve performance and ignite transformation in water and sanitation utilities: management and operational (a "hard" dimension that focuses mainly on processes and practices), and change management (a "soft" dimension that focuses on leveraging staff engagement, empowerment, and teambuilding).

Merme-Darrigrand, V., Pascual Sanz, M. & Schwartz, K., 2019. Framework for analyzing water operators' partnerships. 32 **p. Bonn, Germany: Global Water Operators' Partnerships Alliance (GWOPA). 32 p.**
The BEWOP Framework for Analyzing Water Operators' Partnerships (WOPs) presents step-by-step guidance to develop dynamic, tailored, and user-friendly case studies that inspire, challenge and support the many practitioners struggling to build and maintain good WOP projects that contribute to a significant impact.

PERPAMSI, 2024. National WOPs facilitation guidelines. **Bonn, Germany: Global Water Operators' Partnerships Alliance (GWOPA) and PERPAMSI. 15 p.**
These guidelines were developed by PERPAMSI, the national association of operators in Indonesia supporting and facilitating national WOPs. The guidelines advise on National WOPs based on the Indonesian experience and include a step-by-step guide to the process, covering brokering, diagnosis, work plan development etc.

Soppe, G., Janson, N. & Piantini, S., 2018. Water utility turnaround framework : a guide for improving performance. **Washington, DC, USA: World Bank. 167 p.**
This framework for turning around poorly performing water utilities integrates practical steps to increase a utility's operational and managerial efficiency with measures to reverse the dysfunctional political equilibria in which it operates. Together with "Smart Water Utility" it forms the foundation of the Utility of the Future methodology (Lombana Cordoba, C. et al., 2022).

WHO, 2024. Guidelines for drinking-water quality : small water supplies. **Geneva, Switzerland: World Health Organization. xxvi, 189 p. : 19 boxes, 15 fig., 13 tab.**
WHO guidelines addressing the needs and opportunities associated with small supplies to facilitate progressive improvement towards safe and sustainable drinking-water services for all. "The guidance is also important for small water suppliers, although most recommendations are directed at the institutions that regulate and support them. (The Selected further reading section includes resources that are intended for use directly by water suppliers to support water safety planning.). "See also the accompanying publication: Sanitary inspection packages: a supporting tool for the Guidelines for drinking-water quality : small water supplies. iv, 216 p.

World Bank, 2022. Water supply and sanitation policies, institutions, and regulation : adapting to a changing world : synthesis report. **Washington, D.C., USA: Global Water Security & Sanitation Partnership (GWSP), World Bank. 63 p.** Includes accompanying Agile PIR Prototype Tool
Besides policies, institutions, and regulation (PIR) the framework also covers water and sanitation in an intergovernmental context, financing and resilience. The 3 key messages are: : Understanding the PIR context of WSS provision is a precondition for all other efforts to achieve meaningful and sustainable WSS outcomes; Progress in achieving meaningful PIR reforms starts with a rigorous assessment of the root causes of WSS service bottlenecks; and PIR reforms are long term in nature and require mechanisms that foster evaluation, learning, and adjustment. Includes case study boxes from Bosnia and Herzegovina. Niger, South Africa, Kenya, South Africa and Benin.

Other – Research

Furlong, C., Mugendi, A., Brdjanovic, D., 2023. Exploring the usage and impact of urban sanitation tools targeting low- and middle-income countries**. Frontiers in Environmental Science. Section Water and Wastewater Management ; 11, 14 July**. DOI: 10.3389/fenvs.2023.1109306
This paper explores the usage and impact of four urban sanitation tools: Shit flow Diagram (SFD), City Service Delivery Assessment (CSDA), SaniPath, and the Citywide Planning Tool.

Gude, V.G. & Muire, P.J., 2021. Preparing for outbreaks : implications for resilient water utility operations and services**. Sustainable Cities and Society, 64. 102558. DOI: 10.1016/j.scs.2020.102558**
The purpose of this article is: 1) to discuss the economic and public health impact of outbreaks on water and wastewater utilities and utility workforce; 2) to present case studies demonstrating utilities' preparedness and response to COVID-19, and 3) to review various alternatives for education and training as well as innovative processes and strategies for productivity during and after outbreaks.

Narayan, A.S. & Boller, M., 2023. To integrate or not to integrate? : water and waste as unified basic services. **PLOS Water, 2, pp.1-4.** DOI: 10.1371/journal.pwat.0000180
A summary of an expert debate held at the All Systems Connect Symposium 2023 in The Hague. It presents four key issues when considering integration of water and waste services in low-resource settings: (1) Management and capacity; (2) Implementation complexity; (3) Operational synergies; and (4) Prior experiences. Further research involving practitioners, and government representatives could provide insights into what the optimal level of integration is for different contexts.

