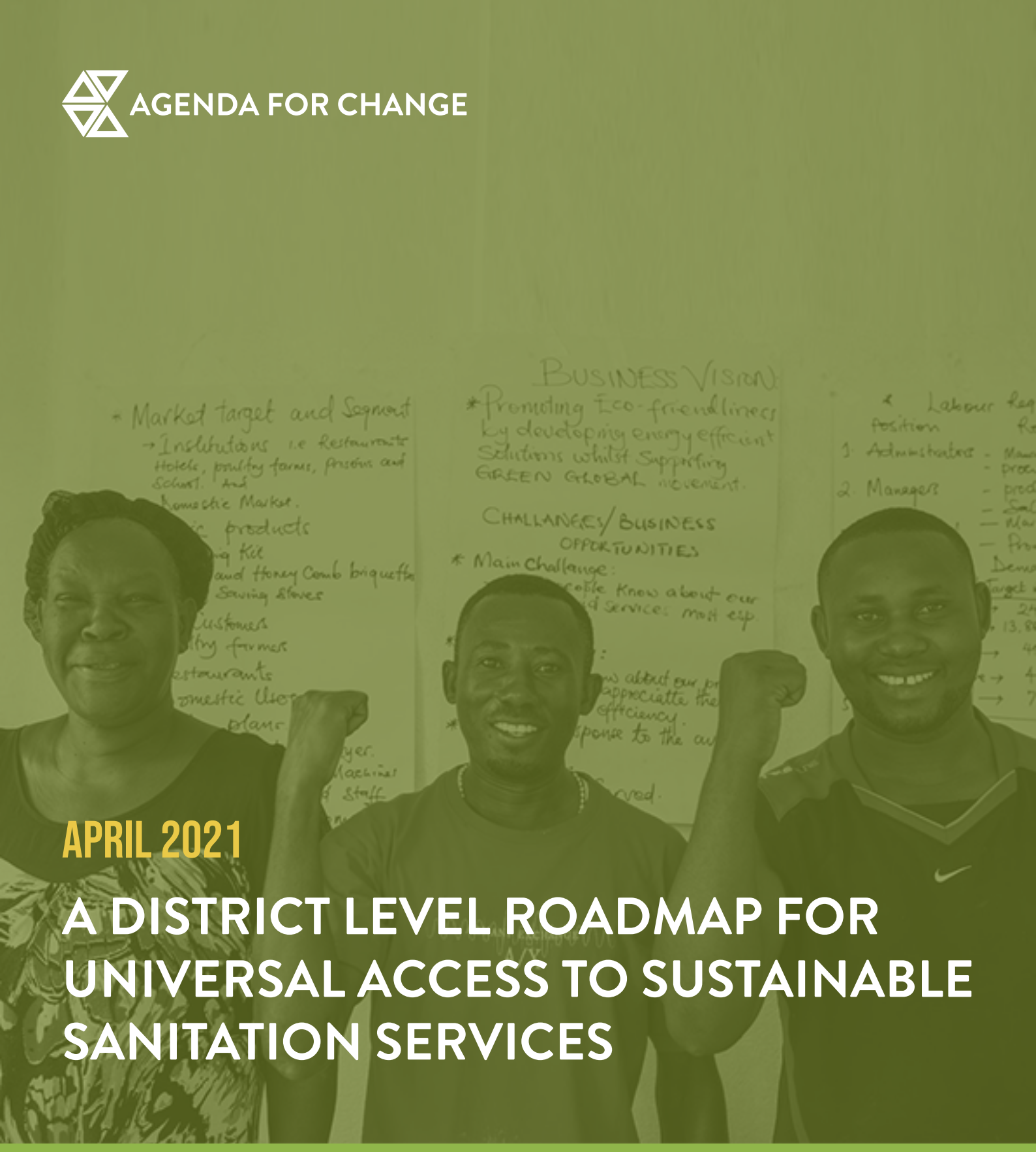
AGENDA FOR CHANGE



APRIL 2021

A DISTRICT LEVEL ROADMAP FOR UNIVERSAL ACCESS TO SUSTAINABLE SANITATION SERVICES

AGUA CONSULT

HELVETAS

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AUTHORSHIP AND ACKNOWLEDGEMENTS

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Cover page: These three entrepreneurs work at a Decentralized Fecal Sludge Treatment (DEFAST) plant in Kampala, Uganda. Pit emptiers can dispose of waste that is then treated and turned into briquettes for fuel or fertilizer (Water For People Uganda).

Below: Simon, the leader of a community hygiene and sanitation club in Rulindo, Rwanda, stands in front of his newly-constructed latrine (Water For People Rwanda).

ACRONYMS

Acronym	Description
CapEx	Capital Expenditure
CapManEx	Capital Maintenance Expenditure
CATS	Community Approaches to Total Sanitation
CLTS	Community Led Total Sanitation
CLS	Community Led Sanitation
CoC	Cost of Capital
DANIDA	Danish International Development Agency
DSExp	Direct Support Expenditure
FSM	Faecal sludge management
GPS	Global Positioning System
JMP	Joint Monitoring Programme
MFI	Microfinance Institution
NGO	Non-governmental organization
ODF	Open Defecation Free
OpEx	Operation and Minor Maintenance Expenditure
SAAB	Sanitation as a business
SDG	Sustainable Development Goal
SME	Small and medium enterprises
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WASH	Water, Sanitation and Hygiene
WHO	World Health Organization
WSP	Water and Sanitation Program
WSSCC	Water and Sanitation Supply Council

DEFINITIONS OF KEY TERMS

Community-led sanitation (CLS) is the term used to describe a facilitating process to inspire and empower rural communities to stop open defecation and to invest in, build, and use latrines, without offering external subsidies to purchase hardware. CLS focuses on creating demand for sanitation services in communities (UNICEF, 2009) and different versions of it exist such as **Community-Led Total Sanitation** (CLTS) and **Community Approaches to Total Sanitation** (CATS). This roadmap will not go into the specificities of the different approaches and refers to CLS as a generic approach to changing sanitation and hygienic behaviours.

Life Cycle Costs refer to the full range of costs required for delivering adequate sanitation services. **The Life-Cycle Costing Approach** is a methodology that considers all cost categories for providing adequate services to a specific population in a particular geographic area indefinitely and has been theorized for the water and sanitation sector by IRC under the WASHCost initiative.

Expenditure refers to the amount allocated to a specific cost category by a given group such as a district authority, a household, or a donor. While a cost refers to the ideal amount allocated to reach a specific service level, an expenditure refers to the amount effectively spent.

Hygiene refers to the conditions and practices that help maintain health and prevent the spread of diseases including handwashing, menstrual health and hygiene, and food hygiene (UNICEF and WHO, 2020). Behaviour change activities and infrastructure encompass hand hygiene materials, either a basin with water and soap or alcohol hand rub available at points of care, and toilets. The Joint Monitoring Programme (JMP) hygiene service ladder is shown in Figure 1.

Sanitation services refer to the management of excreta from the facilities used by individuals, through to the emptying and transport of excreta for treatment and potential discharge or reuse (UNICEF and WHO, 2020). It covers all services levels, latrine types, and faecal treatment methods.

Service authority may refer to an administrative unit in a district, commune, or municipality holding the service authority functions, depending on the country. The service authority functions will depend on the country legislation and level of decentralisation, and may include WASH services planning, budget allocation and utilisation, or monitoring and transfer of data to the regional level. In this document, the term "**district**" is used to refer to the unit holding this set of functions.

On-site sanitation covers a wide range of sanitation technologies in which excreta and wastewater are collected, stored on the plot where they are generated, and treated somewhere else. There are two main categories of on-site sanitation technologies: "wet" technologies which require water for flushing; and "dry" technologies which do not require any water for flushing (Tilley, Ulrich, Luethu, Reymond & Zurbruegg, 2014). The JMP sanitation ladder differentiates service levels based on shared facilities and faecal sludge treatment, rather than on technologies (see Figure 2).

On-site sanitation - in situ refers to the specific case in which excreta and wastewater are collected, stored, and treated on the plot where they are generated.

Off-site sanitation refers to a sanitation chain in which excreta and wastewater are collected and conveyed away from the plot where they are generated. Off-site sanitation relies on a sewer technology (e.g., simplified sewer, solids-free sewer, or conventional sewer) for conveyance. A sanitation system is considered off site regardless of the treatment system (centralized or decentralized).

Rural areas can be defined by default as "non-urban areas" or as a clustering of households that does not exceed a specific population threshold, depending on the country. In general, rural areas are characterized by a low or very low population density.

DEFINITIONS OF KEY TERMS

Sanitation market system development is an approach to area-wide sanitation that aims to improve the long-term efficiency and inclusiveness of the systems that provide access to essential sanitation services. The approach focuses on stimulating a change in behaviour of market players – public and private, formal, and informal – so that they are motivated to perform important sanitation-related market functions effectively. This approach creates a sustainable ecosystem of market actors. It is not building one business or supporting one entrepreneur; it involves building a sustainable market system that works for all. It can involve any or all of the following: researching and developing innovative new solutions to safe waste management and reuse; incubating and growing networks of social entrepreneurial start-ups that provide safe and affordable sanitation solutions; developing business models that replicate and scale; formalizing associations of sanitation entrepreneurs; and public-private partnerships with cities and utilities.

Sanitation marketing aims to change behaviours and to scale up the demand and supply for improved sanitation, particularly among the poor. It is a process for creating, communicating, and delivering benefits that a target population desires in exchange for adopting behaviour changes that benefit society, such as strengthening supply by building the capacity of the local private sector, or "selling sanitation" by using commercial marketing techniques to motivate households to build toilets. How behaviours are modified or adopted depends on the application of what is known as the marketing mix, including product, place, price, and promotion (WSP, 2011).

Service levels are the metrics by which the performance of a particular service is measured. Service levels provide the expectations of quality and service type. The JMP service ladders are used to benchmark and compare service levels across countries and build on the improved/unimproved facility type classification with additional criteria relating to service levels.

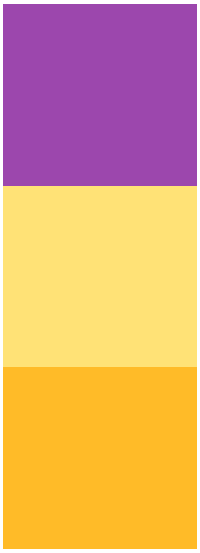
Service delivery model is the legal and institutional setup for the provision of WASH services (here, it refers to sanitation). A service delivery model includes all links in the value chain, the method of provision, the end use of services, and the level of service delivered.

The Agenda for Change WASH Systems Glossary has additional definitions for general terms relating to WASH systems strengthening work.

Below: Robert, in Cascas, Peru, was able to construct a bathroom using materials from a local hardware store (Water For People Peru).

