



PROGRAMMING FOR SUSTAINABILITY IN WATER SERVICES – A FRAMEWORK

ACCOUNTABILITY FOR SUSTAINABILITY



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Resilient nations.

FOREWORD

Ensuring lasting impacts of water, sanitation and hygiene (WASH) programme investments is a strategic, ambitious and complex task. It is not enough simply to invest more in WASH service delivery; we must also consider *how* those services are delivered, in the context of achieving Sustainable Development Goal (SDG) 6 ambitions – ensuring lasting positive effects on children’s survival rates and their general development. The SDG agenda is extremely ambitious, clearly setting out where the world should be in 2030, in terms of access to safely managed water and sanitation. It is a vision we all can – and must – unite behind.

The importance of the sustainability of safely managed water and sanitation is embedded in the SDG 6¹ wording. Success will mean changing the mind-set of stakeholders – including development partners and donors, who will need to move beyond measuring the functionality of infrastructure investments, to embedding the concept of sustainability into programming from the design and proposal phase through to implementation, monitoring and follow up. Moving away from an infrastructure focus to ensuring that services are maintained and enhanced, with no time limit, is particularly ambitious in the context of mounting pressures facing the water sector – pressures such as increased demand from rising populations, urbanization, mitigating the impacts of climate change, as well as ongoing changes to political, social or financial backdrops.

This document considers different programming intervention levels and models, the upstream enabling environment, as well as the importance of meaningful interaction with communities to ensure better access to sustainable water and sanitation services. The document is rooted in UNICEF’s ambition to strengthen national capacity to deliver lasting WASH services, while, as ever, leaving no one behind.

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TABLE OF CONTENTS

Foreword	3
Acknowledgements	4
List of figures	6
List of tables	6
Acronyms and abbreviations	7
Executive summary	8
1. The Case for Sustainability	9
2. The sustainability framework	11
A. Introduction	11
B. The pathway to Sustainable Services	12
STEP 1: Understanding Sustainability	17
STEP 2: Plan and Partner for Sustainability	27
STEP 3: Programming for sustainability	29
STEP 4: Monitoring and adapting	34
3. Conclusion	37
References	39
Annex 1: List of indicators and factors	40

LIST OF FIGURES

Figure 1:	The new SDG 6 water and sanitation service ladders indicating countries progressive realization of SDG 6.1 and 6.2 _____	9
Figure 2:	Secondary data analysis of functionality of water points in four Sub Saharan African countries _____	10
Figure 3:	UNICEF's framework on programming for sustainability _____	11
Figure 4:	The pathway to Sustainable Services _____	13
Figure 5:	UNICEF's sustainability framework applied in West and Central Africa _____	16
Figure 6:	Understanding sustainability steps _____	17
Figure 7:	Understanding sustainability factors at community, service and sector level _____	21
Figure 8:	A functioning rural water service and value chain is critical to sustain affordable services to communities but also to generate healthy businesses that can continue to provide services. Different levels of consolidation of a broken chain can increase sustainability of the service _____	22
Figure 9:	Triangle of service delivery showing well-functioning relationships, and clear responsibilities and duties between stakeholders help to ensure the provision of services _____	23
Figure 10:	The enabling environment for sustainable WASH services _____	25
Figure 11:	The 'plan & partner' step _____	27
Figure 12:	Programming actions to address sustainability _____	29
Figure 13:	Monitoring and adapt step _____	34
Figure 14:	Full pathway to sustainability _____	38

LIST OF TABLES

Table 1:	UNDERSTANDING sustainability; assessment tools examples _____	26
Table 2:	Plan & Partner for sustainability; planning tools examples _____	28
Table 3:	ACT for sustainability; programming tools examples _____	33
Table 4:	Monitoring tools example _____	36

ACRONYMS AND ABBREVIATIONS

GWP	Global Water Partnership
JMP	Joint Monitoring Programme
MDG	Millennium Development Goal
MIS	Monitoring Information System
NGO	Non-governmental Organisation
SDGs	Sustainable Development Goals
SIWI	Stockholm International Water Institute
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
WASH	Water, Sanitation and Hygiene
WASH-BAT	WASH Bottleneck Analysis Tool (WASH-BAT)
WGF	Water Governance Facility
WHO	World Health Organisation

EXECUTIVE SUMMARY

This document is intended as a resource guide for UNICEF WASH staff and partners, helping them understand how to increase a focus on sustainability in their WASH programming. It considers the different programming intervention levels and models, the upstream enabling environment, as well as the importance of meaningful interaction with communities in order to ensure better access to sustainable water and sanitation services.

The document consists of four parts, linked to the **Sustainability Pathway**: the first part (**understanding**) explores the concepts linked to sustainable WASH services across the different levels that contribute to service delivery (sector, services, and community levels). The second part reviews various tools designed to **plan for and partner** for sustainability. The third part details a series of **programming actions** that can be undertaken for improved sustainability. The fourth part discusses the **monitoring of sustainability**.

The framework offers guidance on how to understand and integrate sustainability in WASH programming throughout the programme cycle, from the assessment phase to implementation and monitoring of results and how to feedback findings for reinforcement or course correction. Available supporting tools and examples are provided throughout. A guidance to simplified 'Sustainability Checks', including a list of core indicators and underlying factors to be analyzed in sustainability monitoring, has been developed and complements this document².

1. THE CASE FOR SUSTAINABILITY

When representatives from the world community signed the 2030 Sustainable Development Agenda in September 2015 ('Agenda 2030'), they agreed a specific commitment to "Ensure availability and sustainable management of water and sanitation for all". SDG 6 commits us to a global effort to provide universal access to equitable, safe and affordable drinking water and sanitation by 2030. Target 6.1 addresses drinking water and measures the percentage of the population having access to a safely managed drinking water service. 'Safely managed' is defined as an improved water source, which is on premises, is free of contamination and is available when needed. Availability when needed can be considered as a proxy for a reliable service.

Target 6.2 measures percentage of the population using safely managed sanitation services, which comprises of three main elements: a basic sanitation facility, which is not shared, and where excreta is safely disposed of

in situ or transported and treated off-site. Target 6.2 also measures the elimination of open defecation. The explicit focus on sustainability in Agenda 2030 and in SDG 6 is a significant policy change. The SDGs are also substantially more ambitious than the previous Millennium Development Goals (MDGs), since the aim now is for everyone to have sustainable water and sanitation services, and that open defecation will be eliminated. Countries will realise the goals of Agenda 2030 through taking policy decisions on how to move up the service ladders (Figure 1). National and global monitoring and reporting are already providing data and information on progress and whether countries are capable of maintaining the higher level of service over time.

The focus on sustainability is a much welcome response, recognizing that newly delivered WASH services still fail too often and often do not provide continuing benefits to their users. For example, various studies estimate that between 30% and 50% of water points are not

FIGURE 1: The new SDG 6 water and sanitation service ladders indicating countries progressive realization of SDG 6.1 and 6.2

MDG/SDG	Service Ladder	Description
SDG 6.1	Safely managed drinking water	Improved facilities located on premises, available when needed, and free from contamination
	Basic water	Improved facility within 30 minutes round trip collection time
MDG continuity	Unimproved water	Facility which does not protect against contamination
	No service	Surface water
	Progressive realization	

Source: JMP, 2015

MDG/SDG	Service Ladder	Description
SDG 6.2	Safely managed sanitation	Private improved facility where faecal wastes are safely disposed on-site or transported and treated off-site; plus a handwashing facility with soap and water
	Basic sanitation	Private improved facility which separates excreta from human contact
MDG continuity	Shared sanitation	Improved facility shared with other households
	Unimproved sanitation	Unimproved facility does not protect against contamination
	No service	Open defecation
Progressive realization		

Source: JMP, 2015

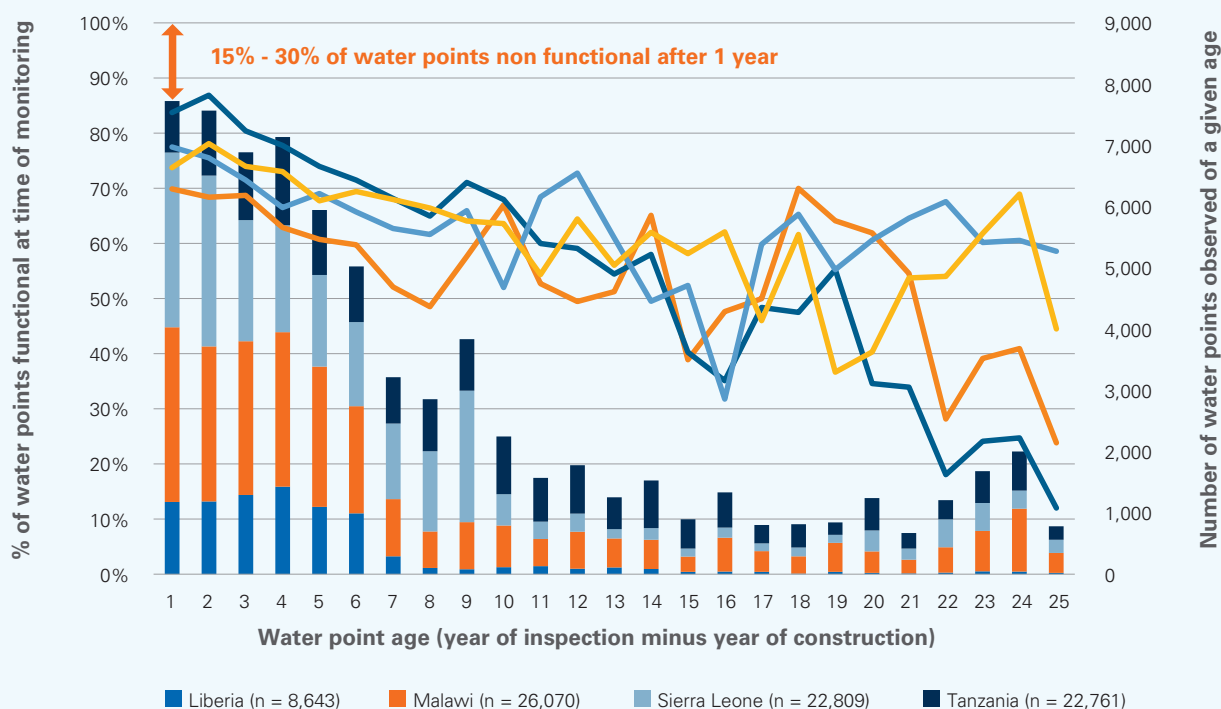
working as planned after two to five years³. Such a non-functionality rate is, in part, an expression of a weak and fragmented rural water service chain; from the construction of the water point, and the management of the system to the point when water is consumed. Importantly, studies show that significant sustainability challenges are seen even during the first year after construction, often as a result of poor planning, siting, and quality of the construction process (see Figure 2). During year one to year five, non- or poor functionality is observed mainly due to poorly developed management models which do not consider the whole service delivery chain.

Both research and practice have shown it is clear that achieving sustained universal coverage will require more than building water and sanitation infrastructures and increasing access

to services. Understanding how services are maintained over time needs to be at the heart of all WASH sector systems, at all levels – from local community interventions, to wider service delivery, and at the national level, where the enabling environment for services needs to be strengthened to make sure that, once provided, services and the benefits to the end user continue over time.

The national governance system is what decides and guides *who gets what service, where and how*. All stakeholders at all levels of the WASH service chain have a responsibility to address possible barriers to sustainability that may be rooted in the national governance system; changing or adjusting their behaviour and playing their role in identifying, challenging and addressing key systemic barriers to sustainability.

FIGURE 2: Secondary data analysis of functionality of water points in four Sub Saharan African countries



Source: Tincani et al, 2015

2. THE SUSTAINABILITY FRAMEWORK

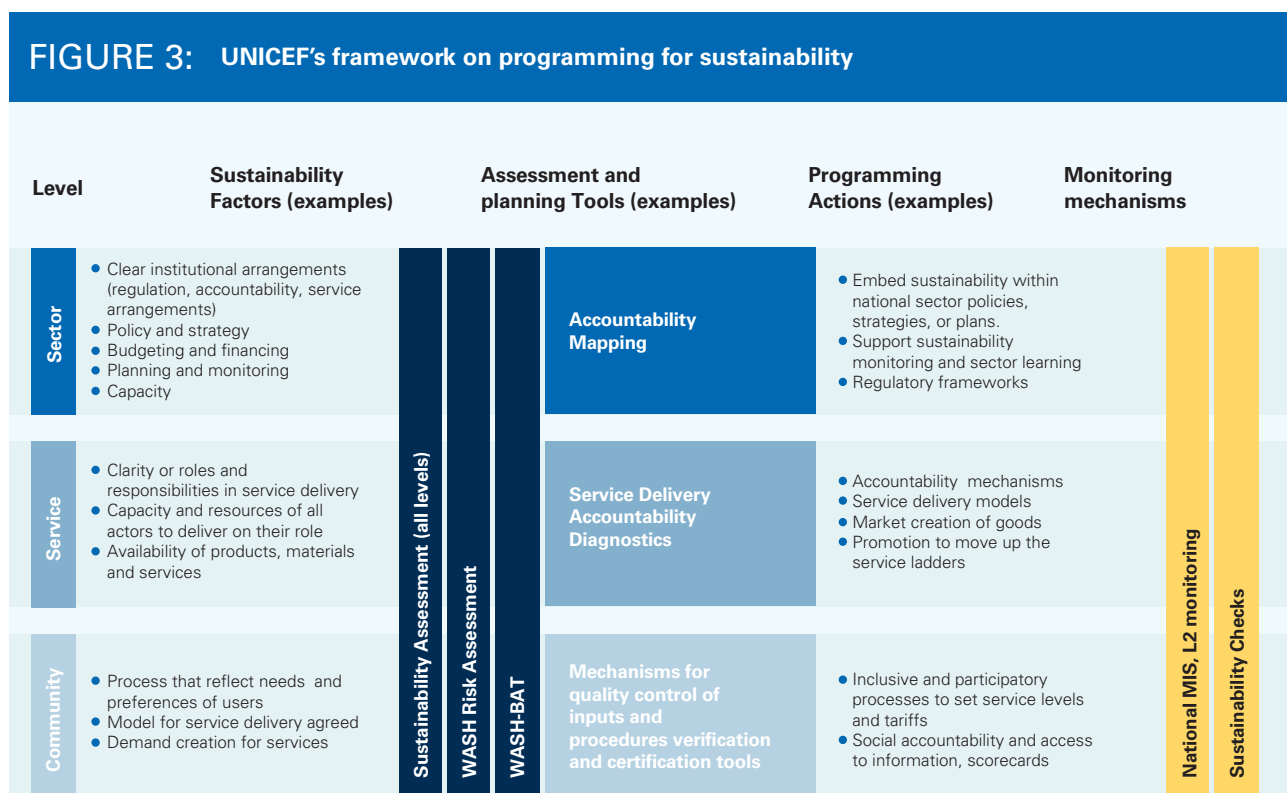
A. INTRODUCTION

This framework builds on UNICEF’s past work on WASH programming sustainability, mainly in East, South and West Africa, but also other global, regional and country experiences, both inside and outside UNICEF. It aims to set out experiences, tools and programming options in one document for easy access, with the aim of harmonizing our understanding and approach to address and improve sustainability. The guidance unpacks some key concepts to better understand the sustainability of WASH services, and how we can assess, monitor and create programmes for more sustainable WASH outcomes over time.