Strande, L., Evans, E., Von Sperling, M., Bartram, J., Harada, H., Nakagiri, A. and Nguyen, V., 2023. Urban sanitation : new terminology for globally relevant solutions?. **Environmental Science & Technology ; 57 (42), 15771-15779**. DOI: 10.1021/acs.est.3c04431
The use of accurate, technically robust vocabulary and definitions can improve decisions about management and selection of treatment, promote a circular economy, provide a basis for evidence-based science and technology research, and lead to critical shifts and transformations to set policy goals around truly safely managed sanitation. Three current modes of sanitation are defined, examples of misconceptions based on existing terminology are presented, and a new terminology for collection and conveyance is proposed: (I) fully road transported, (II) source-separated mixed transport, (III) mixed transport, and (IV) fully pipe transported.

Twyman, B., 2023. Six conditions for institutionalising WASH systems strengthening. **The Hague, the Netherlands: Agenda for Change, c/o IRC WASH. 14 p**.
Institutionalising water, sanitation, and hygiene (WASH) systems strengthening is a long-term process that varies between organisations based on the scale of their operations as well as their priorities, funding, and focus areas. This think piece distils learnings from Agenda for Change members' ongoing processes. It details six priority conditions organisations should focus on creating when institutionalising the approach and highlights common milestones.

Other – SDG localisation

Hernández Orozco, E. et al., 2021. SDG localization baseline : how local-level actors are driving change and advancing the achievement of the 2030 Agenda. Stockholm, Sweden: Stockholm Environment Institute, 62 p.
This document explains and outlines key entry points and practices that enable the local advancement of the 2030 Agenda. Key findings from 28 case studies indicate that more work is needed in harmonizing efforts and resources for critical SDG indicators at global, national, and subnational levels. It was also found that local engagement and stakeholder inclusion in the SDGs are complex since subnational contexts differ considerably.

NDPC, 2022. Ghana's Voluntary National Review report on the implementation of the 2030 Agenda for Sustainable Development**. Accra, Ghana: National Development Planning Commission. 168 p.**
Includes section on SDG 6 (p. 52-58)

UN-Habitat, 2022. Multilevel governance for SDG localization : accelerating progress towards the localization of the SDGs and post-pandemic recovery through enhanced multilevel governance**. Nairobi, Kenya. United Nations Human Settlements Agency (UN-Habitat). 81 p.**

To analyse the MLG-SDG localisation nexus, this report proposes a framework that aims to capture and connect: (i) the key dimensions of multilevel governance (MLG) processes, as emerging from the policy coherence and integration paradigms; (ii) the main principles and conditions under which these are turned into specific practices; and (iii) the resulting outputs and outcomes, in terms of improved capacities and functionalities for SDG localisation.

Annex 3: Water and sanitation associations, networks, partnerships and CoPs

Water Associations

International

- International Water Association

Regional

- African Water and Sanitation Association (AfWASA)
- Arab Countries Water Utilities Association (ACWUA)
- EurEau
- European Water Association (EWA)
- Water Institute of Southern Africa (WISA)
- WOP-LAC /ALOAS

Water Regulator Networks

International

- IWA - International Water Regulators Forum (IWRF)
- International Network of Drinking-water and Sanitation Regulators (RegNet-WHO)

Regional

- Asociación De Entes Reguladores De Agua Potable Y Saneamiento De Las Américas (ADERASA)
- Eastern and Southern Africa Water and Sanitation Regulators Association (ESAWAS)
- European Association of Water Regulators (WAREG)

Water Operator Partnerships (WOPs)

International

- Global Water Operator Partnerships (GWOPA)

Regional

- GWOPA - WOP-Africa
- GWOPA – Asia and Pacific
- GWOPA - WOP-LAC

Water and Sanitation Networks and Partnerships

- Public Services International - Utilities
- Sanitation and Water for All (SWA)
- Water Integrity Network

Communities of Practice (CoPs)

- GWOPA - **Global Community of Practitioners to accelerate the SDG6 ambitions: water and sanitation for ALL by 2030** [exclusively for utility employees]
    - Enabling Environment (EE)
    - Utility Organisation Strategy (UOS)
    - Water Resources Resilience & Climate Action (WRRCA)
    - Asset Management (AM)
    - Water Production (WP)
    - Water Distribution (WD)
    - Commercial Operations (CO)
    - Sanitation, Wastewater & Utilities (SWU)
    - Investment Mobilisation (IM)
    - Low-Income Customers (LIC)
- IWA Specialist Groups (registration required), incl.
    - Benchmarking and Performance Assessment
    - Efficient Urban Water Management
    - Institutional Governance and Regulation
    - Sanitation and Water Management in Developing Countries
    - Statistics and Economics
    - Strategic Asset Management
    - Sustainability in the Water Sector
- Community of Practice on Water and Open Government [Note: last newsletter 2021]
- RWSN – Sustainable Services Dgroup
- SuSanA working groups: Operation, maintenance and sustainable services | Cities
- **WaterPros** (Linkedin group)

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