DEFINITIONS OF KEY TERMS

Figure 1: Handwashing ladder (source: WHO/UNICEF, 2020)



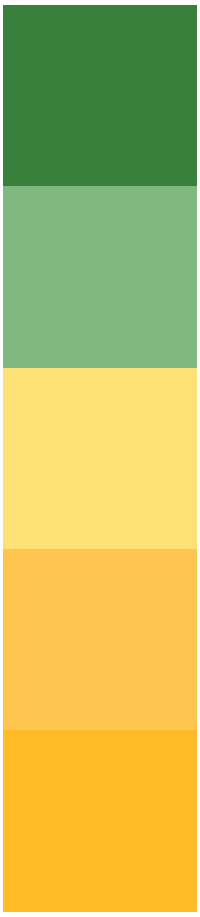
BASIC
Availability of a handwashing facility on premises with soap and water

LIMITED
Availability of a handwashing facility on premises without soap and water

NO FACILITY
No handwashing facility on premises

Note: Handwashing facilities may be fixed or mobile and include a sink with tap water, buckets with taps, tippy-taps, and jugs or basins designated for handwashing. Soap include bar soap, liquid soap, power detergent, and soapy water but does not include ash, soil, sand or other handwashing agents.

Figure 2: Sanitation ladder (source: WHO/UNICEF, 2020)



SAFELY MANAGED
Use of improved facilities which are not shared with other households and where excreta are safely disposed in situ or transported and treated off-site

BASIC
Use of improved facilities which are not shared with other households

LIMITED
Use of improved facilities shared between two or more households

UNIMPROVED
Use of pit latrines without a slab or platform, hanging latrines or bucket latrines

OPEN DEFECATION
Disposal of human faeces in fields, forests, bushes, open bodies of water, beaches and other open spaces or with solid waste

CHAPTER ONE
BACKGROUND

Agenda for Change

Agenda for Change is a collaboration of like-minded organizations ("Members") that have adopted a set of common principles and approaches. Members work collectively to advocate for, and support national and local governments in, strengthening the water, sanitation, and hygiene (WASH) systems required to deliver universal, sustained access as outlined under Sustainable Development Goal (SDG) 6. This means supporting collaboration in countries where Members work on system strengthening, compiling evidence of system strengthening activities at national and local levels, and promoting lesson sharing across Members and other systems actors so that governments can apply successful approaches from one district to another, eventually scaling to a national level.

The district-wide approach considers the district as the entry point for strengthening systems, while also recognising the broader national enabling environment. Members work with governments to resolve any weaknesses within the enabling environment by providing external support to service authorities (i.e., districts, municipalities, or equivalent local government), but ultimately districts are responsible for oversight of all service delivery. The associated support involves developing evidence-based district-wide plans to achieve and sustain universal access, which are implemented with the support of aligned partners and include joint monitoring, learning, and accountability mechanisms. District-wide approaches can be viewed as a mechanism developed within the existing national framework that can lead to learning and best practice being replicated at the national level.

Agenda for Change members presently include Aguaconsult, CARE, The Center for Water Security and Cooperation, Concern Worldwide, Catholic Relief Services, Helvetas, IRC, Osprey Foundation, Splash, WaterAid, Water for Good, Water For People, WaterSHED, and Welthungerhilfe.

Purpose and audience of the roadmap

Agenda for Change developed a district-level roadmap for universal access to sustainable WASH services in 2017 based on some Members' experiences. That roadmap presents the process of supporting district-level governments to achieve universal and sustainable WASH services. Although the roadmap relates to WASH services at large, the historic focus of Agenda for Change members has been on water planning and systems strengthening, largely in rural areas (Gensch and Tillett 2019, Huston and Moriarty 2017). The approaches and tools included did not fully reflect the important differences between the water, sanitation, and hygiene sectors.

With less than 10 years left to reach Sustainable Development Goal target 6.2[1], 2 billion people still lack access to basic sanitation facilities while 673 million people still practice open defecation (UNICEF and WHO, 2020). This sanitation roadmap was developed to address this gap in available tools. This document complements the initial roadmap by presenting guidance and available tools specifically related to sanitation services. It includes case studies from some Members, focused on how these steps or tools have been applied across different countries.

This document is intended for Agenda for Change members, governments seeking to improve decentralized processes of monitoring or planning and budgeting to achieve and sustain universal access, and other organisations interested in applying the Agenda for Change Joint Principles in their work.

[1] By 2030, achieve 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 (United Nations 2020).

Structure

The remainder of this report is structured as follows:

- Chapter 2 describes the scope and main differences between water and sanitation services (and associated planning).
- Chapter 3 presents the step-by-step process of developing a WASH district roadmap focusing on sanitation service delivery. Each step is described in terms of its objective, the key questions that need to be answered, the outputs and the methods or tools that are currently available.

Annex 1 presents examples of some Agenda for Change members' district wide approaches to sanitation services, gathered through a set of interviews, and Annex 2 provides a list of useful resources for sanitation services.

Links to resources and tools are provided throughout the report.

Specific case studies from districts implementing steps of the sanitation roadmap are highlighted in green, like this.

Below: Alexandra Velvarde at her shop that is stocked with sanitation materials in Cascas, Peru (Water For People Peru).

CHAPTER TWO
SCOPE OF THE SANITATION ROADMAP

This roadmap reflects the experiences of some Agenda for Change members to date. There are several important considerations in terms of the scope of the roadmap as follows:

Sanitation services. This document focuses only on sanitation service access, delivery, and excreta management and does not include environmental sanitation. Service authorities' mandate may cover different components defined as sanitation; for example, a WASH plan could include solid waste and/or broader environmental health. However, this document will not address those components.

Rural sanitation and, to a lesser extent, **small town sanitation** (defined as rural district centres that, while displaying urban characteristics, are still very much rural "hubs", located in a rural district and surrounded by rural areas). Primary and secondary cities and towns are excluded from this roadmap because they are not the focus of the district-wide approach, which mainly focuses on rural areas. For more information on urban sanitation planning, see Citywide Inclusive Sanitation Initiative.

Off-site sanitation. Sewer sanitation technologies are relevant for Central and South American small towns[2].

On-site sanitation. Figure 3 illustrates the sanitation value chain, which covers the experience of the user, excreta and wastewater collection methods, transportation or conveyance of waste, treatment, and reuse or disposal. All are included in the scope of this document.

On-site sanitation - in situ. This is the most common approach to sanitation in rural areas where some Agenda for Change members operate. In rural areas, when the container is full, a new sanitation facility is constructed. When referring to this specific practice, "in situ" is indicated in the document.

Public institutions. The guidance presented is primarily applicable to schools and health centres but is also relevant for other types of institutions such as public markets. Specific differences are mentioned where appropriate.

District planning. This document simply provides guidance for district planning purposes. It does not promote one technology or service delivery model over another. It does not propose a specific approach for scaling district-level work to a regional or national level. It simply provides instructions on how district actors can engage in an impactful and adaptive planning process.

Hygiene. This document cannot be considered a roadmap for hygiene planning; that might occur in an update of this document, or a separate standalone document that could be developed once more experience and consensus are reached around hygiene planning (e.g., steps, methods, and tools) at the district level. Hygiene planning does not follow the same process as sanitation; however, both include similar behaviour change principles. The hygiene sector includes handwashing, as indicated in the JMP ladder, but also menstrual health and hygiene, solid waste management and, in some instances, food hygiene.

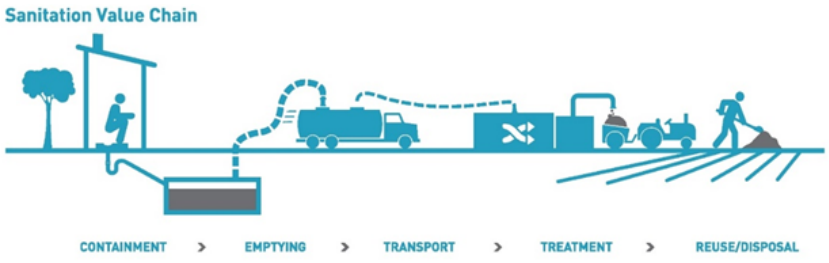


Figure 3: On-site sanitation chain of excreta: containment, emptying, transport, treatment, reuse, or disposal (Bill and Melinda Gates Foundation, 2010).

[2] For districts with a town equipped with a centralized sewer sanitation system, city-wide sanitation planning documentation should be used as a reference.

Therefore, the hygiene sector has enough differences in scope and nuances in programming that it cannot be covered within a sanitation roadmap.

If the district is targeting open defecation free (ODF) status, the main recommendation from some Agenda for Change members is to include hygiene as part of the planning and applying the steps presented in this document. There is an imperative to build sanitation facilities in combination with handwashing facilities providing at least a basic hygiene level of service. Therefore, when hygiene experiences are available, they are referenced throughout the text. The term "service" is less commonly applied to hygiene than to water or sanitation services; it is more common to use the concept of "hygiene behaviours" or "hygiene practices." For example, IRC defines hygiene "service" as the sustained hygiene behaviour changes experienced by households (IRC, 2011), which is quite different to how hygiene services are defined based on JMP ladders.

Emergency. This document does not focus on sanitation service delivery in an emergency, such as natural hazards or political conflicts.

Shared sanitation facilities. This document focuses on rural and small-town sanitation; therefore, there is no mention of shared sanitation facilities or compound facilities for households, which are only recommended by UNICEF and WHO in urban areas. However, this roadmap does apply to the institutions such as schools and health centres that have shared sanitation facilities.

The Methodology

This sanitation roadmap is based on primary and secondary sources of information such as reports, workshops, and interviews with some Agenda for Change members. It builds on the work carried out by other WASH organizations such as Plan International and UNICEF (see Annex 2). As of now, only a few Members have carried out specific steps of the roadmap (i.e., mostly the initial assessment). As such, the roadmap should be considered a "living document," updated periodically as further experience is gained and enriched with additional case studies.

Differences between on-site sanitation and water

There is a fundamental difference between water and on-site sanitation services: water supply is a public service whose responsibility falls under a public body, but on-site sanitation is considered the prime responsibility of individuals as it largely depends on individual behaviours and investments, especially with on-site sanitation - in situ. This is not the case for sewer sanitation. Faecal sludge management (even within the on-site sanitation supply chain) is generally considered a service requiring a collective response, and therefore designated as a public service and largely the responsibility of the relevant service authority for oversight and investment.

Differences between on-site sanitation and water

The main differences between on-site sanitation and water, **from the service authority's perspective**, can therefore be summarized as follows:

Water services are asset-heavy in terms of capital and management. On-site sanitation is less so.

The approach to sanitation service provision can vary hugely across and within countries (e.g., fully or partially subsidized through various channels, use of sanitation market system development, and/or community-led sanitation). Public water service always involves an important element of infrastructure provision and service management.

Responsibilities for on-site sanitation are often split across various entities at the national level, particularly for rural areas. This has implications for planning, budgeting, and coordination because different entities may have different priorities. At the local level, districts are often responsible for initial water supply investments, with some household contributions, but households are often/usually responsible for the initial investment in latrines and handwashing facilities. In some cases, the district may be the service authority for delivering public sanitation services, but not for private facilities. In general, the role of sanitation service authorities for on-site sanitation focuses on household demand creation and in some cases faecal sludge treatment. In a few countries, governments develop a hardware

subsidy policy; in this case, the local government is usually responsible for using the subsidy to ensure access to private facilities.