This framework recognizes the complexity of addressing sustainability in service delivery, which needs a system-strengthening approach. Hence, the framework is based on and sets out

an iterative process: the ‘sustainability pathway’. The definition of each level in the framework (national, subnational/service level and local/community) is spatial but also based on functions and sequences in a programming process.

The document consists of four parts. The first part explores the concepts linked to sustainable WASH services across the different levels that contribute to service delivery (sector, services, and community levels), to help build common **understanding** of these concepts. The second part reviews various tools designed to **plan for and partner** for sustainability. The third part details a series of **programming actions** that can be undertaken for improved sustainability. The fourth part is the **monitoring of sustainability** and adaptation for the new cycle. This structure and the conceptual framework for programming is summarized in Figure 3 below.



The framework offers guidance on how to integrate sustainability in WASH programming throughout the programme cycle, from the assessment phase to implementation and monitoring of results, and how to feedback findings for reinforcement or course correction. A guidance to simplified sustainability checks, including a list of core indicators and underlying factors to be analyzed in sustainability monitoring has been developed by UNICEF and complements this document⁴.

B. THE PATHWAY TO SUSTAINABLE SERVICES

Programming for WASH sustainability connects activities related to three distinct periods in the programme cycle: learning from *past* successes and correcting failures; maximizing the relevance, effectiveness, efficiency and impact of *current* activities; and building systems able to learn from this and sustain services over time for the *future*. Sustainability processes link planning, monitoring, assessment, and decision support activities into systems for programming and learning. The general principles outlined above need ideally but not necessarily to be undertaken in a staged manner, as outlined in Figure 4 below:

Understand sustainability:

Defining what sustainability means in each context, how to set clear targets for sustainability and how to achieve lasting services in resource-poor rural areas is an important step in the process of introducing sustainability into programming. In the next section we underline some important general factors that have been demonstrated to affect sustainability. In a country context, understanding sustainability might be done through the use of baseline studies, or sustainability-assessment-specific studies, which can shed light on the national context for sustainability and its main challenges. This can also have the effect of raising awareness of sustainability issues and help put it on the national agenda. At this stage, sustainability assessment studies can be useful to raise

understanding. If enhancing sustainability is not currently regarded among the priorities on the national WASH agenda, carrying out national studies with a focus on exploring what sustainability looks like in different contexts can help to raise awareness about its importance and start the debate. In some cases, making the case for sustainability could be a first step to secure a genuine political commitment and stakeholders' support.

Plan and partner for sustainability:

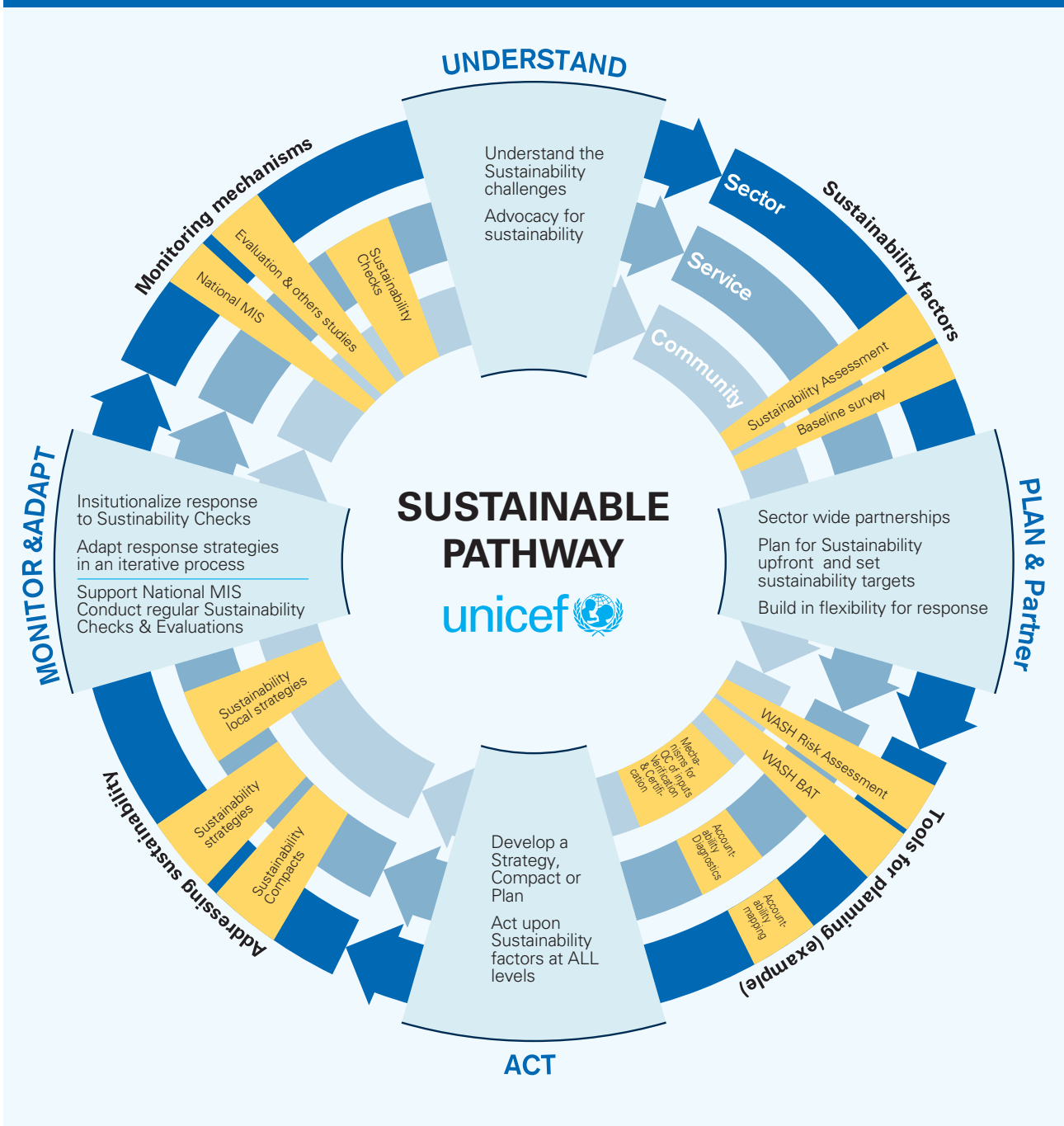
This is about ensuring that sustainability is at the centre of any national WASH programme definition. Clear sustainability targets should be explored and set out (for example, clarifying sector policies, clear roles and responsibilities, the type and level of service delivery expected), all of which will help to define key indicators, and begin to create a sense of stakeholder ownership of them and how they will be achieved. It is important to build in flexibility to these plans and targets, so that the sector can identify and respond to the sustainability challenges that will inevitably be faced over the course of implementation.

It is therefore important to forge partnerships at sector level that can work collectively on improving sustainability. Clearly this will heavily involve the national government, but should also include, where appropriate, other decentralized levels of government or municipalities, other external support agencies, service providers, and any other bodies involved in regulation and operation of services. Tools like WASH-BAT, which help diagnose and propose actions in a participatory way, can be instrumental in involving different partners collaboratively on the common task of improving sustainability.

Act for sustainability:

Once bottlenecks and priorities are identified and set out, it is important to build on this by preparing an explicit strategy for sustainability. Whatever solution is agreed as part of this plan, it needs to:

FIGURE 4: The pathway to Sustainable Services



- 1) Be owned, and officially recognized by the government and other stakeholders;
- 2) Be linked to and coherent with other sector-wide commitments on sustainability;
- 3) Be national in scope;
- 4) Set targets and milestones with clear definitions of responsibilities;
- 5) Include a mechanism for follow-up and update.

Given the complexity of sustainability and its dependence on the context of each country, it is not possible (or even desirable) to provide a simple recipe for action to address it. Annex 1 of this document offers some programming guidance, in the form of broad guiding questions and potential programming responses to each of them.

'SUSTAINABILITY COMPACTS'

An example of a strategy or plan that can be adopted by the sector is a 'Sustainability Compact'. Most compacts are essentially agreements signed between UNICEF and national governments, which set out government commitments to ensure services are functioning to an agreed standard for a minimum of 10 years, and which specify UNICEF's role in supporting this effort. The compact contains a series of technical and financial commitments to tackle the bottlenecks for sustainability of WASH that have been identified. The compacts are open to be signed with other WASH stakeholders in each country. They have been implemented in various countries in the West and Central Africa Region. The commitments outlined in the compact are then operationalized through 'Action Plans' that give further level of detail, including specific roles and responsibilities.

Monitor for sustainability:

The actions being agreed in the sustainability plan, compact or strategy need to be implemented. To support this, monitoring of sustainability needs to be in place. As described in the fourth part of this document, regular sustainability checks^{5,6,7} will inform the sector about the outcome of sustainability efforts, as well as a brief check on likely future sustainability.

Strengthening the national monitoring system is an important long-term strategy, to ensure that sustainability is monitored beyond any programme implementation, as part of national and subnational monitoring and evaluation systems. National monitoring systems that set up an effective way to monitor real time service delivery, including sustainability factors such as, for example, consumption levels, payments, or time to repair broken down points or systems, are even more efficient; they allow for a quicker response, and in turn help safeguard sustainability beyond the scope of a sustainability check.

Adapt programming for sustainability:

The Sustainability Checks will not be effective if they are not followed up by adequate action addressing the challenges found in the studies. The results of the checks **must** feed back into programmes, strategies, and plans. A management response, setting clear tasks, roles and timelines to address the challenges identified can be a good tool to operationalize this feedback in the short term. However, the strategic nature of some threats to sustainability will require planning for long-term actions as well. The overarching sustainability plans, compacts or strategies therefore need to be flexible and should be adapted using an iterative process, depending on context.

In all this process, sustainability needs to be treated as a collaborative effort. The primary ownership of and accountability for the long-term provision of WASH services rests with government, though UNICEF and other external support agencies stand ready to support through facilitating and providing technical and financial support when needed.

WASH 'SUSTAINABILITY CHECKS'

A WASH 'Sustainability Check' is a study conducted by an independent third party (e.g. auditors, or a consultant) to assess the sustainability of WASH services, safety, behaviours and practices at the national, subnational or local level. It provides an assessment of the sustainability of services in the area of study at the time of the study, and assesses conditions (factors) for future sustainability.

The first WASH Sustainability Check was initially implemented in Mozambique in 2008. To date, UNICEF has carried out more than 43 checks, with some countries having conducted several rounds of checks. In general, they have been instrumental in raising awareness and debate on sustainability issues at country level. Sustainability checks have varied in the complexity of the framework of analysis, the key indicators chosen, and the geographical scope of application. The main challenge carrying out these checks has been the adoption of the mechanism within national monitoring systems, due to the cost and capacities required for implementation. This and other issues are considered in a Guidance for Implementation of Simplified Sustainability Checks document, which has been developed and is available separately.

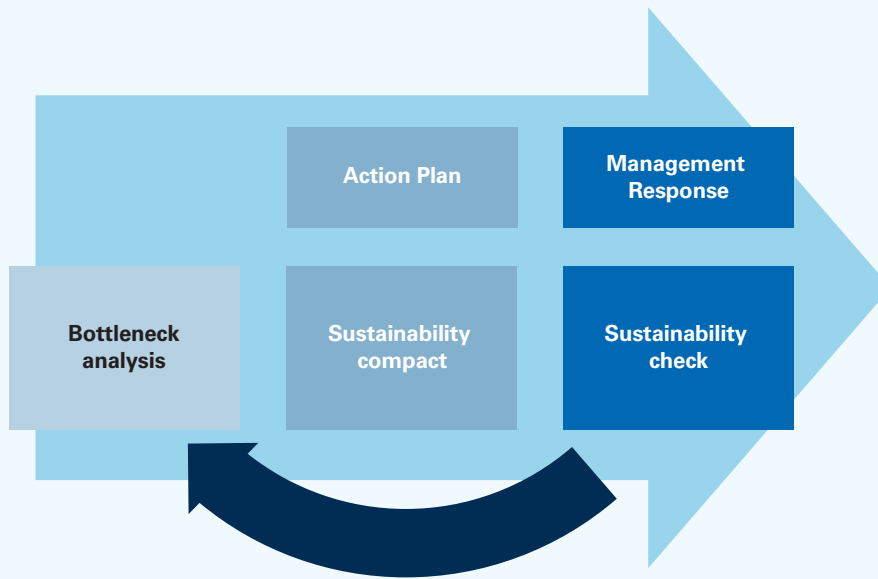
UNICEF'S SUSTAINABILITY FRAMEWORK APPLIED IN WEST AND CENTRAL AFRICA

UNICEF in WCAR has supported the implementation of a sustainability framework at the national level in Benin, Central African Republic (CAR), Côte d'Ivoire, Ghana, Guinea, Liberia, Mali, Mauritania, Niger and Sierra Leone.

The framework is designed to be operational. It is not limited to the assessment phase; it comprises the whole cycle of understanding, planning, acting, monitoring and adapting the priorities for increased sustainability.

UNICEF supported the WASH bottleneck analysis process (WASH-BAT), which led to the signing of a Sustainability Compact. The commitments outlined in the compact are then operationalized through Action Plans. Independent sustainability checks are conducted regularly (annually or every two years) to identify the progress made. Recommendations of sustainability checks are analyzed, prioritized and actions are agreed in a management response, signed jointly by UNICEF and the Government. The aim is to transfer the mechanism to the governments for continuous monitoring of sustainability.

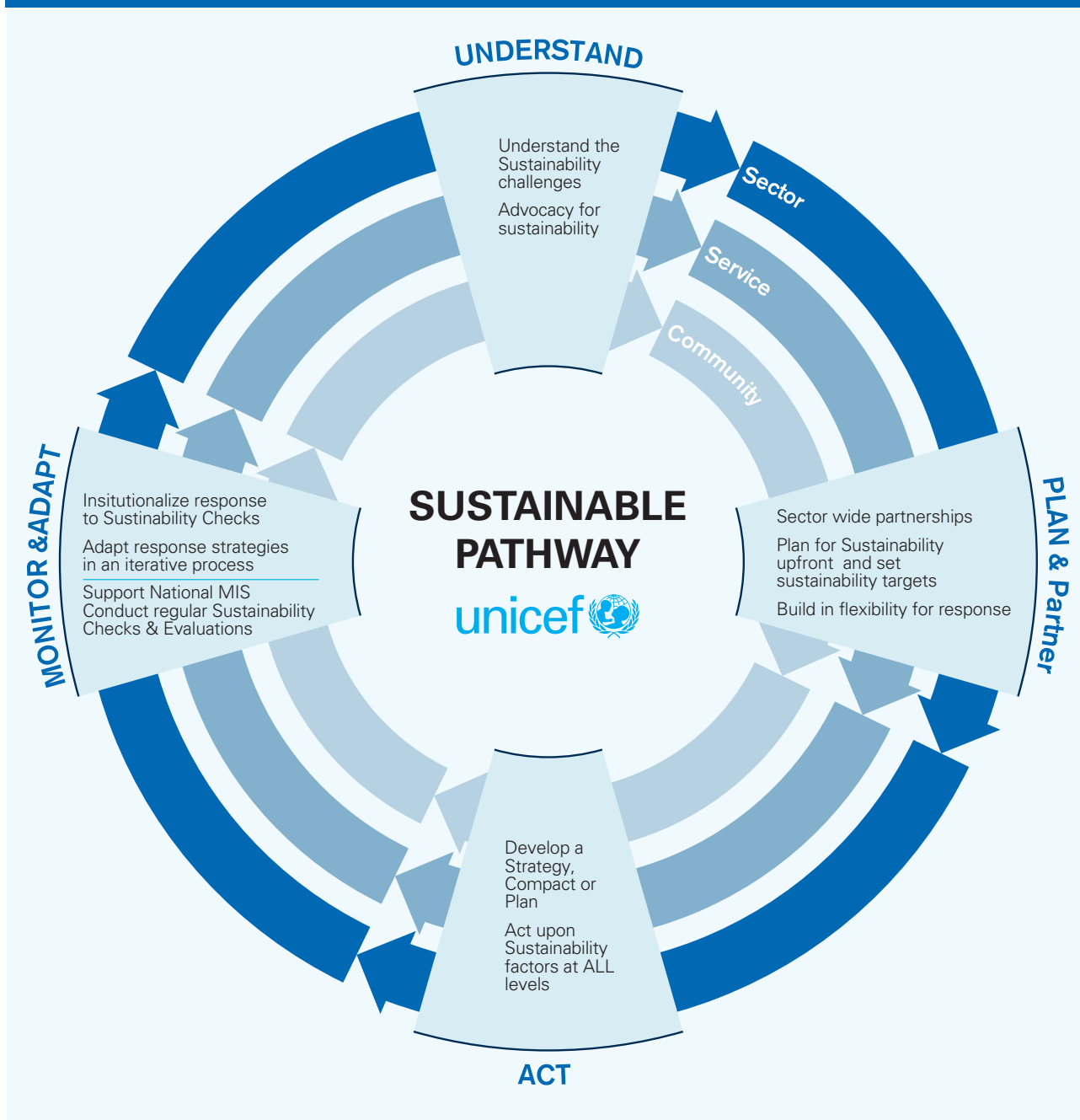
FIGURE 5: UNICEF's sustainability framework applied in West and Central Africa



Reference: Jiménez, A; Jawara, D. LeDeunff, H.; Naylor, KA; and Scharp, C. (2017). "Sustainability in Practice: Experiences from Rural Water and Sanitation Services in West Africa" *Sustainability* 2017, 9, 403; doi:10.3390/su9030403

> STEP 1: Understanding sustainability

FIGURE 6: Understanding sustainability steps



Defining sustainable WASH services

Defining what actions are essential to foster sustainability, among all underlying factors that come into play, and how actions should be sequenced, and the level of intervention is a complex process that should not be underestimated.

Having an acceptable and agreed definition of what ‘sustainability’ looks like is an essential part of the process of setting targets, indicators and levels for the expected outcome; when is a water and sanitation service considered to be sustainable?

To be practical and applicable, any sustainability definition firstly has to be clear on the **functions** the service should perform. A very simple definition of a sustainable WASH service could be:

*The indefinite provision of a water or sanitation service with certain agreed characteristics over time.*⁸

Beyond the ambition for the service to be durable over time and what any agreed performance characteristics should be, any definition of sustainability should also reflect the joint effort required to make services last, specifying all actors who have a role in the service delivery framework, including the government, the service provider, the end users, and the regulator (if the institution exists).

For a service to be truly sustainable, national systems need to perform certain core governance functions. However, beyond this core governance functions for WASH, there are many other additional aspects that need to be understood and taken into account to understand and begin to ensure sustainability. These range from political leadership, national decentralisation policies and public financial management to external shocks and stresses due to demographic change, increased demand, climate change and variability⁹ and other ecological disruptions.

Taking all these aspects into consideration, a definition for sustainability of WASH outcomes could be the following:

Sustainable WASH programmes that create the conditions for the indefinite provision of resilient water and sanitation services, with certain agreed characteristics over time, [without the need for continuous external support] and without undermining the environmental systems on which they depend.

This definition essentially means that if a water point or sanitation facility continues to work as intended, and a social norm is maintained, providing the planned amount of safe water and sanitation benefits indefinitely, then all aspects required for keeping services flowing are presumed to be in place and functioning. From a programming viewpoint, project planning and implementation have been conducted well.

Sustainability indicators and factors that enable sustainable services

A crucial aspect of understanding the sustainability of WASH programming in a *given context* is identifying and setting ambitions or targets specifically for sustainability, which can be regularly monitored through indicators. Several indicators are possible; lack of sustainability manifests itself not simply as a complete lack of functioning of the service, but also as a reduction in service standards (for example, a reduction in the continuity of the service, or a lack of conformity to quality standards, etc.).

Assessing and monitoring the progress or achievement of sustainability targets and

outcomes are critical in order for services to be maintained properly, and to identify necessary measures and actions to improve performance of the delivery of services. There have been several attempts to measure and assess sustainability by identifying long sets of indicators and underlying factors that affect functionality or use of the service over time. For underlying factors, a robust evidence base about how they interplay is often missing.

Different factors can affect different scales or levels of the intervention. For example, the absence of a coherent national WASH policy is critical and can be an obstacle identified at sector level, while at the local subnational level it is the actual knowledge about, capacity and practice of implementation of a policy that matters. The complexity of the sector can often make generalizations difficult: some authors identify as many as 25 factors affecting sustainability of rural water supply¹⁰.

For the purpose of this document, there has been an extensive consultation across UNICEF, and other sector stakeholders, to define a short set of core indicators and priority factors to measure and assess whether a service is functional and being used, as well as considering underlying factors that are likely to help determine longer-term sustainability. More on the definitions of 'core service level indicator' and 'factor' for sustainability are provided in Box 1.

BOX 1. Definition of core service indicators and underlying factors to be used to measure and assess sustainability of WASH

Core service level indicators are quantitative or qualitative metrics or measures that represent a state of actual performance of the facility, service, or behaviour. This guidance includes a set of core indicators of the sustainability of WASH services (Annex 1) aimed at providing a quick overview of the state of service quality at the time of survey. It is strongly suggested that core service level indicators should be adhered to, and part of every sustainability check.

Factors are elements contributing to a particular result or condition (sustainability, in this case). Sustainability factors are often classified as 'Technical', 'Financial', 'Institutional', 'Environmental' or 'Social'. Depending on context, not all of these factors need to be considered, while others are of such importance that they need to be the subject of specific in-depth studies (for example, financial sustainability). A list of factors (and the proposed indicators for each of them) is included in Annex 1. In a sustainability assessment factors can be selected and tailor-made based on the specific context and the scope of the sustainability check. The list provided is not exhaustive, and additional factors could be added as necessary.

It is by understanding and addressing underlying factors affecting sustainability at community, service and sector levels, together with nurturing the 'upstream' enabling environment will help ensure access to sustainable water and sanitation services.

Community

The community/local intervention level refers to the set of interactions with the final users of the services and their direct organizational structures (for example, village governments, local WASH committees). It is where services are actually delivered to end users, and where services need to be reliable and functioning on a daily basis. Interventions at this level include planning/pre-construction, and construction of facilities, which are all key to both short-term and long-term sustainability. Although the functionality of infrastructure generally decreases over time¹¹, the early phase of development of services is of particular importance, as experience shows there is usually a drop in the functionality and use of services in the immediate period after construction¹². Annex 1 presents a list of sustainability factors that can affect sustainability at this level. The most critical factors are:

- The **participation of users:** participation in defining the services required or desired by the community helps ensure services meet users' demand. Evidence gathered from different sources demonstrate that sustainability is higher in communities when projects follow a demand-responsive approach¹³. However, meaningful participation requires much more than initial request for demand and include users in all stages of project implementation including setting the performance standard of the service, the management and monitoring of the service.

- **High quality of implementation of the infrastructure:** this should include consideration of environmental impacts, water quality, high quality procurement process (when relevant), appropriate building materials and procedures. Significant non-functionality of water supply services is often attributable to initial poor infrastructure implementation, poor local construction materials, poor water quality, impacts from overuse due to larger than anticipated pressure on water systems, or from flooding.
- **Mechanisms for service provision being in place:** the service provider can be public, private, community-based or mixed – but it is always essential to have a clear service delivery model in place. Key aspects such as setting tariffs, enforcing mechanisms for tariff collection, meeting water quality standards, and transparency in the use of funds are behind immediate failure of many services, if not agreed and managed professionally.

These key factors need to be addressed from the design of the programme to understand what successful sustainability looks like for that programme, and should be monitored throughout its implementation. The process of establishing the service must be particularly carefully carried out, as errors at this stage cannot be easily corrected afterwards and can affect sustainability very quickly.

FIGURE 7: Understanding sustainability factors at community, service and sector level

Factors leading to sustainable services

Sustainability Factors (Example)



- Services that reflect needs & preferences of users
- Model for service delivery agreed
- Demand creation for services
- Clarity of roles & responsibilities
- Capacity and resources of all actors to deliver on their role
- Availability of products, materials and service
- Policy and strategy
- Clear institutional arrangements
- Budgeting and financing
- Planning and monitoring



FIGURE 8: A functioning rural water service and value chain is critical to sustain affordable services to communities but also to generate healthy businesses that can continue to provide services. Different levels of consolidation of a broken chain can increase sustainability of the service

Community Managed Maintenance and Repair Value Chain



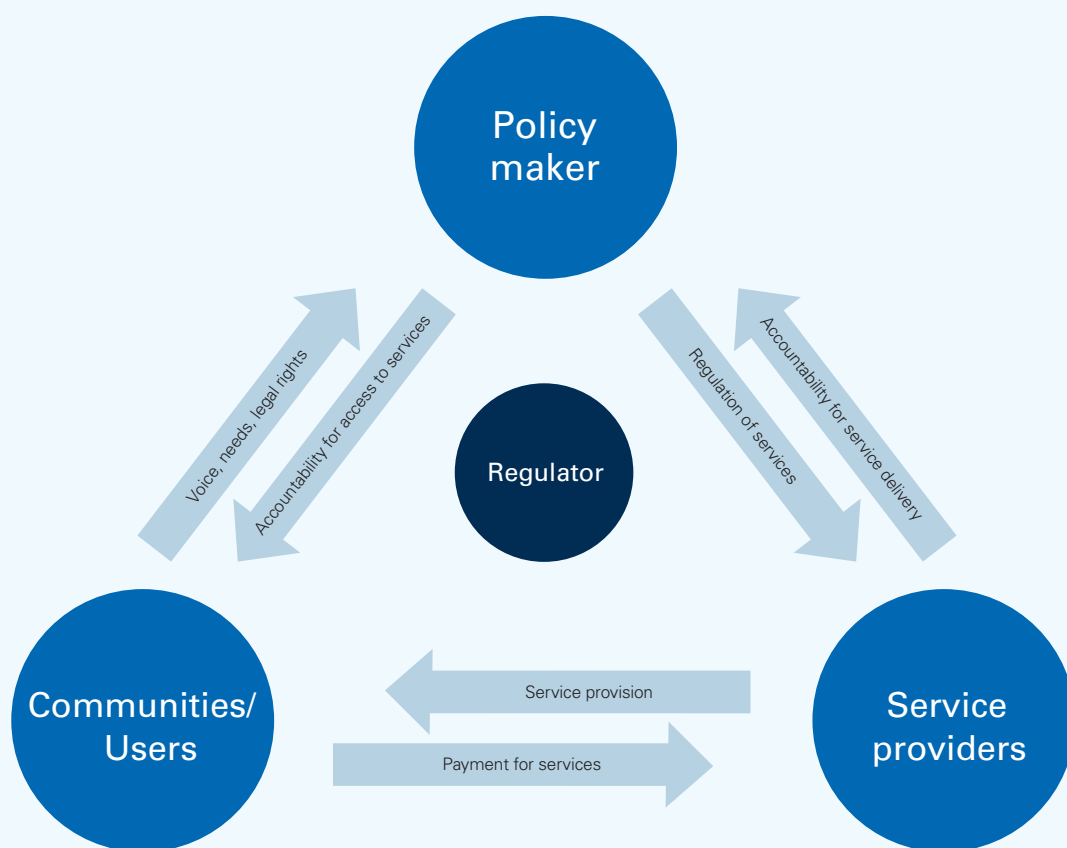
Service

Once a service is established, the job is not over: all actors must work together for the services to be continuously provided and managed. The ‘service’ level comprises the set of interactions and activities that take place once the service is designed and established, between the service provider, the service authority (typically local governments) and the users.

The set-up of institutional responsibilities in service provision can be summarized in the ‘triangle’ of service delivery. It includes the users, the service provider and the government

agencies and cuts across all the three levels of programming intervention (see Figure 9). The inter-relationships between the three levels of actors, through a combination of different mechanisms (such as contracts, the delegation of services, the payment of tariffs, local markets for financing or subsidies, the election of representatives, and the monitoring and sharing information) are critical to how services are provided and sustained. Accountability interventions, which aim to strengthen the quality of these relationships, can provide core incentives for actions that either promote – or hinder – sustainability.

FIGURE 9: Triangle of service delivery showing well-functioning relationships, and clear responsibilities and duties between stakeholders help to ensure the provision of services



Typical factors to take into account at service delivery level for the quality and sustainability of interventions include:

- **Mechanisms in place for continuous oversight and support to service delivery from local government:** development partners have become increasingly aware that local communities and service providers are often unable to guarantee an appropriate service level if left to their own devices. Community dynamics (for example access to finance, low capacity, social conflicts, and political issues), low capacity of the local service provider, and vulnerability to external shocks and

stresses (such as climatic events) often constrain community managed services. Hence an important factor for sustainability is that local/municipal governments (or the responsible government agency in place) need to have the capacity and monitoring tools to support service providers and communities, with post-construction technical support, agreed performance indicators, the validation of water quality, and safety and financial support (when problems exceed minor repairs). They will also need to develop mechanisms to ensure affordability of the service for the most vulnerable and marginalized community members. Monitoring should as much as

possible engage community members in collecting and reporting on functionality data – and information should be transparent to all community members.

- **Accountability in service delivery:** lack of clarity in service delivery standards, roles and responsibilities of parties, limited information on availability and the use of funds, or lack of reactivity to challenges detected in service delivery erode the trust of users, who can choose to find alternative ways of service delivery and stop payments, ultimately causing the services to collapse. Experience shows that services are more sustainable if users have been involved from the start, if there is transparency and spaces where both service providers and governments can be accountable to users, and if there is regulation from the corresponding authorities that protects both consumers and service providers.
- **Availability of local finance, markets for products and professional services:** infrastructure will need to be quality assured, built and repaired by skilled technicians with access to spare parts, and users need to have accessible and affordable services to be able to progressively move up the service ladder. This includes understanding the viability of local markets for spare parts. The lack of availability of financing mechanisms for short and medium term is one of the main indicators of system stress in water¹⁴.
- **Climate change impacts, water safety and water conservation:** the sustainability of safe and secure drinking water services is dependent on the management and allocation of water resources in the watershed. Conservation also includes attention to the quality of water delivered, as it is a critical issue for continuous use of services by a given population. Similarly, monitoring of fluctuations of ground water tables are essential to ensure the durability of services. An important and critical issue that will be covered under forthcoming documents include regulation and water scarcity.