The legislation for water access and associated service levels is often in place to regulate services. For sanitation, the legislation is often only partially in place (e.g., in many countries, legislation is limited to the compulsory use of a latrine and the identification of open defecation as an offence). Acceptable toilet or latrine standards, service levels for schools, public toilets, special provisions for access for people with disabilities and mechanisms for providing faecal sludge management services are not always systematically defined and regulated. This is also one distinction between public and private goods, where service authorities can set standards for publicly delivered services, but it is more challenging to set standards and regulate services that are privately delivered through household investments. Mandates for regulation and oversight vary between countries.

Higher variability in sanitation services levels within a locality is largely due to individual responsibility. Within a community or small town, it is possible to find a range of sanitation service levels because in most contexts, individuals are responsible for constructing their own facilities. As such, even facilities providing the same service level can look very different (e.g., tiled or concrete floor, ventilation and light), because facilities are closely linked to individual aspirations, as well as income and affordability.

On-site sanitation access depends heavily on **markets.** The enabling environment set by authorities plays a significant role, including helping promotion, improving transport of products and directing subsidies for businesses, which is normally not the case for water.

Below: As part of a School Water, Sanitation, and Hygiene (SWASH) program, these students and their teacher stand in front of improved bathroom and handwashing facilities at their high school in North Bengal, India (Water For People India).

CHAPTER THREE

ROADMAP FOR UNIVERSAL AND SUSTAINABLE SANITATION SERVICES AT THE DISTRICT LEVEL

Definition of a Roadmap

A roadmap is both as an output and a process:

It results in a distinct output: A strategic plan that defines desired outcomes and includes the major steps needed to reach them and the associated costs. In addition, many other intermediary outputs are obtained such as an asset registry, district service level targets, and costing information. The Kabarole District WASH Master Plan 2018-2030 illustrates an output with water, sanitation, and hygiene services planning. The Kitgum Municipal Town Council in Uganda developed the Town Sanitation Plan in collaboration with Water For People.

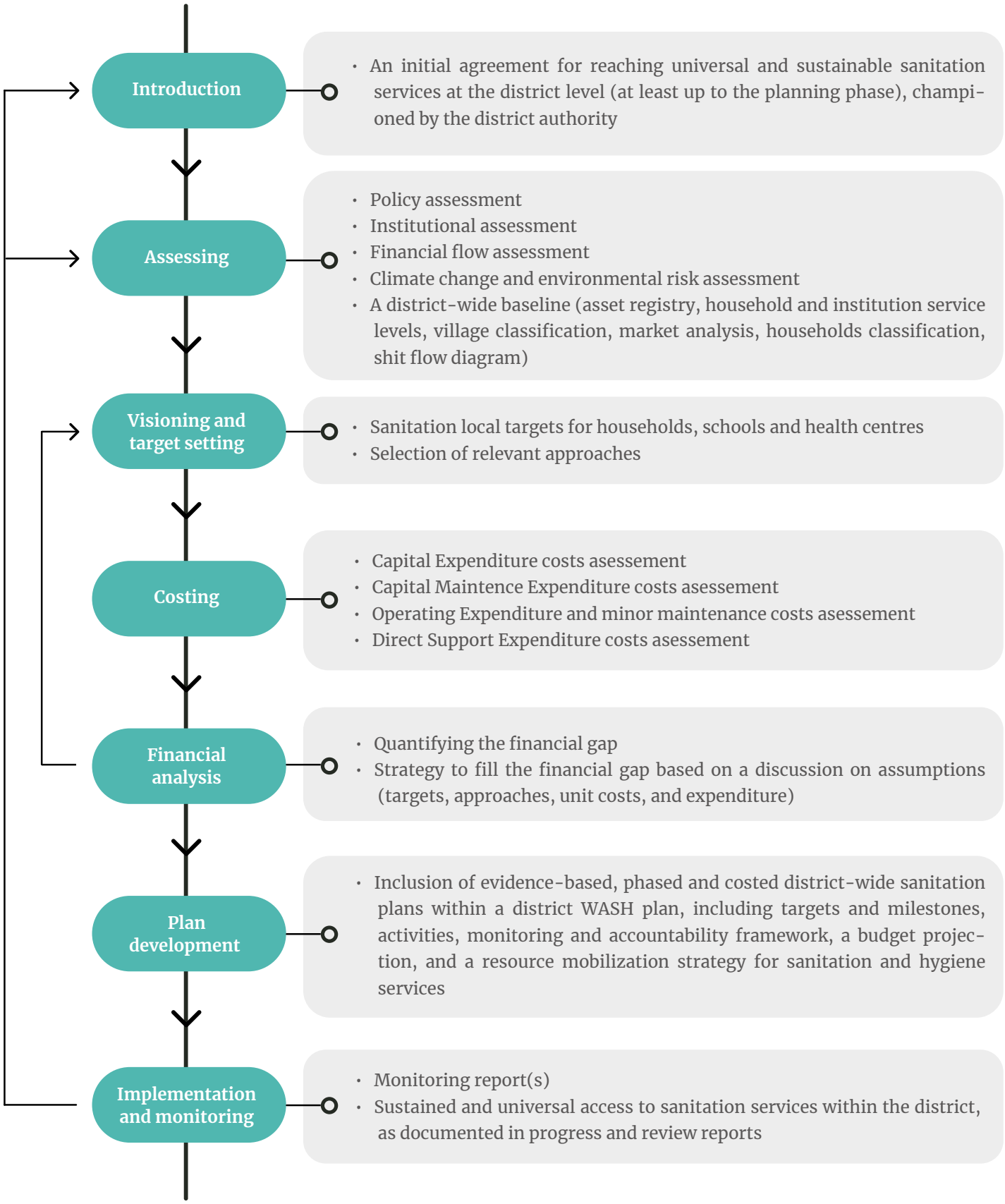
The process of developing and implementing the plan includes building local government capacities to lead WASH activities. It emerges from an iterative process. Both the outputs and the process should be realistic and based on resources available. This process may require several discussions, a flexible approach which may mean modifying the initial vision, using a range of different tools and decision-making processes, advocating for national level policy changes and investment decisions to obtain a final plan. For example, the costing and financial analysis are likely to lead to a revision of targets or service levels, which may require negotiating at higher levels of government. Through this process, the sector should be strengthened, resulting in a more resilient and sustainable WASH system.

As illustrated in Figure 4, this sanitation roadmap is made up of seven steps , each attached to specific outputs, which may vary from one country or district to another (e.g., to reflect country specificities like the importance of household income classification in Rwanda). Other steps such as the costing and expenditure step should lead to the standard outputs across districts and countries.

Below: Pastor Samuel stands in front of a newly constructed latrine for his family in Maska, Uganda (Water For People Uganda).

[3] The sequencing of these steps differs slightly from the initial WASH roadmap document from 2017, because sector thinking has evolved. This report presents the latest agreement and research available in the sector to the date. For example, visioning should go after the initial assessment.

Figure 4: Steps of the sanitation roadmap



The key steps for including sanitation within the district WASH plans follow a similar method to water services (situation analysis, visioning, costing, and financing). However, the situation analysis considers data on service status and sector capacity, as well as the mapping of current approaches to determine their relevance and effectiveness in addressing the key challenges.

Step 1: Introduction

Objective: to introduce and build a common understanding of the process and outputs, and secure commitment to the principles of achieving universal and sustainable access to sanitation services within a rural district while ensuring systems strengthening.

Key questions:

- Have appropriate stakeholders been identified?
- Do all stakeholders agree to develop a joint plan for reaching universal and sustainable sanitation services at the district level?
- Are all stakeholders aware of the importance of adopting a common and systemic approach to achieving this outcome?

Methods and outputs: Two main methods are used to develop these outputs: (i) facilitated meeting(s) and workshop(s); and (ii) formal and informal advocacy and lobbying.

A key output is an initial agreement for reaching universal and sustainable sanitation services at the district level (at least up to the planning phase), championed by the district authority, and with commitment from the relevant district and national authorities. This agreement will be translated into an initial action plan for the early steps of the roadmap, particularly focusing on the assessment phase. This action plan should specify the objective of the assessment phase and provide: (i) a clear timeline for completing it; (ii) key phases for involving all relevant parties; and (iii) a list of institutions and focal persons who could inform and feed into specific activities.

Step 2: Assessing

Objective: to establish a rigorous, evidence-based reference point for planning and tracking implementation of the plan over time.

Key questions:

- What are the current policies and approved and implemented approaches?
- What are the current roles and responsibilities of different stakeholders and their capacities to fulfil these mandated roles?
- How are sanitation services currently delivered and funded?
- What are the climate and environmental risks that influence technology and service delivery approaches?
- What sanitation service levels currently exist in the district (in line with SDG indicator definitions)?
- What are the current barriers to reach universal and sustainable sanitation services? Who is excluded or unable to move up the sanitation ladder?

Methods and outputs: The assessment phase consists of collecting, consolidating, and analysing data related to (i) current policies and approaches used for sanitation services; (ii) roles and responsibilities as well as district and service provider capacity; (iii) financial flows; (iv) climate change and environmental risks; and (v) assets and sanitation services.

These data serve as a basis for developing five separate outputs, namely: policy assessment; institutional assessment; financial flow assessment; climate risks assessment; and a district-wide household and institutions baseline presenting the current levels of service, defined by JMP standards as well as national standards.

The district-wide baseline will require the development of the following sub-outputs:

- An asset registry.
- Household, school, and health centre and other relevant institution sanitation service levels.
- Village classification.
- Market analysis.
- Household income classification (if relevant).
- Shit flow diagram.

Table 1 below provides an overview of the methods required and tools available for developing each of the five outputs as set out above.

Note: additional studies can be carried out during the assessment phase, including those focused on gender and social inclusion. However, their specific aim and related approach to incorporating their findings should be clarified upfront; for example, by discussing whether the district would focus on increasing access to sanitation facilities for women or provide sanitation facilities with accommodations for people living with disabilities.

Table 1: Overview of outputs, methods, and tools available for completing the assessment phase of the roadmap

Output Sub-output	Objective	Method	Tools/Resources
Policy assessment	Clarify the political and policy frameworks where the service authority operates.	• Review national sanitation policies, strategies and plans, and any other relevant document setting the legal framework for sanitation services (e.g., approved approaches, subsidy principles). • Review the regulation for sanitation services in terms of technologies, price, and treatment and re-use standards. • Identify implications for relevant approaches and setting targets at the district level (e.g., budgeting allocated, subsidies).	Political Economy Analysis - Sector Strategy Tool developed by WaterAid, focuses on achieving universal access in individual sectors, and can be applied to sanitation. The tool is useful for increasing understanding of the politics and informal relationships, which shape how change happens.
Institutional assessment	Assess the institutional framework and stakeholders' capacities to carry out their roles and duties, according to national and regional policies.	• Define activities required to implement the various national and regional approaches for sanitation. • For each activity, determine roles and responsibilities and identify any overlap or gaps. • Identify the capacity required to fulfil these roles. • Assess the current capacity levels and identify any obvious shortfalls.	• The IRC WASH System Building Block Assessment Tool is used to score WASH systems strengthening, including core service authority functions (e.g., monitoring and financing). It has a section on sanitation that can be used to assess districts' capacities. • WaterAid developed a template to determine roles and responsibilities related to (i) community-led sanitation and (ii) sanitation marketing in Rwanda. • Water For People's Sustainable Services Checklist, adopted in more than 35 districts across 9 countries (Uganda, Rwanda, Malawi, India, Peru, Bolivia, Guatemala, Honduras, and Nicaragua), is used to assess the service authority capacity for water and sanitation, along with capacities of water service providers.