Sector

Interventions at the national sector level aim to influence core governance functions¹⁵. These functions are the main tasks that a line water ministry should undertake in cooperation with other stakeholders to develop an effective sector. The institutional environment outside of the water sector (decentralization, social norms, etc.) and the country context at large (geography, the economy, etc.) also influence the performance of the sector and the sustainability of services, as summarized in the Figure 10 below¹⁶.

Sustainability factors at the sector level can be described as good performance and quality in the implementation of core governance functions. The key factors in each country at any point in time will need to be assessed individually through specific assessment tools (for example WASH-BAT). However, there are some general factors that have often proven to be critical. These include:

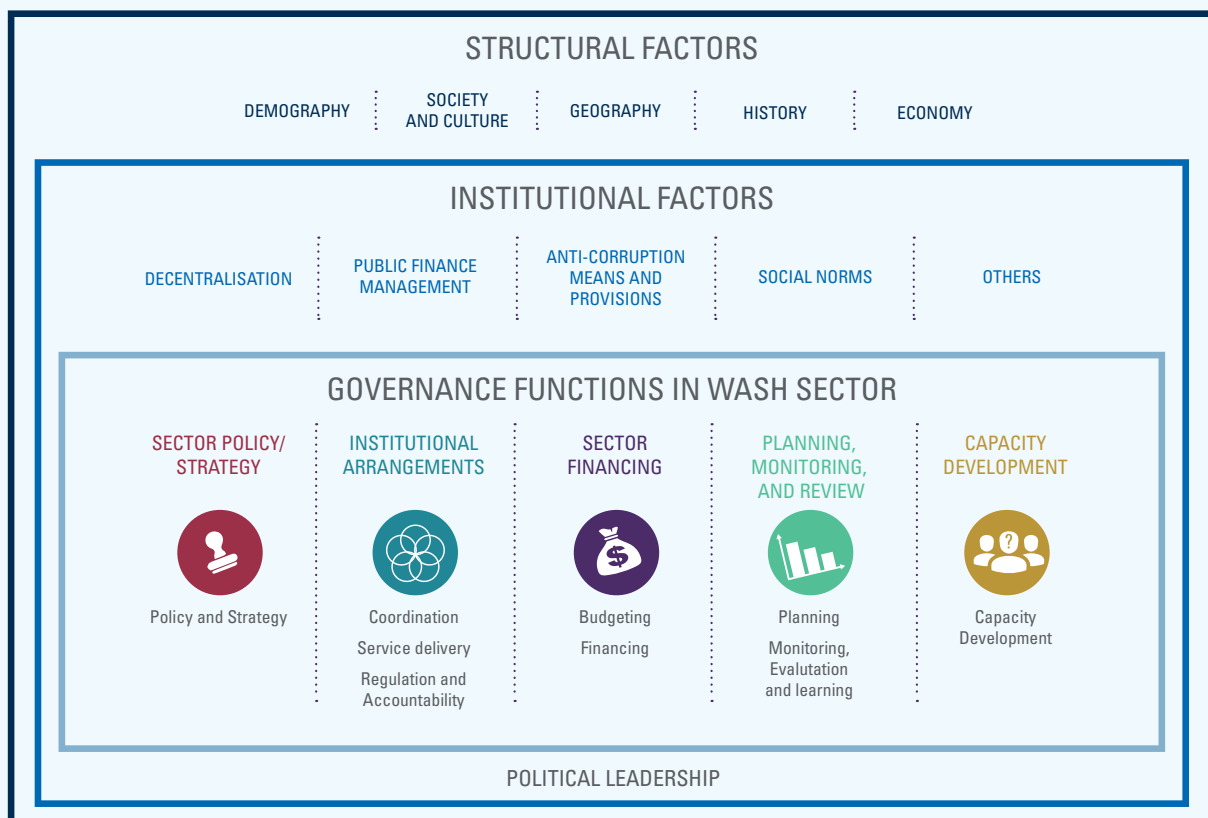
- **Clear roles and responsibilities among stakeholders:** national policies and strategies that assign clear roles and responsibilities of stakeholders, accompanied by guidelines and tools for the dissemination and implementation of the policy and strategy are fundamental to help guide the sector and focus on common goals.
- **Coordination, institutional arrangements and regulation:** effective sector coordination remains an issue in many places, both within the government and with other partners, to make policies and plans operational. Institutional arrangements for service delivery need to be in place. Good accountability mechanisms, based on timely access to information and adequate participatory spaces mean that roles and responsibilities are more often fulfilled. A lack of regulatory functions for key elements of service delivery (tariffs, efficiency of service providers, levels of service, coverage, environmental and health issues) mean that there is no pressure to provide adequate service levels – with predictable results for the sustainability of those services.

- **Sufficient and well-targeted funds for the sector:** if clear policies and national plans are not backed up by sufficient funds for implementation, and/or these are not adequately channeled, services will inevitably suffer. Often, the budgeting process is unclear, and highly unpredictable, making the implementation of plans an obvious challenge. Without a reasonable and realistic combination of income from tariffs, taxes and transfers in the sector budget, sustainability is extremely difficult to achieve. Developing innovative funding mechanisms will be needed in many settings. The targeting of funds needs to be based on an adequate allocation of priorities, backed with a robust monitoring system and asset management strategies.
- **Monitoring and learning:** lack of continuous monitoring of the status and performance

of services prevents the sector from understanding where the weaknesses lie. Regular review of plans and achievements, combined with studies on the quality of service and sustainability provides the feedback necessary to be able to adapt policies and guidelines to changing realities on the ground.

- **Capacity development:** capacities and resources allocated to the different actors need to match the allocated responsibilities. Far too often, responsibilities are decentralized but funds and capacities for implementation do not follow. Professionalization of service delivery is also essential for sustainability. A concerted and ongoing effort for capacity development needs to be put in place at all levels.

FIGURE 10: The enabling environment for sustainable WASH services



Tools¹⁷ for assessment

Sustainability assessment tools (and baseline surveys) play a significant role in understanding where progress has been made and where challenges lie, to inform necessary actions for sustainable service delivery. The tools help to analyse the landscape and inform key decision making and help keep sustainability commitments aligned and focused on the most important priorities. Generally, sustainability

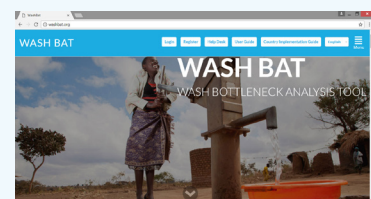
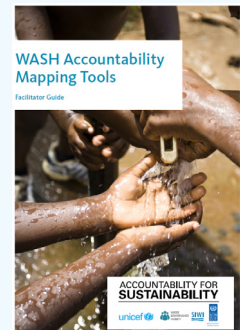
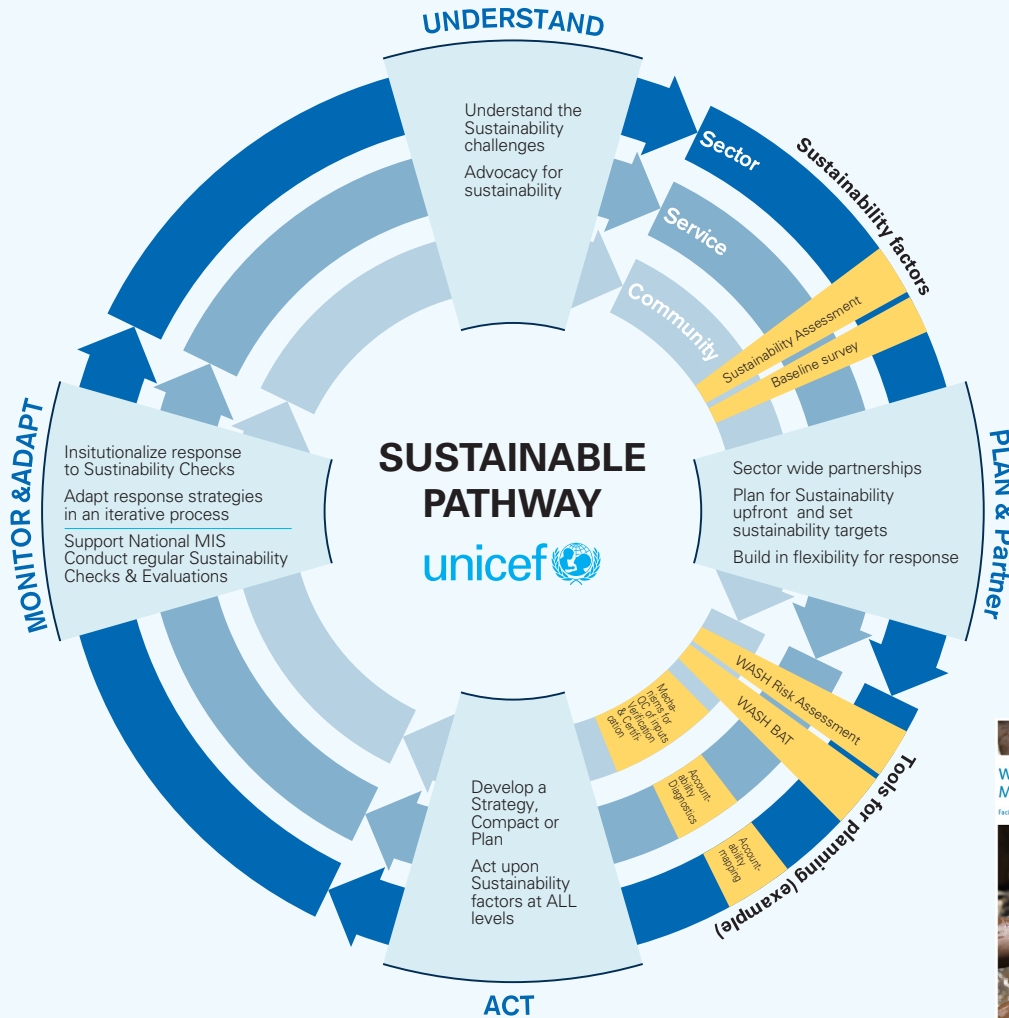
assessment tools provide WASH professionals and decision makers with an in-depth sector assessment at national or subnational level, based on which decisions and priorities can be made. A sustainability assessment can help to provide guidance for the development of sustainability strategies or action plans. More comprehensive Sustainability Assessments have been carried out in for example, Pakistan and Myanmar. A list of tools and the related definition is presented in the table 1.

TABLE 1: UNDERSTANDING sustainability; assessment tools examples

Tool	Level of implementation	Description of tool	When to use	How to use for sustainability	Link to tool/example
Sustainability assessments	Sector Service Community	A comprehensive review and assessment tool providing a comprehensive in-depth review of the current state of water and sanitation sustainability the country	Sustainability Assessments contribute to the overview and discussion at the starting point of an intervention. It can provide a baseline of the status of sustainability for improvements in the sector. This is a full-scale application of the Sustainability Check tool (explained later in the document)	The scope of the assessment covers all three levels of sustainability programming, from community to the sector level and the broader enabling environment for sustainable services that extends beyond the sector	A good example, is the work done by UNICEF Pakistan to support the government of Pakistan in conducting such an assessment in 2016
Baseline survey	Sector Service Community	Gather information tool providing a comprehensive review on existing sustainable practices	Baseline surveys contribute to the overview and discussion at the starting point of an intervention. They can provide a baseline of the status of sustainability for improvements in the sector	Based on the use of certain indicators that can be measured over time. The set of core indicators suggested in [Annex x – add here when finalised] can help to harmonize these baselines	
Risk informed programming	Sector Community	An analytical tool assessing hazard, vulnerability and risk linked to actual and potential impacts of climate change on water resources	To gather evidence at the country and community level to identify WASH hazards, vulnerabilities, capacities and exposure to perform a risk assessment and integrate adaptive action into existing programmes	A process of hazard identification is conducted along the entire drinking-water supply chain to identify actual and potential risks and their causes. Activities are based on community knowledge	

> STEP 2: Plan and partner for sustainability

FIGURE 11: The 'plan & partner' step



This part of the document describes some key tools and approaches for planning WASH programming which are already in use by UNICEF, how they are interlinked, and how they support sustainability considerations at different levels in the service chain. At each level – sector, service, and community – there are a number of tools that can be used for planning for sustainability. They are not necessarily designed for sustainability but can be employed to help us plan different aspects that relate to overall sustainability. The tools are designed to be robust in how they assess the situation, allowing for discussion, the establishment of priorities, and clearly setting

out roles of each partner. In this step, as the name suggests, ‘partnering’ is crucial. Sector-wide partnerships are essential for increased sustainability, as the knowledge and involvement of very different actors (from national to local government, service providers, regulators, civil society, private sector companies, and donors) contributes to a sense of shared ownership and responsibility.

Links to the tools are provided in the table below. The list of tools is not exhaustive; tools are constantly being updated and new approaches are being developed, often based on feedback

TABLE 2: Plan & Partner for sustainability; planning tools examples

Tool	Level of implementation	Description of tool	When to use	How to use for sustainability	Link to tool/example
WASH bottleneck analysis tool (WASH-BAT)	Sector Service Community	Assesses the enabling environment for sustainable WASH by identifying and tracking the removal of barriers to sustainable and efficient services at national, regional, service provider & community levels	To provide a rational, evidence-based approach for formulating an investment strategy that meets multiple sector aims of efficiency, equity and sustainability. It can be used at different stages of the programme cycle to analyse situations, plan or monitor progress	Enabling factors, with a focus on those relating to sustainability, are scored and activities for the removal of each bottleneck are identified, sequenced and prioritised. The tool is applied in a collaborative effort (e.g. workshop), involving a range of sector stakeholders and external partners	http://washbat.org/
Accountability Mapping	Sector	A participatory tool to assess the status and gaps of accountability relations amongst actors of the service delivery framework	To review the service delivery framework to produce visual graphics of the water sector as a comprehensive system of accountability relations where all interconnected functions need to work together in an accountable way for the services to be provided successfully	It can be used alone or complimentary to the WASH BAT exercise to evaluate current and prospective sustainability of practices of on-going interventions and services; in order to reach a common level of understanding on the challenges and options for solutions	http://watergovernance.org/wp-content/uploads/2016/12/WASH-Accountability-Mapping-Tools-Brochure.pdf http://watergovernance.org/wp-content/uploads/2016/12/WASH-AccountabilityMapping-Tools.pdf
Service Delivery Accountability Diagnosis	Service	It is a change-oriented tool that assesses current and future sustainability of existing service delivery systems to design options for action. It is a full-scale application of the Accountability Mapping tool, implemented in a greater detail and in a specific context	The objectives of this exercise are operational: it is designed to understand how accountability relations are functioning today and why, and also to formulate and agree on a series of options for change. Depending on the country administrative model and levels, the Accountability Diagnosis at the service delivery level can be at municipal, regional or national level	The intended beneficiaries are stakeholders of the WASH service delivery framework. Conducting this diagnosis takes one and a half days. Some preparation is required: research and consultations to identify the actors and pre-diagnose accountability challenges. It is important that participants are in a position to make decisions and speak for the institution or group of interest they represent	

from implementation. Ideally, indicators and factors in the different tools should be gradually but increasingly aligned with one another, to create an increasingly harmonized chain of results that can feed into national – and eventually global – monitoring.