Output Sub-output	Objective	Method	Tools/Resources
Financial flow assessment	Determine the possible sources of funding for sanitation and quantify each flow.	Financial flows are a stream of expenditures (funding from one source to a receiving entity). The methodology looks at expenditure and not revenue because it is estimating what amount is currently being spent in the sector and not what could, or ideally should, be spent. The steps to carry out a financial flow analysis are: • Identify all stakeholder financing activities related to sanitation in the district. This includes household investments, district and WASH partners within the district, and stakeholders based outside the district, such as the Ministry of Finance[4] or funds from micro-financing or lending banks. • Identify the flow of tariffs, transfers and taxes between the different stakeholders and their allocation across the various cost categories. • Quantify financial flows through a combination of interviews (with district officers, households, schools, institutions, donors or other stakeholders investing/transferring in the district on sanitation) and analysis of the district's budget and district and household expenditure, to quantify the funding originating from each stakeholder and the recipient.	The TrackFin tool was developed by World Health Organization (WHO) to track the financial flows within the WASH sector and provides evidence to support planning and decision-making processes. It can be applied in a district for sanitation services, as illustrated here.

[4] Information collected during the assessment phase.

Output Sub-output	Objective	Method	Tools/Resources
Climate change and environmental risk assessment	Identify climate stress and shocks and other environmental conditions which could limit access and quality of sanitation services.	• Identify the environmental conditions and climate-based stress and shocks which affect a given district (e.g., flooding, water scarcity), and identify particularly vulnerable areas within the district. • Identify the groups likely to be most vulnerable to environmental and climate change risks. • Assess how these conditions, shocks, and stresses affect sanitation access and service levels. Note: The assessment should look at both direct and indirect risks to sanitation delivery (water scarcity limiting handwashing vs. not having access to sanitation components because the road connecting the village has been flooded).	• The Adaptation Support Tool, developed by the European Climate Adaptation Platform, supports sub-national actors to prepare for, develop, implement, and monitor and evaluate adaptation strategies, which could be applied to sanitation. • The Climate Finance Impact Tool, developed by the Japan International Cooperation Agency, is designed to screen climate risks in the early stages of project development. It has sections related to sewer sanitation systems. • The Caribbean Climate Online Risk and Adaptation Tool, developed by the Caribbean Community Climate Change Centre, guides users to identify whether an activity is likely to be influenced by climate change. The tool is focused on the Caribbean region.

Below: Headteacher of Mirembe Primary School presents the life-cycle costed WASH budget. WaterAid supported this work with funding from H&M Foundation (WaterAid/James Kiyimba/H&M Foundation).

Output	Sub-output	Objective	Method	Tools/Resources
District-wide household and institutional baseline	An asset registry	Determine sanitation asset conditions and coverage for public institutions (schools and health centres) and public infrastructures.	Identify all district-owned (public institutions) sanitation assets and determine their age and condition through surveys, aimed at collecting the following types of data: • Information on the sanitation facility, sewer sanitation system, and handwashing point (e.g., location with Global Positioning System (GPS) coordinates) where possible). • Information on each component of the facility in terms of its physical condition and age. • Information on the collection, transport, and treatment carried out (or not) per facility. Treatment infrastructures could have a specific asset registry, due to their complexity. • Ownership of the facility. • Use of facility (e.g., number of users, payment). Household owned sanitation assets can be captured in service level monitoring noted below.	Field surveys carried out by enumerators, including institutional sanitation surveys and service provider surveys for sludge management and sewer sanitation systems.
	Service level baseline	Determine sanitation service levels at baseline.	Through a survey, collect key information to determine the level of sanitation services in households and public institutions. This survey can be (at least partly) combined with the asset registry, and the following types of data will be required to assess service levels: • Type of sanitation technology. • Accessibility of facility. • Sanitation use (e.g., number of users by household members, etc.). • Reliability (functionality of sanitation facility, observed or reported frequency of sanitation facility cleaning, availability of a pit-emptying service). • Environmental protection (the distance of sanitation facility from the water source, the practice of disposing of faeces and urine, reuse of faeces). • Service delivery model.	• IRC developed a checklist describing the variables needed to determine the quality of sanitation service as well as the definitions of each indicator. • Water For People has a methodology and indicators for measuring service levels for water and sanitation at the household level and in public institutions.

Output	Sub-output	Objective	Method	Tools/Resources
	Village classification	Characterise communities within a district to identify the most appropriate approaches to sanitation delivery.	Determine key features of a village and develop a taxonomy to tailor approaches to the village context. This characterization is best determined through a village survey during which the following type of data is collected: • Location, population, population density. • Road access. • Water resources. • Hygiene and sanitation behaviour practices and social norms. • Household income (to include only if household income classification outcome is not possible - see Household income classification row below).	WaterAid developed guidance on Programming for Rural Sanitation to characterize the "rural district setting" and identify a typology of community (rural remote, rural on-road, and rural mixed). The section on village taxonomy can be found here.
	Market analysis	Understanding the current market set up and the factors affecting the ability of all households (including vulnerable and marginalized) to access different service levels.	Assessment of existing markets for sanitation products and services including price point, market penetration, service chains to determine the ease of accessing products and services, affordability, and related gaps. Some specific examples include: • Supply and demand analysis, considering affordability, aspirations, barriers, and monopolies associated with specific products and services. • Analysis of the private sector retailers and type of goods or services sold by each one (component manufacturers, sellers, masons, loan providers and others). This can be done by desk review, field visit, surveys, interviews with key stakeholders, workshops and focus group discussions.	• Consumer Behaviour: How do we understand sanitation consumers in target markets? UNICEF developed a guidance note to understand common consumer motivations, desired product attributes, barriers for investing in improved latrine designs, and how consumer market research is used to develop Sanitation Marketing strategies. • IRC carried out a sanitation demand and supply study in rural Bangladesh which could be adapted when developing a village-level taxonomy based on the criteria of sanitation supply and demand. • This report on Supply Chain Analysis for Rural Sanitation Products and Services in Laos, developed by the Water and Sanitation Program (WSP) and others, provides an example of the type of analysis that the district could carry out.

Output	Sub-output	Objective	Method	Tools/Resources
	Household income classification	Classify households according to their income levels to determine the most suitable approaches (for example, subsidies and market segmentation).	Use local or national databases or other sources of information to define household categories and determine the number of households in each category in each district.	The EquityTool allows you to compare the wealth of respondents to the national or urban population in over 60 countries, as well as define wealth quintile of households (if surveys have been done).
	Shit Flow Diagram	Assess faecal sludge management in the district and the environmental risks posed by unimproved sanitation facilities or poor management of faecal sludge.	Estimate the current flow and fate of excreta produced by a district's population, by collecting data from primary (via field observation, interviews and focus groups) and secondary sources of information on: • The enabling environment (see the shit flow diagram in the next column for more details). • The type of equipment used and actions taken (by households and workers) concerning containment, emptying, transport, treatment, disposal or end-use of faecal sludge. • Service provision and facilities across the sanitation service chain. Analyse the data to estimate the flow and fate of excreta produced by the population.	• The shit flow diagram is a tool to understand and communicate how excreta physically flows through a city or town, and the percentage which is safety managed. This can be useful for discussing the current situation within a district and sub-district areas. Kitgum municipality in Uganda completed a shit flow diagram in collaboration with Water For People. • IRC developed a Faecal Waste Flow Calculator to determine faecal waste volumes along the sanitation service chain, allowing service authorities to identify where the biggest losses are and where interventions should be targeted. Less easily quantifiable issues, such as the existence of policies and legislation, availability and transparency of plans and budgets, and presence and adherence to environmental and safety standards, are captured with the use of scorecards. • Sanitation Safety Planning is a risk-based management tool developed by WHO for sanitation systems. It supports the identification of health risks in the sanitation chain. It can be used at the planning stage and to improve the performance of existing sanitation systems. This tool is complex and requires an in-depth analysis.

Step 3: Visioning and target setting

Objective: determine district-level sanitation targets in terms of service levels, in relation to the national targets.

Key questions:

- What are the district-level targets in the short term, and by 2030?
- How will these be achieved for various population groups?

Methods and outputs: defining a district-level vision requires breaking down the national targets to arrive at targets for the district, both in the short term and the 2030 horizon, and identifying district approach(es) for reaching these targets. This could include targeted approaches (such as smart subsidies) for reaching vulnerable groups (poor households, people with disabilities, etc.) and it could also include market-based approaches aimed at strengthening the overall sanitation market system.

A mix of approaches is likely needed to reach the different service level targets that might apply in a district. This step is completed through a set of discussions with the district counterparts, such as the WASH officer and other strategic political representatives and utilizing findings from the assessment phase as a basis for engagement. This step can also be re-visited after subsequent steps reveal the magnitude of any financial gaps that exist.

Table 2 provides an overview of the methods required to develop a district-level vision, objectives, outputs, and tools, along with key elements to consider through this process.

Below: Workshop participants assess the strength of the WASH system from a gender perspective in Kampong Chhnang Province, Cambodia as part of WaterAid's SusWASH programme funded by H&M Foundation (WaterAid/H&M Foundation).

Table 2: Overview of outputs, methods, and elements to consider for the visioning and target-setting phase of the roadmap

Output	Sub-output	Method	Key aspects to consider	Tools/Resources
District targets for the short term and 2030 horizon	Set the sanitation targets for the district.	Workshops, bilateral, and joint discussions	• Targets should align with the national policy and the SDGs as articulated by the country in question. • Targets should be precise for each area within the district and specific population groups.	WaterAid, UNICEF, and Plan International Guidance on Programming for Rural Sanitation section 1.5.2 provides a list of strategies to consider when setting targets.
District approach(es) for reaching targets	Decide how the targets will be reached for a specific area in each district, across various service levels, and for various population groups.	This output is delivered through facilitated discussions, which can include the development of different scenarios, combining various targets, and of approaches.	• Approaches can vary widely across districts and countries depending on national policies, private sector possibilities, and district strategies. The selection of the approaches and the related technologies is a dynamic process considering many factors, including settlement patterns, availability of water supply, existing behaviours, household income and affordability, sanitation supply chains and growth projections, and environmental and climate change risks affecting the sanitation services in the district. However, the most common types of approaches are (i) community-led sanitation and its variations, (ii) market-based approaches, (iii) hardware subsidies, and (iv) loans. • The district should design a combination of approaches to address the different issues related to sanitation services and households' capacities to afford facilities. • The selected approaches should consider the targeted service levels as a starting point: - The approach should tackle all aspects of sanitation services: demand, supply, and financing. - For off-site and on-site sanitation, the approach should cover the whole sanitation chain (as presented in Figure 3).	• As highlighted in Figure 2 of the WaterAid, UNICEF and Plan Guidance on Programming for Rural Sanitation, one approach is unlikely to be appropriate for the entire district. • Annex 1 has approaches and specific initiatives of some Agenda for Change members, which could be considered in this process.

Output	Sub-output	Method	Key aspects to consider	Tools/Resources
			- To reach full coverage in a district, developing and testing alternative approaches or innovative mechanisms to the main approaches selected may be required. - If required, a pilot phase to test new approaches should be implemented. If the district decides to develop a new approach, a second pilot phase will be required to ensure that the plan can be implemented across the district. • Other sectors may need to be mobilised, such as the district health department, in relation to demand creation and follow up health messages. • For rural sanitation, responsibilities are rarely known. During the visioning phase, clarify who is responsible in the district for each step in the supply chain, and what the implications are in terms of support and financing. This should be based on the results of the assessment phase (i.e., policy and institutional assessments).	

Below: Second National Meeting of Municipal Water and Sanitation Offices, developed in coordination with the National Potable Water and Sanitation Network (CARE Guatemala).

Step 4: Costing

Objective: identify and estimate the full life cycle costs for achieving and sustaining sanitation service level targets in the district to inform the planning process.

Key questions:

- How much does it cost to reach the targets identified over the planning horizon?
- How are these costs split across the various categories?

Methods and outputs: determining the full cost of achieving the district's vision requires all expenditures (borne by households, districts, and other stakeholders) to be identified. The general methodology is to: (i) list all activities related to the current provision of sanitation services; (ii) identify additional activities required to achieve the vision and targets; and (iii) determine the cost of each activity, per cost category and year (as described in Tables 3 and 4).

Table 3: Main components of the life-cycle costing approach

Life cycle cost category	Description for sanitation services	Key aspects to consider
Capital Expenditure (CapEx)	CapEx refers to all activities carried out prior to or during the construction and provision (directly or indirectly) of a service to ensure households, schools, and health centres can access sanitation services. These initial costs cover both hardware costs (e.g., capital investment in fixed assets, excavation, lining, slabs, superstructures, and pipes) but also software costs (e.g., community training, demand creation, market creation, and hygiene promotion).	Determine the initial software costs of conducting any demand creation/behaviour change campaign. Determine the initial costs for hardware and equipment for sanitation: bathroom facilities, pit construction, in situ treatment facilities, decentralized treatment facilities, sewers (if applicable), and/or wastewater treatment (if applicable).
Capital Maintenance Expenditure (CapManEx)	CapManEx refers to the activities required to carry out long-term maintenance of facilities (e.g., asset renewal and replacement that seek to restore the functionality of a system, such as replacing a slab, emptying a septic tank, or rehabilitating components of a decentralized or centralized treatment facility).	In many instances, there is no clear definition or distinction with Operating Expenditures, and this should be clarified during the visioning phase. For on-site sanitation with in-situ treatment, the CapManEx definition varies depending on national legislation, a financial threshold, or the type of repair activities and the share of risk.
Operation and Minor Maintenance Expenditure (OpEx)	OpEx refers to regular expenditure including operation of treatment facilities and minor maintenance expenditure such as the purchase of cleaning products.	The definition of OpEx needs to be established during the assessment phase and its difference with CapManEx made explicitly clear. For example, the cost of emptying septic tanks might be considered OpEx or CapManEx, depending on the country.
Direct Support Expenditure (DSExp)	DSExp refers to software activities required by the district during the lifetime of the facility, to support service providers or users' groups such as training masons, faecal sludge management for on-site sanitation and district-wide monitoring.	Direct support costs for sanitation services can be difficult to disaggregate from water services and one shared tool could be used to estimate.
Cost of Capital[5] (CoC)	CoC refers to the interest payments on micro-loans (borrowed by households) and other loans contracted to build infrastructure. It can also apply to loans taken by government at local and central levels to invest in sanitation services; for example, concessionary or commercial loans.	In general, loans for CapEx in low-income and middle-income countries are typically taken by central governments rather than districts. Therefore, the CoC for sanitation services corresponds to the cost of borrowing money from microfinance institutions for households to construct or improve their facilities.

Table 4 provides an overview of the methods and tools available to calculate each cost or expenditure category once the activities required to achieve the vision and targets have been identified and the costs categorised. IRC presents its methodology used for calculating costs per cost category in Applying the life-cycle costs approach to sanitation.

[5] Indirect support defined as the expenditure on macro-level support is not captured in the district-wide approach, because usually these costs are borne by national authorities.

Table 4: Overview of outputs, methods, and tools for costing the district vision

Output	Method	Tools/Resources
CapEx calculation	• For a household facility, an average costs-per-facility measure could be used to obtain an approximate calculation in a region. • Determine the initial hardware costs for sanitation services that are not on-site - in situ (including costs for collection, transport, and treatment facilities) as well as public institutions facilities: - Identify the material, labour, land, planning, and training, associated with the initial construction in each location, for specific technology and facility. - Identify unit costs for material and labour to ensure that a database of costs can be updated and used in the future to estimate new construction, infrastructure extension, or major repair requiring replacement of components. • Identify the initial software costs incurred in campaigns to create demand and/or supply for sanitation facilities.	WaterAid's CapEx tool for on-site sanitation with in-situ treatment allows districts to identify the cost of providing new facilities as well as planning potential subsidies based on wealth quintile. WaterAid has updated the tool for the Rwandan context and will publish it soon (in the meantime, contact Ellen Greggio for information). Note: All WaterAid tools were developed for "rural district settings" for the assessment phase. The tool will need to be modified if used in a different setting.
CapManEx calculation	For sewer systems, collection systems, treatment infrastructures, and public institution facilities managed by the district or service provider, the costing method uses the following steps: • Identify the unit cost for repair and replacement per component type (length, size, diameter, pressure) of the facility as well as collection, transport, and treatment assets. • Identify the physical state of components using the asset registry. • Identify the lifespans of components. • For each component type calculate the cost of repair and replacement based on its physical state. • Define the cost over time based on a priority system (e.g., sewer sanitation with more than one component broken should be repaired in less than three years). • For CapManEx under the responsibility of households, an estimation can be made per type of facility (for example average cost of emptying a septic tank) which is then multiplied by an estimation of number of facilities in the district.	WaterAid's tool helps calculate CapManEx based on the current condition of latrines and the replacements costs. It does not yet include a prediction of future CapManEx based on the age of latrines because data on latrine age are often not available. However, if data on latrine age were available, the tool can be customised to any infrastructure type and can predict long term CapManEx based on age. WaterAid will publish the tool soon (in the meantime, contact Ellen Greggio for information).
OpEx calculation	• For facilities managed by households, a rough estimation per facility type could be used for operation and minor maintenance cost. The cost of materials used to clean and maintain the toilet and to avoid bad smells could be considered. • For facilities operated by the district and other service providers and public institutions, the steps include: - List regular activities that need to be carried out. In the case of the district, it could be operating a treatment plant, emptying and transport, minor sewer maintenance activities and regular checking of facilities. For public institutions, it could be cleaning and pit emptying. - List the number of staff and materials required to carry out the activities listed. - Determine a unit cost per year. - The total cost per year can be calculated by adding all costs.	In Rwanda, Water For People and WaterAid are developing a Sanitation Costing Tool to help districts identify the costs needed to reach universal and sustainable sanitation services.

Output	Method	Tools/Resources
DSExp calculation	For each support activity, determine: • The list of activities required for households, service providers, and the district itself. • The number of staff involved, and the time required per person. • The associated cost per staff and any additional costs (e.g., cost of the meeting, transport costs, etc.). Note 1: Direct Support activities should consider technical assistance, training, monitoring and the follow-up behaviour change campaigns. This includes frequent activities to ensure that facilities are used and remain functional, and that hygiene behaviours are maintained throughout the lifetime of the facility. Note 2: It is vital that a minimum level of monitoring should be planned and costed by the district for reaching the sanitation targets and maintaining them. Note 3: Include public institutions which are managed by the district or service providers.	• WaterAid has developed a tool to calculate direct support costs for on-site sanitation with in-situ treatment. This tool considers demand and supply markets to cover all potential approaches that a district can put in place to reach its targets. WaterAid will publish the tool soon (in the meantime, contact Ellen Greggio for information). • WaterAid developed a template to determine roles and responsibilities related to community-led sanitation and hygiene and sanitation marketing in Rwanda.
CoC calculation	For each loan, the CoC should be identified. It can be provided directly by the financial institution or calculated. Calculating the interest rate of a loan requires the following information: • The total amount borrowed. • The cost of borrowing the loan, including the interest rates, the length and repayment terms (this information should be provided by the financial institution).	No tool available.

Below: Weyonje volunteers speak to community members about the importance of good sanitation and hygiene. This work is part of WaterAid's SusWASH programme funded by H&M Foundation (WaterAid/James Kiyimba/H&M Foundation).

Step 5: Financial analysis

Objective: determine the financial resources available or potentially available to cover the costs required to achieve the vision.

Key questions:

- How much are households, districts, donors, health centres, schools and ministries directly spending on sanitation facilities?
- How do these match the pre-identified cost categories?
- What are the projections over time, per cost category and per sub-sector?

Methods and outputs: conducting financial analysis to achieve the district's vision and targets requires (i) consolidating the sources of funding (current expenditures and future potential sources of funding) collected during the assessment phase, (ii) comparing these with the costs required over time, and (iii) determining a financial strategy to bridge the gap.

To simplify the analysis, (i) divide the analysis by sub-sectors: households, health centres and schools, (ii) compare the current and future expenditures with the costs calculated previously per year, as illustrated in Figure 5, and (iii) identify the financial gap per cost category and year. This will allow identifying any financial gap and develop a financial strategy adapted for a specific gap. Table 5 presents an overview of outputs, methods, and tools for developing the financial analysis.

Figure 5: Financial gap analysis, costs vs current expenditure per year (Aguaconsult, 2018)