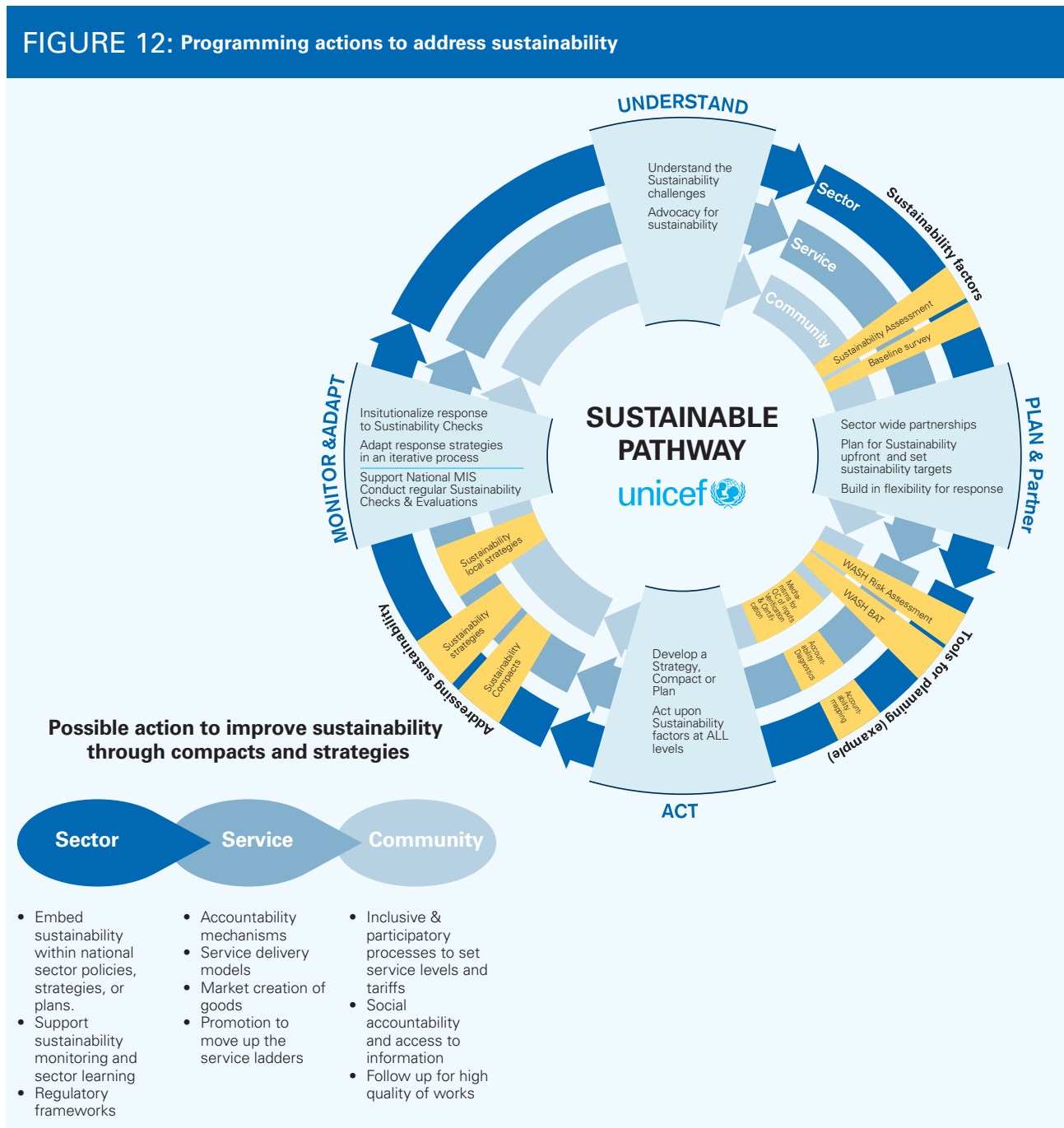
Tools for planning

Some tools can serve multiple purposes; they are not all useful simply for one stage of the

sustainability pathway. For example, tools which are such as the WASH-BAT, which explores bottlenecks and barriers to sustainability are ostensibly a planning tool but could be equally useful as a sustainability assessment tool. To play these roles, tools, approaches, models and instruments need to be appropriate to the local context and the targeted level of programming. A list of tools and the related definition is presented in the table 2.

> STEP 3: Programming for sustainability

FIGURE 12: Programming actions to address sustainability



This section explains the main elements for consideration when programming for sustainability in WASH. Firstly, some general principles to be taken into account are discussed. This is followed by a set of guiding key topics that contribute to sustainability, which can aid to develop appropriate actions to address sustainability.

Basic principles for sustainability programming

Sustainability should be clearly prioritized from programming outset. A clear definition of the sustainability and targets to be achieved is a precondition to ensure that agreements can be taken and later followed up.

Sustainable services need working together in partnerships

One of the main barriers to sustainability of interventions is the high fragmentation of the water sector. The sustainable provision of water and sanitation services depends on an effective inter-organisational coordination between institutions and organizations, including external support agencies, at different levels. Programming for sustainability in WASH needs to build on a systems-based approach. This entails that sector wide partnerships for sustainability have to be established, and that spaces for coordination and interaction among stakeholders should be established and maintained.

Sustainability change is an iterative process

Sustainability support means creating the appropriate conditions for service continuity at all levels, developing processes, create demand and social norms, strengthening systems by building capacities and supporting systems. Programmes relying on building relationships and capacities do not deliver immediate outcomes. As a result, monitoring changes in sustainability trends will not yield measurable results from one year to the other, particularly if monitoring or

assessment is conducted at the national level. However, the results of monitoring exercises are critical to understand the situation on the ground: hence, there is a need to embed the analysis of sustainability failures in programme design and during the course of programme implementation. Programme strategies need to have the flexibility to adjust in response to lessons learned from implementation.

Sustainability achievements are incremental and a long-term process

The process of building sustainability extends beyond typical programme cycles. As an example, the Sustainability Compacts aim to ensure the sustainability of services for a period of 10 years from the beginning of the programme. Appropriate arrangements need to be in place to continuously monitor the sustainability of the results¹⁸ and enable support to sustainability failures that arise also after programme ends.

Sustainable services are resilient services

For a WASH intervention to continue to deliver services indefinitely, it has to be designed in such a way that it is resilient to different external risks such as social, environmental, economic and political changes. The delivery of WASH results can be affected by factors such as climate change and variability, natural hazards, conflicts, urbanisation, demographic trends, agriculture growth and industrialisation as well as rising service level expectations and variable consumption patterns. Decision making mechanisms and institutional arrangements for exceptional situations need to be designed. In particular, the increasing impacts of climate change, such as floods and droughts on services must be at the core of WASH programme design, planning resource allocation, implementation and monitoring¹⁹. A risk informed programming approach is most appropriate in those cases.

Sustainable services leave no one behind

Promoting gender-, poverty- and demand-responsiveness not only improves project design and implementation but also enhances the process of local ownership of service delivery systems, which is critical for achieving sustainability. Achieving sustainable progress and results with regard to eliminating inequalities in WASH service delivery demands a human rights-based approach²⁰. To address the situation of the most marginalised, including deprived children, and the structural causes of their exclusion and poverty, they have to be provided with a voice and space to participate in decisions affecting them. At the same time, if inequities are to be overcome, people in position of authority must be accountable to the most deprived.

Tools for programming

A list of tools and the related definition is presented in the table 3

Sustainability compact: It is a commitments agreement between partners to assure the sustainability of investments that will be made in the framework of a programme for a period.

Sustainability strategy: Strategy that take into consideration all aspects of sustainability technical, institutional, economic, social, environmental; It could national strategies, but also local strategies developed by local government and partners;

Key guiding topics for sustainability programming: Given the complexity of Sustainability and its dependence on the context of each country, it is not possible to provide a simple recipe to address it. Hence, the following programming guidance has been formulated in the form of broad guiding key topics and potential programming responses to each of them.

KEY GUIDING ACTIONS FOR SUSTAINABILITY PROGRAMMING

Community

Responsiveness to user needs and expectations

Programming actions:

- Conduct preliminary assessments of both technical, social and cultural aspects related to water and sanitation.
- Support the implementation of inclusive participatory processes, with particular attention to be given to vulnerable populations, indigenous populations, people with disabilities and ethnic minorities in the whole project cycle, from design to implementation.
- Support the creation of affordability mechanisms for access to services, to ensure that vulnerable people are not excluded from accessing the service.

Infrastructure design and construction

Programming actions:

- Design of infrastructure should consider needs of all users – men and women, children, the elderly, and disabled people.
- Appropriate technologies should be used to consider operation and maintenance constraints.
- Ensure high quality and transparent procurement processes.
- Ensure high quality of construction and follow-up of the works, through third party external quality control and community involvement.

Service provision/management

Programming actions:

- Support a process to select an adequate service provider (public, private, community based), including contractual and legal issues around the model of service provision.
- Support the definition of clear service standards regarding quality of service and performance and responsibilities, as well as setting tariffs, and specific mechanisms for review of service standards.
- Support adequate mechanisms for transparent use of funds and reporting mechanisms to users and authorities

Service

Mechanisms at local level for post construction support and continued service delivery

Programming responses:

- Support the establishment of technical departments/units and technical support mechanisms within the local government, which have sufficient financial, human and technical capacities to support, and can provide monitor service delivery at the community level.
- Support capacity of local government or other relevant organizations to monitor and support the reinforcement of changed behaviours in relation to WASH.
- Support the institutionalization of these units through annual budget allocation at local/ municipal government level.
- Support ongoing local technical and human capacity development, specifically to help ensure the quality of post construction support and service delivery.

Accountability mechanisms between service providers and users, and service providers and local authorities

Programming responses:

- Operationalize the roles: support the agreement of service standards and reporting mechanisms between government and service providers, and between both of these these and the end users.
- Ensure that information about services is regularly collected, and publicly available, and that there are opportunities for discussion about it for stakeholders. Information collection and the knowledge sharing mechanism should ensure that discussion is enabled, that lessons can be learned from such discussions, and that service delivery can be adapted accordingly.
- Ensure that mechanisms for correction (and sanction) are in place to act when service providers are not responding. Similarly, consider and promote incentive mechanisms for good performers.

Access to markets and availability of goods and services for operation and maintenance and upgrade solutions

Programming responses:

- Support the establishment and professionalization of service providers and ease access to markets for goods (such spare parts etc.)
- Support affordability mechanisms (access to micro-credit, cash transfers, development loans and commercialization of low cost solutions, etc.)

Actions to ensure good quality and sufficient quantity of water over time in the light of climate change

Programming responses:

- Establishment of information systems, including data about the quantity and quality of the water
- Develop risk-informed programming which includes the consideration of climate risks and shocks.
- Develop water safety plans and support the implementation of community-level measures for protection of water catchment areas.

Sector

Regular monitoring of sustainability and discussion at national level

Recognition of sustainability as a priority in national policies

Programming responses:

- Raise the profile of sustainability in the national WASH agenda, by presenting preliminary studies and analysis on the national WASH sustainability picture, for example at the sector working group meetings and/or other advocacy mechanisms.
- Embed sustainability as an objective within national sector policies, strategies and/or action plans.

Programming responses:

- Build monitoring mechanisms that ensure sustainability is specifically and regularly monitored at the national level, through nationally owned sustainability checks and other studies.
- Promote the inclusion of a specific sustainability chapter as part of the national Joint Water Sector Review process, and as part of the key national performance indicators.

TABLE 3: ACT for sustainability; programming tools examples

Tool	Level of implementation	Description of tool	When to use	How to Use for Sustainability	Link to tool/example
Sustainability compacts	Sector Service	It is a commitments agreement between partners to assure the sustainability of investments that will be made in the framework of a programme for a period	Agreement with stakeholders to address sustainability at different level	Compacts provide an overarching agreement between key actors about the aspects to address for improved sustainability. It can be complemented with more specific Action Plans	See for example, the cases of West Africa countries in period 2012-2016
Sustainability strategies	Sector Service	Strategy that take into consideration all aspects of sustainability technical, institutional, economic, social, environmental; It could national strategies, but also local strategies developed by local government and partners	Sustainability strategies should be developed after the assessment and planning phase	Sustainability strategies should be the product of wide consultation with stakeholders, as the successful implementation of the strategy will require commitment from a wide variety of stakeholders	A good example is the strategy developed in Madagascar in
Key guiding questions	Sector Service Community	The programming guidance has been formulated in the form of broad guiding questions and potential programming responses to each of them	To help programming to address sustainability	This set of questions can be used in a participatory exercise with stakeholders, alone or in combination with other tools, to provide suggestions for Programming Actions that can improve sustainability	(provided in this same document)
Sustainability local strategies	Service Community	Strategy that take into consideration all aspects of sustainability technical, institutional, economic, social, environmental; It could national strategies, but also local strategies developed by local government and partners	Sustainability strategies should be developed after the assessment and planning phase	Sustainability strategies should be the product of wide consultation with stakeholders, as the successful implementation of the strategy will require commitment from a wide variety of stakeholders	

Agreement on actions to remove sector-wide barriers to sustainability

Programming responses:

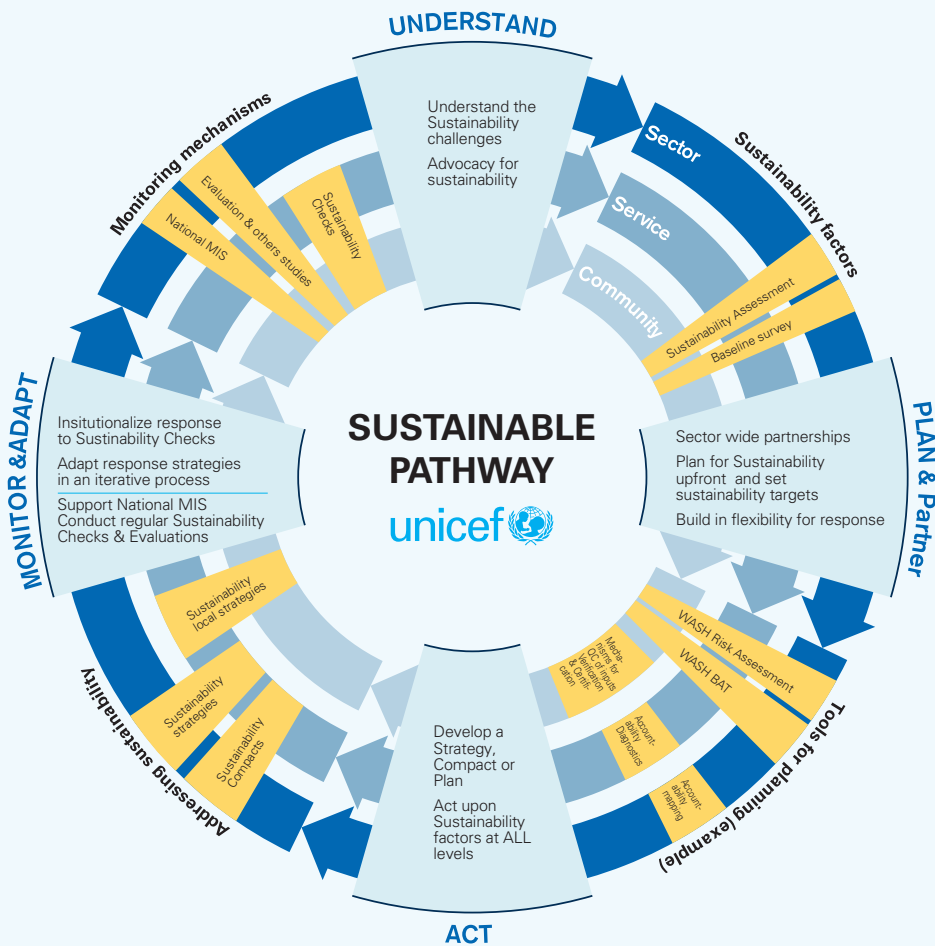
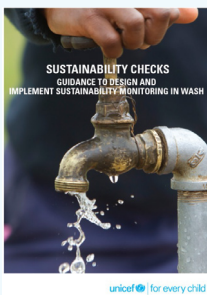
- Engage national stakeholders in conducting a sector bottleneck analysis (WASH-BAT or similar), and forge agreement on sector

priority actions.