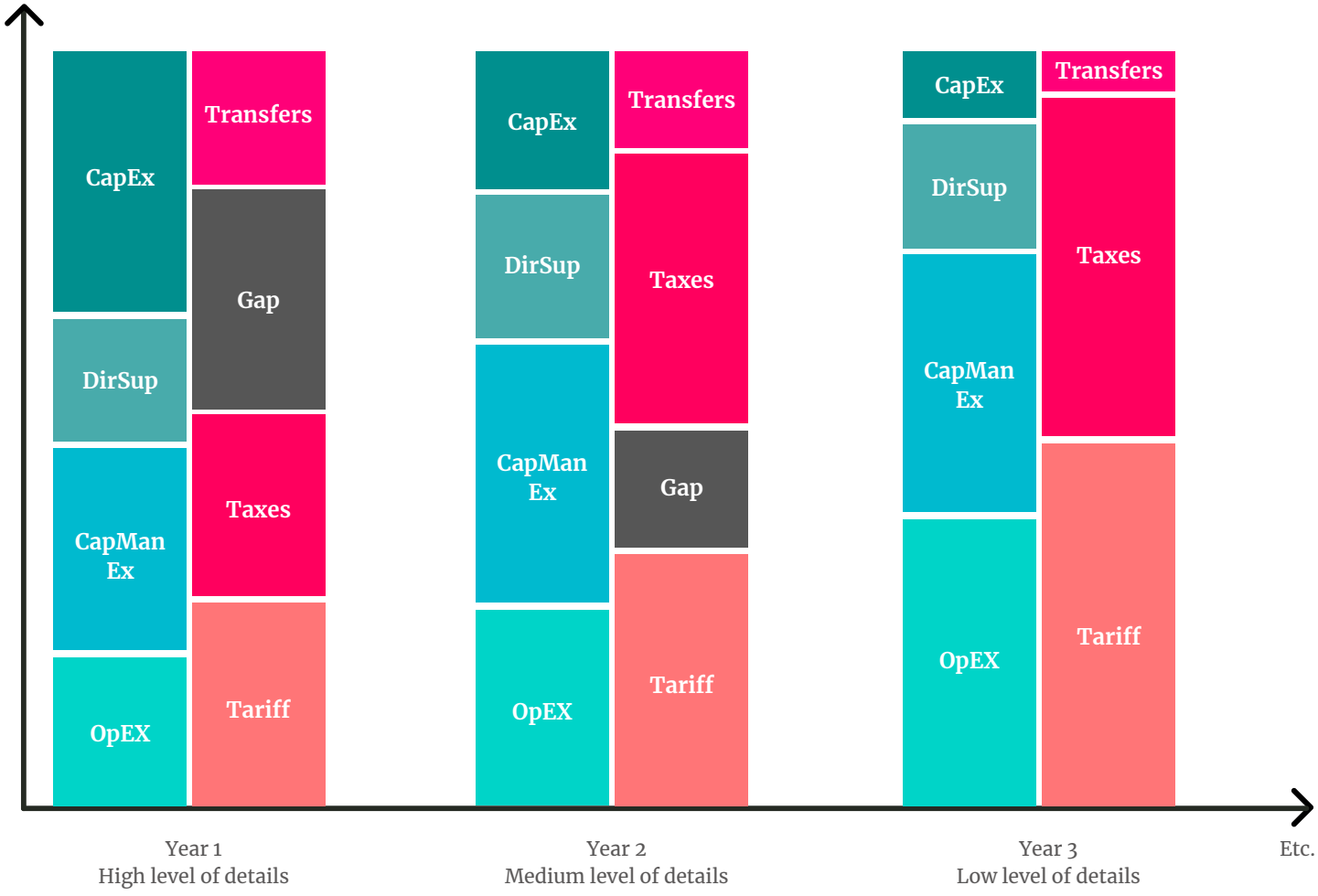


Table 5: Overview of outputs, methods, and tools for developing the financial analysis

Output	Objective	Method	Key aspects to consider	Tools/Resources
Financial gap identification	Identify the current financial gap to reach the sanitation targets per cost category	All financial flows within the district should have been identified during the assessment phase: (i) identification of stakeholders, (ii) quantification of the flows, and (iii) identification of the associated cost category. The steps to carry out a financial flow analysis are: • Compare the current expenditure in the district with the cost required to reach the district targets calculated previously. Reminder: this includes all stakeholders funding the sector (e.g., households, district, national government, non-governmental organizations (NGOs)). • Identify the difference per cost category and year. • Summarize the results on a table or diagram as presented in Figure 5. Note: the distinction of expenditure per stakeholder should be presented in a table to simplify the analysis (see the consolidated tool example).	• Sewer sanitation follows the same logic as water supply schemes: tariffs are a household expenditure, and transfers and taxes correspond to district expenditure. • For on-site sanitation, tariffs or fees for collection and treatment are household expenditures, and transfers and taxes correspond to district expenditures if a service authority oversees collection and treatment or supporting the private sector in these activities. • For on-site sanitation with in-situ treatment, household expenditures will vary depending on the facility type and construction modality (e.g., subsidies) and the operation and maintenance carried out. Therefore, the amount may vary widely across households and areas within any one district.	Water For People and Aguaconsult have developed a District Consolidated Finance Tool that guides the financial gap analysis. It was initially designed for water services but could be adapted and used for sanitation services. Figure 6 shows the outputs that can be obtained with the tool.
Financial strategy	Decide how to bridge the financial gap.	• Workshops, advocacy, lobbying, and negotiations. • Once the comparison between the costs of reaching the district targets and the financial resources available or projected is established, the financial gap can be identified annually. Discussions on how best to bridge the identified gap should consider:	It is important when designing the plan to allow for amendments once additional resources become available for the district. For example, when designing a treatment facility, it is important to allow the possibility of expanding it in the future, instead of having to build a new one. Sometimes district budgets do not have a specific line item for sanitation, which could be included under health or another general theme.	Water For People, through these illustrations for Faecal Sludge Management (FSM) and household facilities, summarized potential strategies that could be used to reduce the financial gap, by focusing on decreasing costs and increasing the ability to pay by households.

Output	Objective	Method	Key aspects to consider	Tools/Resources
		• Developing a resource mobilization strategy for sanitation services involving (national) advocacy activities to increase district budget or transfers; lobbying targeted stakeholders (e.g., donors) to cover dedicated expenditures. - Figure 7 illustrates different sources of funding (public and private) to consider when looking for additional funds and how to use them for different stakeholders. - Increasing local taxes or their allocation to sanitation. - Increasing tariffs for sewer sanitation systems. • Revising and lowering targets or the service level aims.		

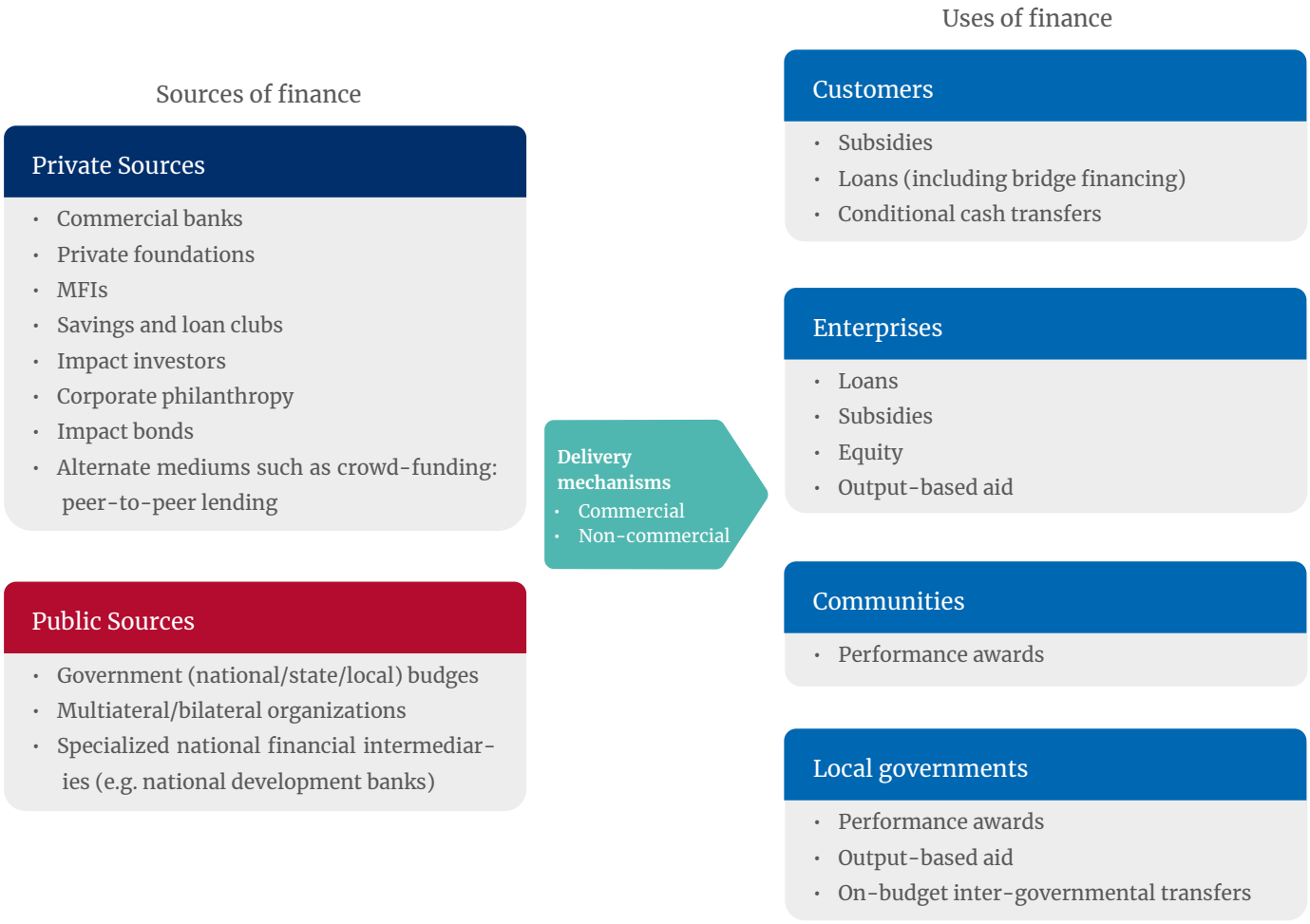
Below: Woreda level context analysis workshop. Gololcha, East Bale, Oromia, Ethiopia, November 2017. This work is part of WaterAid's SusWASH programme funded by H&M Foundation (WaterAid/Behailu Shiferaw/H&M Foundation).

Figure 6: Screenshot from the consolidated tool outputs tab developed by Water For People and Aguaconsult (tool linked in Table 5)

BOLIVIA: Updating short and medium-term sanitation targets based on the revised municipal budget

In Villa Rivero and Tiraque municipalities in Bolivia, short and medium-term targets for sanitation access must be reviewed annually based on the actual sources of funding. These municipalities, in collaboration with Water For People, developed an incentive to motivate households to invest in their sanitation facilities. Municipalities finance up to 20% of the total cost by providing the toilet bowl and sink, while the households cover the remaining expenditure. This strategy is included as an activity within the municipalities' annual budget, intended to increase their current coverage of 60% access to sanitation facilities to 85% in 2025 and 100% by 2030. Local taxes are the source of funding for the municipality for this activity. However, due to annual variations, such as COVID-19, the budget allocated differs from the projection; therefore, short, and medium-term targets are reviewed annually based on the actual budget available.

Figure 7: Finance sources, uses, and delivery mechanisms for Market Based Sanitation (USAID, 2018)



NICARAGUA: Approach to maximise sanitation service coverage when the municipal budget is reduced

In San Rafael del Norte in Nicaragua, Water For People works with the municipality on three approaches (supply, demand, and finance) to ensure household investment in their sanitation facilities. The municipality has created a municipal incentive by subsidizing the price of biodigesters by up to 80%. The municipality has increased demand through social media (Facebook and Instagram) and radio. The municipality ensures access to supply and quality through training masons and supervising construction when households access the subsidy. Households pay only 20% of the biodigester price. In exchange, households must cover all other costs (components and construction); however, the total expenditure of households is lower than the initial price of one biodigester. In parallel, three microfinance institutions provide loans specifically designed for sanitation and water facilities.

Since the program started in August 2020, 65 households have applied for the subsidy. This municipal program is demonstrating how to leverage additional funds with a limited budget. In fact, since the economic crisis of 2018, the total budget allocated to municipalities has decreased by two thirds and by law, municipalities can only allocate 7.5% of their budget to water and sanitation. From 2011 to 2020, the municipality increased the sanitation coverage rate by 5% and it is planning to reach the same rate in only one year with this municipal incentive.

Step 6: Plan development

Objective: to develop a district-wide strategic and financial plan for achieving and sustaining universal access to sanitation services, based on the data analysis. This could be combined with the water and hygiene district plan to ensure all services are considered.