- Develop a joint action plan/strategy/‘Compact for Sustainability’, based on the WASH-BAT analysis.
- Develop the mechanisms for monitoring and subsequent update of any such sustainability joint action plan.

> STEP 4: Monitoring and adapting

FIGURE 13: Monitoring and adapting step



The sustainability of WASH services is broadly understood to mean the continued provision of services over time, with 'certain agreed characteristics'²¹. In practice, the monitoring of sustainability typically refers to both measuring factors which could affect the sustainability of WASH services positively or negatively, as well as measuring the performance of support from authorities to service providers, service providers and facility characteristics.

Real-time monitoring potentially plays an important role in such monitoring for sustainability. This is because it gives a current or very recent picture of key service delivery parameters that affect the quality and efficiency of the service – and therefore fosters better decision-making mechanisms; those which are more responsive to prevention and correction of deviations that could otherwise quickly compromise the service.

Monitoring sustainability plays a key role in planning and upholding accountability mechanisms. Robust and validated sustainability indicator frameworks are a core component of monitoring. However, effective collection of information and use of that data requires capacity and coordination of all institutions involved. Such information must be gathered, analysed, and the presented in different ways for different audiences, to ensure it can be used in the most effective way for decision-making.

This is not as simple as it sounds. National governments and ministries responsible for WASH typically have multiple commitments, standards, and results frameworks upon which they conduct monitoring and reporting activities. In addition, service providers, support agencies, and implementing actors typically have their own monitoring frameworks. Working towards greater synergies between all of these competing elements is a challenge.

The sustainability effort must be owned at all levels – national, sub-national, and local levels. To foster this sense of ownership, sustainability monitoring should ideally become part of the national sector monitoring. That said, it should be noted that national sector information

systems usually require time to become robust, and that costs can often be prohibitive for some countries, at least in the short-term²².

Response strategies to monitoring sustainability should be centred on how they can inform adaptations to programming and services, so that sector systems are strengthened as an ongoing, iterative process.

If sustainability monitoring is to be conducted regularly, their financing is likely to mainly be drawn from national resources, and their scope and ambition will need to reflect national capacities.

Results of regular sustainability monitoring and assessment should become a part of the annual water sector report, to be discussed in the Joint Water Sector Review meetings. This will help cultivate corrective actions for broader issues that require joint efforts from all stakeholders. This process will help with aligning sustainability objectives with national priorities.

Tools for monitoring

Sustainability monitoring tools provide the means to track the sustainability of results over time. Regular programme monitoring of WASH outputs means that the quality of programming and services delivery can be assessed as an ongoing element of WASH programming; it allows for informed decisions about whether – and how – to adjust the programme to ensure it continues to meet its delivery targets. Some monitoring tools examples are set out in the table 4.

TABLE 4: Monitoring tools example

Tool	Level of implementation	Description of Tool	When to Use	How to Use for Sustainability	Link to tool/ example
National Monitoring and Information Systems	Sector Service Community	Management Information Systems (MIS) collect, monitor, and evaluate all aspects of activities undertaken in the WASH sector	To measure sector performance and inform policy decision to progress towards national WASH targets and objectives regarding sustainability. Can be designed to provide a live instrument to monitor the sustainability of services by adding specific indicators and using mobile to web monitoring	Project tracking, follow-up and evaluation functions through systematic data collection, collation, reporting and analysis on indicators & factors relating to sustainability. Serves an accountability purpose by enabling line Ministries to provide performance information to relevant stakeholders and the general public	
Evaluation and other studies	Sector Service Community	External evaluation of project and lessons learned exercise / impact studies	To measure project / programme performance and inform policy decision to progress towards programme objective	Classic evaluation used with a high focus on sustainability. Impact studies	
L2 Programme Monitoring (MoRES)	Service	This involves tracking the implementation of plans to resolve bottlenecks to ensure better accountability for agreed actions and inputs. It includes tracking financial allocation & expenditure & other inputs relating to sustainability	To determine if the organisation is on course to deliver its specific commitments	Information will be derived from existing management performance information and annual reporting systems to ensure WASH programmes are developed to address identified and prioritised bottlenecks and deprivations for more sustainable services	
Sustainability Checks	Service Community	To be conducted by an independent third party (e.g. auditors, consultant) to assess the sustainability of WASH services, safety, behaviours and practices at the national, subnational or local level. It provides an assessment of the sustainability of intermediary outcomes of programmes	To be conducted regularly, to contribute to the national monitoring system. It provides an assessment of the sustainability of services in the area of study at the time of the study, and assesses conditions. When implemented as part of a sustainability framework, it feeds back to the analysis and helps focus on key agreed upon aspects for sustainability	It needs to be country-led from the on-set. Information collected to help benchmark improvements, highlight issues, and make recommendations on how to improve sustainability outcomes. The number of indicators has to be kept to a minimum for a feasible, cost-effective and reliable methodology that can be conducted annually or every two years	
Mobile to Web Real Time Monitoring	Community	Mobile to web data collection or Real time monitoring relating to the quality and continuity of service provision and report any problems	To be used regularly either by service providers, regulators, communities or UNICEF practitioners to follow up on continuity and quality of service or behaviours and/ or programme/project progress	This information would enhance the capacity to respond to service breakage or ODF slippage and also to enhance accountability of system and increase transparency and participation	RapidPro: https://community.rapidpro.io/ AkvoFlow
Monitoring of quality control of inputs and procedures (Professional Water Well Drilling)	Community	The tool gives practical guidance on professionalization of ground water development for drinking water purposes addressing six broad areas including capacity, design, implementation, monitoring and use of data and institutional frameworks	The tool should be applied during the whole planning and implementation of a new water point as a precondition for a high quality investment in developing the water point	Depending on national context all six steps should be addressed during the groundwater development and construction of the water point to ensure the quality of the investment before handing over to a service provider	

3. CONCLUSION

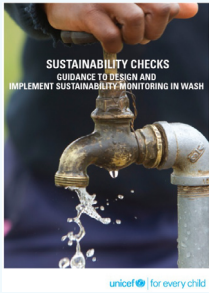
System wide thinking has been around for a long time in the health, education and ecological sectors. In the WASH sector, systems strengthening to **ensure sustainability** is still relatively new.

The systems approach by its nature leads to a shift in focus, from WASH projects simply building infrastructure to considering how authorities can provide ongoing support – through understanding what sustainability looks like in a given context, through the planning and programming process, to monitoring and learning – and, crucially, how to adapt for the future. Importantly, the approach also focuses on strengthening and

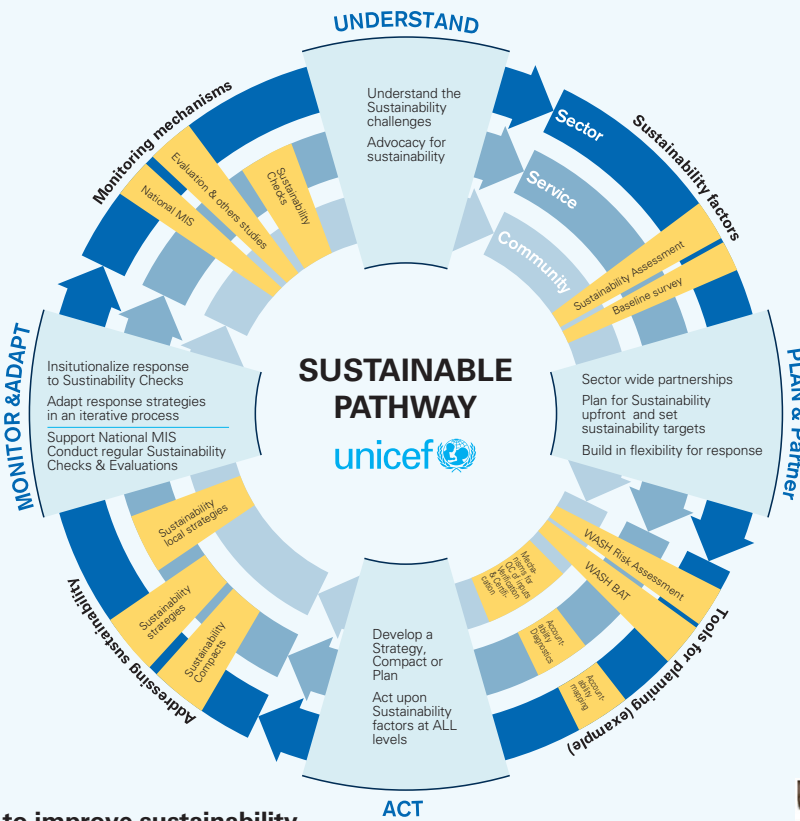
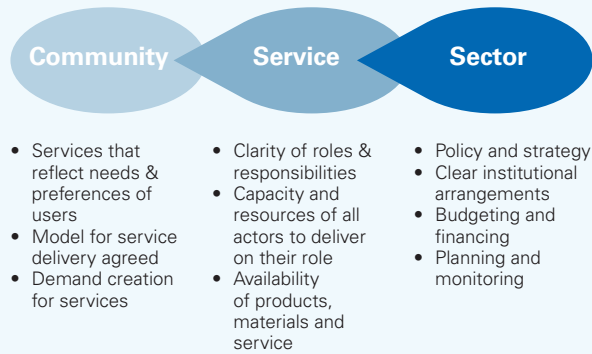
using existing national systems where possible instead of creating parallel ones; the focus is on improving accountability for service delivery at all levels, as well as improving finance strategies so they endure beyond supplying infrastructure to maintaining adequate services for the long term.

While the SDGs are extremely ambitious, they are achievable. However, it is a persistent and committed focus on sustainability in *all* WASH programming that will deliver. Sustainability is the key that will unlock success – if it is truly put at the centre of global WASH programming between now and 2030.

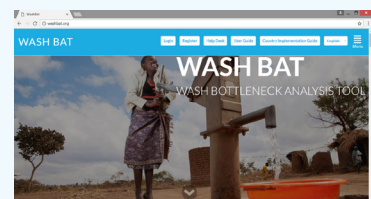
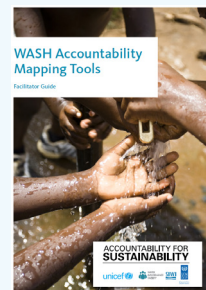
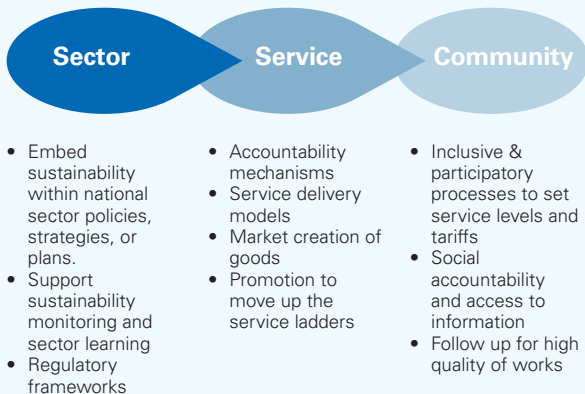
FIGURE 14: Full pathway to sustainability



Sustainability Factors (Example)



Possible action to improve sustainability through compacts and strategies



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Katz, Travis; Sara, Jennifer J. (2005) Making rural water supply sustainable: report on the impact of project rules. Water and sanitation program. Washington, DC: World Bank. <http://documents.worldbank.org/curated/en/495261468135922056/Making-rural-water-supply-sustainable-report-on-the-impact-of-project-rules>
- 14 EU/UNICEF (2010) Mid-term evaluation report of EU/UNICEF supported WASH programme" Accelerating progress towards the MDGs on water and sanitation in Ethiopia"
http://www.unicef.org/evaluation/files/Mid-term_Evaluation_of_UNICEF-EU_Supported_WASH_Programme_9April2010_Ethiopia_2010-001.pdf
- 15 Ryan, P. (2014). Madagascar WASH Sector Sustainability Check. UNICEF
- 16 There is no commonly agreed set of core functions, and they can vary depending on the level of development of the sector and the country context. For different lists of governance functions, see for example:
IRC (2011) Good Governance in the WASH sector, Module Three, presentation, slide 30,
<http://www.slideshare.net/ircuser/module-3-wash-governance-presentation>
or
Jacobson, M. Meyer, F. Oia, Reddy, I., Tropp, H. (2013) User's Guide on Assessing Water Governance, United Nations Development Programme Water Governance Facility at SIWI, Water Integrity Network, Box 2.2.
<http://www.undp.org/content/dam/undp/library/Democratic%20Governance/OGC/Assessing-Water-Governance-Users-Guide.pdf>,
- 17 Strengthening Enabling Environment for water, sanitation and Hygiene (WASH) Unicef 2016. <https://washenablingenvironment.wordpress.com/>
- 18 Some tools can be use in several steps not only the step that is mentioned in the document like for example WASH BAT can be use at different moment in the pathway:
- 19 See for example: WaterAid (2010) Guidance on post-intervention monitoring and follow-up of water and sanitation interventions
http://sustainablewash.org/sites/sustainablewash.org/files/page/guidance_on_post-intervention_monitoring_final_to_peu_15_nov_2010.pdf
- 20 UNICEF (2016) Strengthening the enabling environment for water, sanitation and hygiene – Guidance Note, Available at: https://agora.unicef.org/pluginfile.php/69724/course/summary/WASH%20Guidance%20Note%20Draft%202010_3_%20HR.pdf
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http://www.unicef.org/policyanalysis/rights/index_62012.html
- 22 Alejandro Jiménez, Dawda Jawara, al. UNICEF (2017) – Sustainability in Practice: Experiences from Rural Water and Sanitation Services in West Africa. *Sustainability* 2017, 9(3), 403; doi:10.3390/su9030403
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ANNEX 1: LIST OF INDICATORS AND FACTORS