Key questions:

- Have all steps and aspects of reaching the district targets been considered?
- Have all parties participated and validated the process, results, and plan?
- Are all parties aware of their responsibility and familiar with the key targets and milestones?

Methods and outputs: a plan, summarizing all data collected and analysed, the proposed vision and targets, approaches, and financial strategy, should be jointly developed with and fully owned by district officials, technical staff, civil society, and WASH stakeholders.

It is important to note that an inclusive process relies on the progressive validation of findings and the pre-identification of key moments of validation upfront. The plan should be updated based on the results obtained during implementation, with shorter review and updating cycles when newer or pilot approaches are being implemented. Table 6 provides an overview of outputs, methods, and tools for developing the district-wide sanitation plan.

Table 6: Overview of outputs, methods, and tools for developing the district-wide sanitation plan

Output	Method	Tools/Resources
An evidence-based, phased, and costed district-wide plan, including the current situation, a clear vision and targets, a budget projection, and a resource mobilization strategy for sanitation services.	• Workshops and meetings to develop and validate the detailed plan which has been developed over the previous steps, with all stakeholders involved. • Ensure the planning process is inclusive of all parties. • Each step should be validated by the district and relevant stakeholders. For establishing a validation process, it is necessary to identify who is going to be invited and for what purpose. Validation at each step in the development of the plan is needed to ensure full ownership.	• This plan should be owned, adopted, and launched by the district, with consensus and commitment to its implementation from national and local government and supporting organizations. • Depending on the institutional and budgeting set-up, the sanitation district plan can be combined with the water plan or kept separate. • Due to the division of roles for sanitation across several sectors, it is key to bring together all authorities and agencies to develop the plan and for its future implementation. • The plan should include a detailed monitoring plan with clear roles and responsibilities, key indicators, methodology and review meetings

Step 7: Implementation and monitoring

Objective: planned targets are executed and achieved in a coordinated and accountable manner, with quality oversight, and are periodically reviewed. The district authorities are in place and have the minimum capacity to complete subsequent steps.

Key questions:

- What monitoring mechanisms have been put in place to ensure that the targets are met, and the plan continuously reviewed?
- Are the learnings being used by the district and shared with other stakeholders?

Methods and outputs: monitoring reports ensure that the district is on track to achieve its targets, including key indicators to assess and a timeline, according to the roles and responsibilities established. As indicated in the planning phase, the monitoring plan should have been designed from the outset. The process should be documented to ensure that learning is available for the district and other stakeholders. The results from the monitoring should feed back into the assessment phase to inform and update the targets and approaches selected. This could be communicated to all stakeholders during an annual meeting to review the plan progress. As indicated previously, this is an iterative process which feeds into the previous steps and modifies the planning. Table 7 presents an overview of outputs, methods, and tools for developing the monitoring and learning of the district sanitation plan.

Table 7: Overview of outputs, methods, and tools for developing the monitoring and learning of the district sanitation plan

Output	Objective	Method	Key aspects to consider	Tools/Resources
Monitoring reports	Assess the progress, quality, sustainability and equity of the implementation and planning outcomes.	Reliable and regular monitoring and learning activities are essential for reviewing the roadmap and its targets at the district level. For example, the district should develop a detailed monitoring system for service levels, faecal sludge management, and Open Defecation verification. Currently, most of methods available for monitoring focus only on ODF. However, it is strongly recommended to use the JMP service level ladders for monitoring and map it to specific targets in the district. New approaches that are being piloted would require more specific monitoring plans which should be rooted in a theory of change.	• Active monitoring is required to identify issues while they are emerging, with rapid feedback systems that are often based on real-time data. For example, ODF villages tend to go back to open defecation practices if no follow-up is done. Therefore, regular monitoring is key to behaviour change. • The plan must indicate when and how results from the monitoring will be used and fed back into the roadmap. • Annual reviews of activity and cost data should be considered so that any gaps or weaknesses in the cost tracking approaches can be identified and rectified. The annual reviews will also provide an opportunity to collect and update any local data relevant for costing, such as changes in fuel prices, sanitation components. Some of these cost parameters can be highly variable during the life of a typical roadmap, hence it is useful to record them on an annual basis wherever possible. • The steps used to monitor ODF are: - CLS triggering. - Monitor community progress and request ODF verification. - Collect monthly updates from triggered communities, provide feedback to community, and verify ODF claims. - Consolidate data. - Provide feedback to local authorities and report ODF declarations. - Analyse data to facilitate future planning and budgeting in the district. - Conduct annual cross-district stakeholder reviews and comparative analysis.	• Many of the same tools listed in the assessment phase can be used for routine monitoring of service levels. WSP summarized its findings from a project working with local governments and the private sector in 29 districts of East Java province in Indonesia. • All information for the JMP, its strategy and annual reports for the different sub-sectors can be found here.

Output	Objective	Method	Key aspects to consider	Tools/Resources
Document progress and review reports on reaching universal sanitation services	Ensure that targets from the plan are maintained and updated over time.	• Resourcing the plan, coordination, and alignment. • Technical assistance and capacity building for implementation. • Monitoring, review, and accountability. • Learning and dissemination.	• Ideally, the data collected during monitoring and the results should be publicly available to other stakeholders. • This could be communicated to all stakeholders during an annual meeting to review the plan progress.	This paper summarises the roadmap process in Chitwan District, Nepal, and the lessons learned. It is an example of how the process can be documented.

NICARAGUA: Monitoring strategy to reach universal sanitation access

In San Rafael del Norte in Nicaragua, the service authority carries out frequent data collection for monitoring, which are analysed and summarized once a year. The monitoring strategy was initially established in collaboration with Water For People, and the data collected in rural and urban areas includes open defecation rates, faecal sludge management, septic tank physical condition, toilet facilities, cleanliness, and household satisfaction. During the analysis, the service authority also compares the results from the national monitoring system to its own. The data are used to inform annual priorities and update the planning processes.

Below: Sopharoath, 12, Sopharin, 15 months, Sothy Loth, 23, Limonika, 5, Sokhom So, 56, Sim Kong, 63, stand in front of their family toilet. Torb Tbeng Village, Bongro Commune, Rolea B'ier District, Kampong Chhnang Province, Cambodia, December 2018 (WaterAid/Remissa Mak/H&M Foundation)

ANNEX 1:
EXAMPLES OF SOME AGENDA FOR CHANGE MEMBERS' SANITATION INTERVENTIONS

This table gives examples of what four Agenda for Change members are doing in the field of sanitation. This list is intended to generate ideas on the types of approaches that might be considered in district planning processes.

More information on Agenda for Change members' sanitation system strengthening work can be found here.

Country	Partner	Scope of sanitation interventions
Nigeria	WaterAid	Supporting development of the National Action Plan (NAP), the federal government's flagship program towards achieving universal access to WASH by 2030; supporting design and implementation of the Clean Nigerian Campaign including learnings from WaterAid's rural sanitation research, sanitation marketing, and promoting context specific sanitation approaches (Rethinking Rural Sanitation approach); building capacities of key government functionaries and supporting coordination and planning at federal, state, and local government levels; supporting open defecation protocols, establishing key parameters for ODF communities and districts; building models for private sector participation in WASH, specifically market-based sanitation models; introduced Water Easy Toilet technology and business model.
Rwanda	WaterAid	Supporting local governments in improved data-based planning and costing of sanitation services to inform government-led District Investment Plans that recognise multiple approaches to sanitation promotion based on different contexts by categorisation of rural communities.
Ethiopia	WaterAid	Supporting the government to develop its national sanitation and hygiene campaign "The Total Sanitation to End Open Defecation and Urination," which aims to achieve an ODF Ethiopia by 2024 and addresses policy, regulations, and implementation strategies; developing a set of appropriate technology options that meet basic service levels for different geographical contexts and suggesting hygiene promotion approaches that lead to sustained behaviour change; articulating policy and regulatory parameters including concessions and enabling factors for greater participation of the private sector, and suggesting innovative service delivery for equitable sustainable delivery at scale; supporting 40 town utilities to extend their network, engage residents, and turn around their services; using Shit Flow Diagrams to gauge the sanitation situation and draw up initial options for FSM.
Niger	WaterAid	National capacity building; introducing concepts and approaches of the Rethinking Rural Sanitation Guideline; working with district governments to support the development of costed district sanitation plans focusing on achieving equity, sustainability, and scale.
Cambodia	WaterAid	Improving government rural sanitation planning with different approaches based on context; developed tools for area wide categorisation analysis which informs the selection and combination of implementation approaches suited for each context; achieving a step change with government partners in the understanding of rural communities as diverse entities requiring different strategies and approaches for implementation and achieving sustainability.
Bangladesh	WaterAid	Supporting town authorities (pourashavas) to develop town-wide sanitation solutions including better sludge emptying services, innovative sludge treatment like co-composting, and reuse of derived products to inspire national FSM policies and practices.
Benin	Helvetas	Municipal authorities lead the promotion of sanitation marketing, coaching sanitation entrepreneurs, promoting aspirational toilet design, and linking with awareness-raising activities. Municipal authorities are the entry point (select masons) for sanitation marketing.
Mozambique	Helvetas	Improving efficiency and sustainability of CLTS using Risks, Attitudes, Norms, Abilities, and Self-regulation (RANAS) to change users' behaviours, with a key implication of district level services of health, education, infrastructure, and behaviour.

Country	Partner	Scope of sanitation interventions
Nepal	Helvetas	Principles of the community-led urban environmental sanitation (CLUES) approach integrated into small-town sanitation planning, setting up a revolving fund for improving sanitation facilities. Local authorities have a strong ownership over the planning.
Bolivia	Helvetas	Improving municipal wastewater and solid waste management in small towns.
Haiti	WaterAid	Water and sanitation masterplan (roadmap) for municipalities, clarifying the roles of actors, especially municipalities, regarding access to sanitation, including the role of municipalities in supporting the sanitation market system.
Bolivia	Water For People	Data-driven planning and technical support for reaching and sustaining universal WASH services across seven municipalities in Cochabamba; implementing the municipal incentive model, small-town waste treatment plant rehabilitation, and management and supporting self-construction.
Guatemala	Water For People	Data-driven planning and technical support for reaching and sustaining universal WASH services across four municipalities in Quiche; supporting self-construction, social art strategies, sanitation loans via microfinance institutions (MFIs), Market Sanitation Development, and cement biodigester technology.
Honduras	Water For People	Data-driven planning and technical support for reaching and sustaining universal WASH services across three municipalities in Yoro, Santa Barbara, and Cortez; supporting sanitation loans via MFIs, small town FSM for sewer and non-sewer areas and municipal incentives for excluded households.
India	Water For People	Data-driven planning and technical support for reaching and sustaining universal WASH services across 10 blocks in Bihar, West Bengal and Maharashtra; supporting latrine building with social art, sanitation loans via MFIs, toilet sales via Small and Medium Enterprises (SMEs), and promotion through community organizations.
Malawi	Water For People	Data-driven planning and technical support for reaching and sustaining universal WASH services across three districts in southern Malawi; implementing model village and CLTS (hygiene behaviour change) strategies, and supporting small town pit-emptying services.
Nicaragua	Water For People	Data-driven planning and technical support for reaching and sustaining universal WASH services across two municipalities in Jinotega; supporting sanitation loans via MFIs, sanitation marketing, and a municipal incentive program.
Peru	Water For People	Data-driven planning and technical support for reaching and sustaining universal WASH services across three municipalities in Cajamarca, Lambayeque, and La Libertad; supporting SaTo Stool importation and sales, sanitation loans via MFIs, self-construction, and open defecation elimination.
Rwanda	Water For People	Data-driven planning and technical support for reaching and sustaining universal WASH services across four districts in the Northern, Western, and Kigali Provinces; developing scalable models for distribution and sales of SaTo Pans, access to credit for sanitation businesses, toilet technology development, small town FSM services, toilet sales via local lending groups and SMEs, and a District Sanitation Centre.
Uganda	Water For People	Data-driven planning and technical support for reaching and sustaining universal WASH services across two districts in western and eastern Uganda; developing scalable models for distribution and sales of SaTo pans, supporting model villages, town sanitation planning, small town FSM services and access to finance for household and business loans.
Burkina Faso	IRC	Led by the First Lady of Burkina Faso, the program aims to mobilize the diaspora to invest in hygiene and sanitation for vulnerable parents living in villages, supported through social media, radio, television campaigns (e.g., communications on good examples, positive outcomes, with an emphasis on dignity).
Ethiopia	IRC	Working in 41 districts across eight regions; leading the knowledge management component of this USAID-funded sanitation marketing project.
Ghana	IRC	The Sanitation Challenge provides a prize to induce Metropolitan, Municipal, and District Assemblies to design and implement innovative liquid waste strategies; Conrad N. Hilton Foundation grantees are working with Asutifi North District Assembly to reach full coverage by 2030.

Country	Partner	Scope of sanitation interventions
Uganda	IRC	Improving service delivery outcomes for rural water and small-town sanitation services by strengthening local systems through District Master Planning (in Kabarole, plus one other district); supporting Civil Society Budget Advocacy Group (CSBAG) including evidence generation, working with Sanitation and Water for All (SWA), supporting district activities (including water safety planning, water quality testing, interventions to address water quality problems); developing sanitation plans for four town councils; installing infrastructure in health centres, including incinerators and water filters; Integrating "home improvement" in national strategy ("Beyond the Latrine," "Latrine Plus"); model villages for district-wide campaigns. IRC Country Director, Jane Nabunnya, was appointed as the national coordinator for the Water Supply and Sanitation Collaborative Council (WSSCC); focal lead for menstrual health and hygiene through the Global Sanitation Fund; core contributor to the National Sanitation Working Group to improve sanitation and hygiene service delivery through coordination, learning, knowledge management and advocacy; and supporter of "event days" (e.g., Menstrual Hygiene Management Day, World Toilet Day, Water and Sanitation Week).
Ghana Uganda India	IRC	Five-year program implemented by WASH Alliance International consortium (including IRC, Simavi, Akvo, Amref Health, SNV, and Plan Netherlands); improving access to sustainable services, use of sanitation and hygiene behaviours for at least 2 million people, and access to and use of safe drinking water for at least 450,000 people in six countries (Bangladesh, India, Uganda, Ghana, Kenya, Mali).
India	IRC	Participation in national level India Sanitation Coalition to promote national and state discussions around sanitation behaviour change and FSM; implementing WaterShed program for governance, management, and sanitation as a contamination issue; in Orissa and Bihar, understanding relationship between sanitation coverage and water quality impacts.
Bangladesh	IRC	Supporting the BRAC WASH program as Knowledge Partner; working in 259 sub-districts of Bangladesh and establishing 10 million double pit latrines; providing technical assistance for WaterShed and WASH SDG projects, working for citizen empowerment for WASH rights and strengthening sanitation value chain in small towns (including latrine construction, sludge collection and transportation, awareness raising, etc.); developing an innovative waste-to-energy program in northern Bangladesh to develop an integrated waste management model and subsequent system strengthening.
Indonesia	IRC	Developing a new Theory of Change in 2015/2016 for the Sustainable Sanitation and Hygiene for Indonesia (SEHATI) program (the successor to the Sanitation, Hygiene and Water [SHAW] program) that focuses on system and capacity strengthening of local actors so that they can replicate and scale up the successful approach throughout the participating districts; developing a faecal waste rapid assessment methodology for urban areas and developing the "shit flow calculator'.
Asia	IRC	Data-driven planning and technical support for reaching and sustaining universal WASH services across 10 blocks in Bihar, West Bengal and Maharashtra; supporting latrine building with social art, sanitation loans via MFIs, toilet sales via Small and Medium Enterprises (SMEs), and promotion through community organizations.

ANNEX 2:
RESOURCES FOR DEVELOPING THE SANITATION ROADMAP

The following section presents all the reports which appear in the document and additional resources which could be useful for districts when developing the sanitation roadmap. Applying the life-cycle costs approach to sanitation. This briefing note presents an application of the life-cycle costs approach to sanitation in rural and peri-urban areas in four different countries – Andhra Pradesh (India), Burkina Faso, Ghana, and Mozambique. It reports key findings on the comparison of the financial costs of a range of traditional and improved latrines and the quality of service delivered to users.

Compendium of Sanitation Systems and Technologies. The Swiss Federal Institute of Aquatic Science and Technology developed this compendium to provide a systematic overview on different sanitation approaches and technologies and describes a wide range of available, low-cost sanitation technologies.

Designing the next generation of sanitation businesses. The Toilet Board Coalition presents two models that combine an aspirational value proposition for families in the Base of the Pyramid and a strong potential for financial sustainability. The report includes analysis of projects that stimulate local rural sanitation markets. It provides an in-depth analysis of both best practices and greatest challenges from a pool of 12 representative projects. The report suggests strategies to overcome challenges to sustainability and scale. Finally, it presents how these projects and business models would benefit from corporate and industrial expertise and resources, and highlights opportunities for large corporations to contribute to solving the sanitation crisis.

Doing More with Less - Smarter Subsidies for Water Supply and Sanitation. The World Bank explores how scarce public resources can be used most effectively to achieve universal delivery of water supply and sanitation services. The reports provide an analysis of the prevalence and performance of subsidies in the sector, and provides guidance to policymakers on improving subsidy design and implementation to improve their efficacy and efficiency in attaining their objectives.

Guidance on Programming for Rural Sanitation. WaterAid, Plan, and UNICEF developed a guidance document for the design of large-scale sanitation programs in rural communities, with a focus on the achievement of sustained household and collective sanitation and hygiene outcomes.

Guidance on Costing of Rural Sanitation Approaches, WaterAid, Plan, and UNICEF developed a document to improve the assessment of the costs of rural sanitation programs to enable better comparison and analysis of rural sanitation costs across programs and organizations, and to inform future rural sanitation policy, planning, and programming by governments, development partners, and other local actors.

Guidelines on sanitation and health. WHO created these guidelines to promote safe, healthy sanitation systems and practices. The guidelines provide evidence on the links between sanitation and health, give evidence-informed recommendations, and offer advice for encouraging international, national, and local sanitation policies and actions that protect public health. The guidelines also seek to articulate and support the role of health and other actors in sanitation policy and programming to help ensure that health risks are identified and managed effectively.

Glossary. Agenda for Change compiled definitions for systems strengthening terms developed by its members and other systems leaders.

Life cycle cost approach. IRC presents key components of the life-cycle costs approach.

Reaching the Millennium Development Goal target for sanitation in Africa – A call for realism. This report (which includes the "Hooked on Sanitation Subsidies" paper) developed by DANIDA indicates the key characteristics for hardware subsidies including a specific section on sanitation.

Review of Rural Sanitation Approaches. This UNC Water Institute report maps out the predominant rural sanitation approaches, analyses and compares their core elements, attributes, and activities.

Rural sanitation – Technical Brief. USAID provides an overview of the important factors to consider in rural sanitation programming. Drawing upon the latest evidence, the brief provides guidance for developing and implementing rural sanitation activities.

Sanitation in small towns: Experience from Mozambique. UNICEF summarizes the results from a small-town WASH program in Mozambique. The aim was to implement a comprehensive program that involved WASH and capacity building at the local level, so that the towns would be equipped to meet the challenge of accelerated growth. Sanitation Master Plans were developed in all five towns.

Sanitation marketing. A handbook for Sanitation Managers and Private Sector Players. The Ministry of Health in Uganda, in partnership with Plan, have developed this handbook on sanitation marketing to increase awareness and harness momentum for the uptake of sanitation marketing among stakeholders, such as government at the policy-making level, line ministries, district local government structures, and civil society organizations. It outlines key facts about sanitation marketing, a step-by-step approach to the development and implementation of a sanitation marketing project, and suggests references for further reading.

Strengthening sanitation and hygiene in the WASH systems conceptual framework. The Sustainable Services Initiative (SSI) of Welthungerhilfe seeks to prompt and contribute to sector discussions and add to the available documentation on strengthening sanitation and hygiene within WASH systems.

Sustainable Sanitation and Hygiene for Eastern Indonesia. IRC carried out a study for identifying safely managed sanitation options in two districts in Indonesia. The study provides recommendations and initial inputs for appropriated faecal sludge management guidelines and models to ensure safe practices by households and service providers under the district jurisdiction. Based on the technical and financial analysis, the authors identified the most appropriate treatment method for the current resources in the districts.

The Equality and Non-discrimination and Community-led Total Sanitation Handbook provides guidance for ensuring that behaviour change interventions include equality and non-discrimination approaches. This handbook is specifically targeted towards those implementing or supervising interventions at the community level.

The operational guide for the making markets work for the poor approach aims to provide an accessible operational resource to help practitioners put the market systems development approach into practice. It explains the key principles and frameworks which guide the process of effective intervention in – and development of – market systems, addressing common challenges with examples of good practice based on practitioner experience.

REFERENCES

Aguaconsult (2018). Guidance for Developing a District WASH Plan.

Ministry of Foreign Affairs of Denmark (DANIDA) (2010). Reaching the MDG target for sanitation in Africa – A call for realism.

Gensch, R., Tillett, W. (2020). Strengthening Sanitation and Hygiene in the WASH Systems Conceptual Framework.

Huston, A., Moriarty, P.B. (2018). Understanding the WASH system and its building blocks: building strong WASH systems for the SDGs.

IRC (2011). Assessing Sanitation Service Levels. Second Edition. WASH Cost Working Paper 3.

SFD Promotion Initiative (2017). SFD Manual - Volume 1.

Bill and Melinda Gates Foundation (2010). Water, Sanitation & Hygiene Fact Sheet.

Tilley, E.; Ulrich, L.; Luethi, C.; Reymond, P.; & Zurbruegg, G. (2014). Compendium of Sanitation Systems and Technologies. 2nd Revised Edition. Duebendorf, Switzerland: Swiss Federal Institute of Aquatic Science and Technology.

UNICEF (2009). Community approaches to total sanitation.

UNICEF and World Health Organization (WHO) (2020). Joint Monitoring Programme. Retrieved from https://washdata.org/monitoring/sanitation.

United Nations (2020). Monitoring SDG6 on Water and Sanitation: Target 6.2 – Sanitation and Hygiene.

USAID (2018). Scaling Market-Based Sanitation: Desk Review on Market-Based Rural Sanitation Development Programs.

WSP (2011). Introductory Guide to Sanitation Marketing.