RURAL WATER SUPPLY – LIST OF INDICATORS

#	Area of focus	Indicator	Calculation method	Main data sources & sampling recommendation ¹	Comments
1	Functionality	Percentage of water points functioning at the time of visit	Ratio of functional water points to the total number of water points examined for the purpose of the check, expressed as a percentage	<ul style="list-style-type: none"> – Field observation of a sample of water points² in specific geographical area(s) and timeframe – Interview with a key informant: person most directly in charge of operating/maintaining/repairing the water point 	Check if denominator should include abandoned or irreparable water points Record type of water point, age, and agency (if there is a sign indicating it)
2	Accessibility	Percentage of water points within a 30-minute round-trip (including queuing) to collect water	Average time in minutes to collect water (including queuing) for the household using the water point	<ul style="list-style-type: none"> – A representative sample of households and/or discussion with key informants (e.g. WASH committee, village leaders.) 	Alignment with the SDG for basic water. This is the only water supply related indicator that requires a sample of HHs as opposed to the rest of indicators that all require a sample at water point level
3	Reliability / continuity	Average downtime of water points before repair as reported by users or manager of water point (WASH committee)	Duration elapsed between the day of the most recent breakdown and the day the water point was repaired, averaged across all water points surveyed (except those abandoned), expressed as a number of days	<ul style="list-style-type: none"> – Interview with a key informant: person having been directly involved at that time in managing the water point (WASH committee) or person most directly in charge of operating/ maintaining/repairing the water point 	
4	Reliability / continuity	Average number of mechanical breakdowns per year	Number of mechanical breakdowns per year, averaged across all water points surveyed	<ul style="list-style-type: none"> – Interview with a key informant: person directly in charge of operating/maintaining/repairing the water point. An indication of proper siting and availability of water over the year. At water point -check with manager of the water point 	
5	Reliability: Seasonality	Percentage of water points that dried up for at least 1 month in the past year	Ratio of water points having dried up for at least 1 month in the last 12 months to the total number of water points examined for the purpose of the check, expressed as a percentage	<ul style="list-style-type: none"> – Interview with a key informant: person most directly in charge of operating/ maintaining/repairing the water point 	An indication of proper siting and availability of water over the year. At water point-check with manager of the water point
6	Accessibility	Percentage of villages with a users per water point ratio that complies with national standards	Ratio of villages where the users per water point ratio is equal or less than the national standard, to the total number of villages surveyed for the purpose of the check, expressed as a percentage	<ul style="list-style-type: none"> – Access to most recent population data by village, and the full list of (non-abandoned) water points 	

#	Area of focus	Indicator	Calculation method	Main data sources & sampling recommendation ¹	Comments
7	Intra-village Equity	Percentage of communities that have at least one functional water point per neighborhood/community subdivision	Ratio of villages where all neighborhoods have at least one water point, expressed as a percentage At village level, ratio of sub-villages with functional water point compared to the total number of sub-villages; (100% means good equity, low percentage will mean that there is unequal distribution of water points)	– Key informant: village leader or WASH committee	Ask list of all water points to village leaders and ask if any sub-village does not have a water point If the check is to be representative at programme level, to be calculated at all villages surveyed. Simple way of calculating that is: to do a list of water points per village. That list should include the neighbourhood. Calculate the percentages of villages with sufficient (according to village ratio) but unequal coverage (with one or more non-covered neighborhoods)
8	Water quality	Percentage of functioning water points meeting water quality standards at the time of monitoring	Ratio of water points meeting water national quality standards at the time of the visit to the total number of water points examined for the purpose of the check, expressed as a percentage	– Field check a sample of water points in specific geographical area(s) and timeframe – Water quality field testing through measurement with portable test kits – Household survey about perception of odour, colour and taste of water on the day of the visit – Document review (national policy/strategy), for national standard related to water quality	Quality measurement JMP-compliant with faecal and priority chemical standards
9	Catchment protection	Percentage of water points with source and catchment protection activities in place	Ratio of all water points surveyed that have source and catchment protection activities, expressed as percentage	– Field check a sample of water points in specific geographical area(s) and timeframe – Observations of whether the water point is properly protected – Interview with a key informant (person the most directly in charge of operating the water point), for water point management arrangement/body	Water point properly fenced in, distance to sanitation, etc.

- 1 It is suggested that for most factors to be analyzed, a triangulation of data is necessary. This may mean employing a mixture of field observation, interviews with key informants, and questionnaires for a representative sample of households. In some cases, it may also be appropriate to use focus groups and/or desk reviews of some documents including national guidelines for water quality, meeting records for WASH committees and/or local councils, as well as agreements with service providers, etc.
- 2 For all indicators, a sample of water points in specific geographical area(s) and timeframe. Sampling based on a margin of error 5-7%, confidence level 90-95%, response distribution 50% (sample size calculator: <http://www.raosoft.com/samplesize.html>)
If the check is to be representative at programme level, it should be calculated at all villages surveyed.
If it is for national level, it should be calculated on a sample of villages. Sampling based on a margin of error 5-7%, confidence level 90-95%, response distribution 50% (sample size calculator: <http://www.raosoft.com/samplesize.html>)

RURAL WATER SUPPLY – LIST OF FACTORS

Please note that factors are areas of concern, which can be measured by many different indicators. So, factors also have proxy indicators to understand them. The ones suggested here are only for guidance and do not represent an exhaustive list.

#	Sustainability factor	Suggested indicator(s)	Main data sources & data collection techniques ³	Monitoring tool	Comments
A Community/water point level					
1	Preliminary studies and planning conducted for siting of the water point to be adequate to the local context	<ul style="list-style-type: none"> Percentage of villages where the hydrogeological conditions was properly assessed and documented before water point construction Percentage of villages where planning and siting of water points was done in participation with users 	<ul style="list-style-type: none"> A sample of villages in specific geographical area(s) and timeframe Review of existence and documentation of preliminary studies Key informants: WASH committee and/or people directly involved in the process at the time of construction 	Project monitoring and sustainability checks	Studies should include all technical, social, financial, and cultural aspects. This should take into consideration climate, climate change, and hydrogeological conditions. As well as planning for intra-village equity and future use/avoiding overuse
2	Quality of design, construction, and quality control over the process	<ul style="list-style-type: none"> Percentage of water points constructed by a professional constructor Percentage of water points with a transparent and documented procurement process Percentage of water points which were full-time supervised by qualified staff Percentage of water points/facilities surveyed where good quality of construction is reported by water point committee 	<ul style="list-style-type: none"> Field check a sample of water points in specific geographical area(s) and timeframe Review of documentation of the quality of the process Interview with a key informant: person most directly in charge of operating/ maintaining/repairing the water point and/or WASH committee representative 	Project monitoring and sustainability checks	Optional: professional supervision by client or third-party e.g government/business/NGO
3	Alignment with users' preference	<ul style="list-style-type: none"> Percentage of households that use the improved water point as main source of drinking water Percentage of facilities reported to be acceptable by users 	<ul style="list-style-type: none"> A sample of household heads within the study area Interview with a key informant – households for user views 	Sustainability checks	
4	Local community participation in decision making throughout the process	<ul style="list-style-type: none"> Percentage of water points where communities are/were involved in planning of new water points and their management Percentage of water points where communities are involved in the budgeting and expenditure of the water committees Percentage of water points where communities are involved in monitoring the services 	<ul style="list-style-type: none"> Field check a sample of water points in specific geographical area(s) and timeframe Interview with a key informant – person having been directly involved at that time in managing the water point (WASH committee) and with local government official Interview with key informants/focus groups of users to get their views 	Project monitoring and sustainability checks	Process includes planning, design, construction, and management arrangements
5	Services are reliable, affordable and available when needed	<ul style="list-style-type: none"> Percentage of households that declare that water points are open/available when needed Average number of litres provided per family per day Percentage of households paying for services on time (as a proxy for affordability) Average proportion (%) of monthly income spent on service per family 	<ul style="list-style-type: none"> Sample of household within the study area Sample of household within the study area Interview with a key informant: WASH committee treasurer or equivalent 	Sustainability checks	Aligned with the SDGs part of 'safely managed', affordable, available when needed. This should include satisfaction with affordability, reliability, distance, water quality, etc.
6	Local water resources are properly managed and protected	<ul style="list-style-type: none"> Percentage of water points with source and catchment protection activities for preservation of the water Percentage of communities with mechanisms in place for decision making and conflict resolution regarding allocation of water resources 	<ul style="list-style-type: none"> Field check a sample of water points in specific geographical area(s) and timeframe Interview with a key informant: WASH committee manager, village chairman, and triangulated with other key informants and/or focus groups 	Sustainability checks	

#	Sustainability factor	Suggested indicator(s)	Main data sources & data collection techniques ⁹	Monitoring tool	Comments
7	Safety of the water from pollution and contamination is ensured by a water safety plan that is being implemented	<ul style="list-style-type: none"> Percentage of water points with measures (barriers) to prevent contamination at the water point Percentage of water points where water safety measures are implemented (progressively) 	<ul style="list-style-type: none"> Field check a sample of water points in specific geographical area(s) and timeframe Interview with a key informant: person having been directly involved at that time in managing the water point (WASH committee) and with local government official 	Sustainability checks	Implementation of water safety measures is considered as a community collective action process, particularly in areas with low formalization of service providers
8	Unforeseen changes in demography, political situation, or environment at community level that critically affect the service	<ul style="list-style-type: none"> Percentage of water points with sudden change in the number of users 	<ul style="list-style-type: none"> Interview with a key informant: WASH committee, or government representatives 	Sustainability checks	To be reported ONLY in the exceptional cases where it happens
B Local government level					
9	Post-implementation support from local authorities/administration/technical departments/regulator in charge	<ul style="list-style-type: none"> Percentage of water points where a monitoring system is in place to report failures to local government/service authority Percentage of water points that actually receive technical support and supervision from local or district water authorities when needed Percentage of districts that provide post-implementation support 	<ul style="list-style-type: none"> Field check a sample of water points in specific geographical area(s) and timeframe Interview with a key informant: person directly involved in managing the water point (WASH committee/caretaker) Interview with a key informant: district water officers (when available) Review of local government records if available 	Sustainability checks	This includes continuous monitoring, support, training and incentives for good performance
10	Financing mechanism locally in place to ensure affordability and continuous service	<ul style="list-style-type: none"> Percentage of water points with tariffs that allow covering for regular operation and maintenance costs Percentage of communities that implement solidarity/affordability mechanisms 	<ul style="list-style-type: none"> Interview with a key informant: person managing the water point (WASH committee treasurer/secretary/director) Check WASH committee records if available Questionnaire for a representative sample of households and/or focus group 	Sustainability checks	
11	Safety of water points	<ul style="list-style-type: none"> Verification of water safety plan is carried out once a year 	<ul style="list-style-type: none"> Review of local government records if present Interview with district water department 	Sustainability checks	To monitor water quality once a year, and that the plan is implemented
C Service provider level					
12	Effectiveness and capacity of water management committee to perform its tasks and ensure cost recovery of basic operation and maintenance	<ul style="list-style-type: none"> Percentage of water points with a formalized service provider in place Percentage of water points with gender balance in WASH committees Percentage of service providers that carry out their tasks in operation, maintenance and administration Percentage of water points with WASH committees that actually meet on regular basis Percentage of water points where tariff is effectively/regularly collected and properly managed Percentage of water points with tariffs that allow covering for regular operation and maintenance costs Percentage of WASH committees keeping records 	<ul style="list-style-type: none"> Field check a sample of water points in specific geographical area(s) and timeframe Interview with a key informant: person directly involved in managing the water point (WASH committees / caretaker) Review of WASH committees records if present 	Sustainability checks	<p>Effectiveness of the WASH committee includes whether it has the appropriate human, logistical, financial and technical resources, and if it has frequent meetings and participatory decision-making. Also, if it actually takes actions to deal with problems or potential hazards</p> <p>It is noted that water management companies or service providers are not equal to the number of villages neither to the number of water points. However, it might be difficult to get a list of all water management committees in a region, to enable sampling, so perhaps it is easier to do it with the same water point sampling</p>

#	Sustainability factor	Suggested indicator(s)	Main data sources & data collection techniques ³	Monitoring tool	Comments
13	Accessibility, and quality of inputs and technicians for repairing water points when needed	<ul style="list-style-type: none"> Percentage of water points with access to technicians and spare parts within 48 hours or national service standards 	<ul style="list-style-type: none"> Interview with a key informant: person directly involved in managing the water point (WASH committee / caretaker) 	Sustainability checks	Inputs include energy to run the system, spare parts, etc.
14	There are effective transparency and accountability mechanisms in place between users and/or water management committee and the service providers	<ul style="list-style-type: none"> Percentage of water points with written and signed roles and responsibilities among parties in service delivery Percentage of water points where information about income and expenditure are provided to users and authorities at least once per quarter 	<ul style="list-style-type: none"> Field check a sample of water points in specific geographical area(s) and timeframe Interview with a key informant: person directly involved in managing the water point (WASH committee /caretaker). Interview with a key informant: household heads and people attending WASH committee meetings Review of WASH committee records if present 	Sustainability checks	
15	Financing mechanism locally in place to ensure affordability and continuous service	<ul style="list-style-type: none"> Percentage of water points where tariff is effectively/regularly collected and properly managed 	<ul style="list-style-type: none"> Interview with a key informant: households for user views 	Sustainability checks	

- 3 It is suggested that for most factors to be analysed, a triangulation of data is necessary. This may mean employing a mixture of field observation, interviews with key informants, and questionnaires for a representative sample of households. In some cases, it may also be appropriate to use focus groups and/or desk reviews of some documents including national guidelines for water quality, meeting records for WASH committees and/or local councils, as well as agreements with service providers, etc. All indicators can be reduced to a few sampling exercises: i) water points, ii) households, iii) villages, iv) service providers (this one could be done using the same sample as the water points, for practical reasons). Check above for tips and standard parameters to calculate sampling.

SANITATION – LIST OF SUSTAINABILITY INDICATORS

#	Area of focus	Indicator(s)	Main data sources & data collection techniques ⁴	Comment
1	Maintenance of open defecation free (ODF) status	Percentage of ODF verified communities that still meet all the (national) ODF criteria (please specify national ODF criteria)	<ul style="list-style-type: none"> Field observation for a sample of certified communities in specific geographical area(s) and timeframe Document review for national ODF criteria Interview with a key informant: person having been directly involved at that time in managing (WASH/ sanitation committee) Interview with a key informant: head of household for user views Interview with a key informant from the verification team Questionnaire for a representative sample of households 	<ul style="list-style-type: none"> The aim here is to measure rate of ODF slippage through field observation and interview with beneficiaries It is important to differentiate in the report between ODF slippage versus reversion to open defecation or non-latrine use at household or individual level The sustainability check report will have to explain the criteria for ODF certification in each particular country as well as the quality of the verification process It is given that in each village visited the time since certification will be collected. Possibility to require that no village having been certified recently (i.e. 6 months before or less) will be surveyed
2	Maintenance of ODF status	Percentage of ODF verified communities where no evidence of open defecation can be found	<ul style="list-style-type: none"> Field observation for a sample of certified communities in specific geographical area(s) and timeframe 	<ul style="list-style-type: none"> On the question of using certified or verified: certified or communities that passed verification can be used. What is not wanted is to include villages that did not pass verification Focus here only on one specific ODF criterion: the end of OD practice Based on field observation: transect walk in and around the village (ideally using the map of OD areas drawn during the triggering)
3	Use of sanitation facilities	Proportion/percentage of households with access to basic latrines (improved not shared with other households)	<ul style="list-style-type: none"> Questionnaire for a representative sample of households Ideally sampling is representative of ODF and non-ODF villages 	<ul style="list-style-type: none"> Aligns with household survey questions recommended by the JMP for coverage. Capturing the improved versus unimproved and shared or not shared is especially important in countries where the ODF criteria does not include improved latrines or does not include hand washing facilities
4	Use of sanitation facilities	Percentage of households accessing shared latrines (in contrast with households having access to their own private latrine)		<ul style="list-style-type: none"> Also, in many cases at the time of verification a mud slab might be improved but over time can erode to an unimproved latrine Timing of the checks will be important – in dry seasons or wet seasons. Maybe good to have the check a few months before seasonal diarrhea outbreaks, so corrective action can be taken in time
5	Use of sanitation facilities	Percentage of surveyed households that built a new latrine during the reporting period (whether the village was certified ODF) and that still use that latrine	<ul style="list-style-type: none"> Field observation for a sample of certified communities in specific geographical area(s) and timeframe Questionnaire for a representative sample of households Interview with a key informant: person having been directly involved at that time in managing (WASH/ sanitation committee) Questionnaire for a representative sample of households 	<ul style="list-style-type: none"> Capture use of the new sanitation facilities built Use both direct observation and self-reporting for latrine use whenever possible Consider doing an analysis of which households are reverting back to open defecation and if there is a disproportion of reversion between the general proportion and more vulnerable populations (people with disabilities, poor, marginalized groups, etc.)
6	Use of sanitation facilities	Percentage of households that have re-built/upgraded their latrine in the last year	<ul style="list-style-type: none"> Field observation for a sample of certified communities in specific geographical area(s) and timeframe 	<ul style="list-style-type: none"> It is a proxy to see sustained behaviour change: also, state reason for latrine damage and motivation to rebuild or upgrade when possible
7	Handwashing facility	Percentage of households with functional handwashing facility with soap and water available in vicinity of latrine and with evidence of usage	<ul style="list-style-type: none"> Field observation for a sample of certified communities in specific geographical area(s) and timeframe Questionnaire for a representative sample of households 	<ul style="list-style-type: none"> Use both direct observation and self-reporting for latrine use whenever possible
8	Handwashing practice	Percentage of household respondents reporting always washing their hands with soap or ash at specific critical times	<ul style="list-style-type: none"> Field observation for a sample of certified communities in specific geographical area(s) and timeframe 	

4 It is suggested that for most factors to be analysed, a triangulation of data is necessary. We would suggest employing a mixture of field observation, interviews with key informants, and questionnaires for a representative sample of households. In some cases, it may also be appropriate to use focus groups and/or desk reviews of some documents including national guidelines for open defecation, meeting records for WASH Comms and/or local councils, etc.

SANITATION – LIST OF SUSTAINABILITY FACTORS

Please note that factors are areas of concern, which can be measured by many different indicators. So, factors also have proxy indicators to understand them. The ones suggested here are only for guidance and do not represent an exhaustive list.

#	Sustainability factor	Suggested Indicator(s)	Main Data Sources & data collection techniques ⁹	Monitoring tool	Comments
A Community level					
1	Presence of water to build, repair or clean the latrine	<ul style="list-style-type: none"> Percentage of households that declare having adequate access to water to clean latrine 	<ul style="list-style-type: none"> Field observation for a sample of certified communities in specific geographical area(s) and timeframe Interview with a key informant: household heads for user views Interview with a key informant: person having been directly involved at that time in managing (WASH/Sanitation committee) 	Sustainability checks	This includes: availability, accessibility/distance, functionality, affordability
2	Resilient construction of latrines	<ul style="list-style-type: none"> Percentage of households where latrines were damaged or collapsed in last year due to heavy rains, soil collapse or others Proportion/percentage of latrines that were repaired/rebuilt within 1 month after filling up or getting damaged 	<ul style="list-style-type: none"> Field observation for a sample of certified communities in specific geographical area(s) and timeframe Interview with a key informant: household head for user views Interview with a key informant: person having been directly involved at that time in managing (WASH/sanitation committee) Questionnaire for a representative sample of households 	Sustainability checks	<ul style="list-style-type: none"> Soil and ground conditions include for example: not prone to flood, not rocky, sandy, no high ground water table Climate conditions include for example: no heavy rains, periodic hurricanes Good design and location
3	Willingness to pay / prioritization of sanitation among areas of expenditure	<ul style="list-style-type: none"> Percentage of households that report sanitation as a high priority Proportion/percentage of latrines that were repaired/rebuilt/ upgraded in the in the last year (or since ODF verification) 	<ul style="list-style-type: none"> Questionnaire for a representative sample of households Interview with a key informant: person having been directly involved at that time in managing (WASH/sanitation committee) 	Sustainability checks	
4	Existence of a community based body that is capable, dynamic, and supported by local leaders reinforcing social norms	<ul style="list-style-type: none"> Percentage of communities with an existing committee/ association/individual active (regular meetings, and actions taken) and providing continuous promotion of sanitation 	<ul style="list-style-type: none"> Field observation for a sample of certified communities in specific geographical area(s) and timeframe Interview with a key informant: household heads for user views Interview with a key informant: person having been directly involved at that time in managing (WASH/sanitation committee) 	Sustainability checks	<ul style="list-style-type: none"> Community based body includes: (sanitation/WASH/other committee, general assemblies dedicated to WASH issues etc.) Capable committees indicate that they are well trained and resourced Dynamic committees are committees that have frequent meetings, participatory decision-making, actions taken, etc. Local leaders include: local chief, local government
5	Affordability of standard HH latrine that is being promoted in the area and of material & services, taking into consideration the possible existence of in-kind or financing support for the poorest	<ul style="list-style-type: none"> Percentage of household that report that they can afford latrine construction Percentage of household that have access to finance mechanisms if needed 	<ul style="list-style-type: none"> Questionnaire for a representative sample of households Interview with a key informant: person having been directly involved at that time in managing (WASH/sanitation committee) 	Sustainability checks	<ul style="list-style-type: none"> Standard latrine promotion refers to promotion carried out by the Government, local authorities and NGOs – earlier or currently Financing support could include: community solidarity, subsidies, microcredit, tontines etc.
6	Adequate operation and maintenance of the latrine	<ul style="list-style-type: none"> Percentage of latrines in good condition (includes visual check) 	<ul style="list-style-type: none"> Field observation for a sample of certified communities in specific geographical area(s) and timeframe Interview with a key informant: household heads for user views 	Sustainability checks	<ul style="list-style-type: none"> Good conditions of latrines includes: clean, good light, no odour, etc.

#	Sustainability factor	Suggested Indicator(s)	Main Data Sources & data collection techniques ⁹	Monitoring tool	Comments
7	Existence of social norm supporting the ODF status: existence of a local by-law and corresponding sanctions or reward	<ul style="list-style-type: none"> Existence of (written or unwritten) local by-laws on the adherence to ODF with corresponding sanctions and rewards 	<ul style="list-style-type: none"> Questionnaire for a representative sample of households Document review if available; record if sanctions are being upheld 	Sustainability checks	<ul style="list-style-type: none"> Presence of enforced social sanctions is a good proxy for the presence of social norms Note if a longer assessment is done, the questions should expand to include signs of empirical and normative expectations. Refer to social norms and CATS guidance E.g. "Do most of the people in the village believe that people should use a latrine? If someone in the village was observed defecating in the open, what would happen to them?" Use of vignettes may be necessary
B Support level					
8	Quality of triggering process	<ul style="list-style-type: none"> Participation of a high percentage of community members from all categories including men, women, children, people with disabilities, people from poorest households, people from minority groups, decision makers, opinion leaders, elderly, etc.* Percentage of community members recalling main messages of the triggering* 	<ul style="list-style-type: none"> Questionnaire for a representative sample of households Interview with a key informant: person having been directly involved at that time of triggering 	Programme monitoring and sustainability checks (in newly ODF certified communities)	
9	Quality of ODF verification process	<ul style="list-style-type: none"> Participation of a large number (70%) of household's members* A checklist was used for certification with clear certification criteria* A large number of households and OD areas around the village were visited for the verification process* Involvement of actors other than community members (media, government officials, neighboring communities etc.) in verification process* 	<ul style="list-style-type: none"> Interview with a key informant: household head for user views Interview with a key informant: person having been directly involved at that time in managing (WASH/sanitation committee) Document review if available 	Programme monitoring and sustainability checks (in newly ODF certified communities)	
10	Existence of post-triggering follow-up support activities and type and quality of these activities	<ul style="list-style-type: none"> Percentage of communities with post-triggering follow-up support activities by NGOs, local government or both Percentage of communities with a post-ODF action plan Percentage of districts with the capacity (human and financial resources) not provide post-ODF follow-up support 	<ul style="list-style-type: none"> Questionnaire for a representative sample of household Interview with sanitation committee members Interview with a key informant: person having been directly involved at that time in managing (WASH/sanitation committee) Interview with district officials Check district records if available 	Sustainability checks	<p>Post triggering support should include:</p> <ul style="list-style-type: none"> updating the community map technical training of community members or masons on construction techniques cross-visits and learning training of sanitation committees sanitation/WASH marketing, etc. visits of external stakeholders additional sanitation & hygiene related messages (such as handwashing, child faeces management, grey water and solid waste management)
11	Availability/ accessibility, appropriateness/ attractiveness of sanitation materials, products and services to repair/maintain/ improve the latrines	<ul style="list-style-type: none"> Percentage of households that report easy availability of sanitation materials, products and services (e.g. slabs, masons etc.) 	<ul style="list-style-type: none"> Questionnaire for a representative sample of household Interview with a key informant: sanitation committee, village leaders 	Sustainability checks	<ul style="list-style-type: none"> Difficult one: this will also require a list of basic materials if you want to compare this over time

#	Sustainability factor	Suggested Indicator(s)	Main Data Sources & data collection techniques ⁵	Monitoring tool	Comments
12	There is a functional monitoring system in place that triggers corrective action at lowest level	<ul style="list-style-type: none"> – Percentage of districts where a functioning monitoring system (able to collect, analyze and report on sanitation programme) is in place – Percentage of communities with a functional monitoring system in place that triggers corrective action at lowest level 	<ul style="list-style-type: none"> – Interview with district staff – Interview with sanitation committee leaders – Interview with district staff – Interview with sanitation committee leaders 	Sustainability checks	–

5 It is suggested that for most factors to be analysed, a triangulation of data is necessary. We would suggest employing a mixture of field observation, interviews with key informants, and questionnaires for a representative sample of households. In some cases, it may also be appropriate to use focus groups and/or desk reviews of some documents including national guidelines for open defecation, meeting records for WASH Comms and/or local councils, etc.

Indicators with an * are ONLY RELEVANT FOR NEWLY (UPTO 2 YEARS) ODF verified communities

WASH IN SCHOOLS (WINS) AND HEALTH CARE FACILITIES – LIST OF CORE SERVICE LEVEL INDICATORS

Refer to the WHO/UNICEF core questions and indicators for monitoring WinS in the Sustainable Development Goals, and core questions and indicators for monitoring health care facilities in the Sustainable Development Goals, both published by the JMP in 2016, for additional guidance on monitoring and definition of indicators which have been agreed upon by the Global Task Team for monitoring WinS in the SDGs, convened by the JMP⁶. They are based on the current global norms⁷, existing national standards, questions in national censuses and multinational surveys, global WinS monitoring recommendations⁸, and normative human rights criteria: availability, acceptability, accessibility and quality.

#	Area of focus	Indicator(s)	Main data sources & data collection techniques ⁹	Comments
1	Water at schools and health facilities	Percentage of schools / health facilities with sufficient number of water points that are able to provide water all year round, according to national standards	At sample schools: <ul style="list-style-type: none"> – Observation of a sample of schools to see if water is available at the time of the visit – Key informant interviews with school head teachers or teacher in charge of water facilities – Key informant interviews with children 	<ul style="list-style-type: none"> – The water source should be within the school compound – Applies to pre- primary, primary and secondary schools
	Sanitation at schools and health facilities	Percentage of schools / health facilities with existence of sufficient, improved, separated, functional, and hygienic/clean latrines according to national standards	At sample schools: <ul style="list-style-type: none"> – Interviews with girls and boys – including girls and boys with disabilities – who use the latrine facilities and teachers / managers of the facilities – Focus group discussions with girls and boys (separate or together as needed) – Direct observation of school latrines 	<ul style="list-style-type: none"> – Doors are unlocked, or a key is available at all times, is not broken, the hole not blocked, water is available for flushing/ pour flush at all times, and the doors are lockable from inside with no large gaps at time of visit – Facilities are accessible to all students, including the youngest students at the school and those with disabilities, and meet the menstrual hygiene needs of girls – Applies to pre-primary, primary and secondary schools
	Hand washing facilities at schools and health facilities	Percentage of schools / health facilities having a sufficient number of functional hand washing stations with water and soap with evidence of usage	At sample schools: <ul style="list-style-type: none"> – Observation of a sample of schools to see if water and soap is available at the time of the visit – Key informant interviews with children 	

6 The task team was an open membership group, consisting of over 40 WinS experts, who conducted bi-weekly meetings over a three month period. Agreement was finalised at an Expert Group Meeting hosted by the JMP on 20-21 June, as documented in the meeting report: http://www.wssinfo.org/fileadmin/user_upload/resources/WinS-Expert-Group-Meeting-June-2016-Report_FINAL.pdf

7 WHO (2009) Water, sanitation and hygiene standards for schools in low-cost settings.

8 UNICEF (2011) WASH in schools monitoring package.

9 For all indicators, a sample of water points in specific geographical area(s) and timeframe. Sampling based on a margin of error 5-7%, confidence level 90-95%, response distribution 50% (sample size calculator: <http://www.raosoft.com/samplesize.html>)

If the Check is to be representative at program level, to be calculated at all villages surveyed.

If it is for national level, a sample of villages. Sampling based on a margin of error 5-7%, confidence level 90-95%, response distribution 50% (sample size calculator: <http://www.raosoft.com/samplesize.html>)

WINS AND HEALTH CARE FACILITIES – LIST OF SUSTAINABILITY FACTORS

Please note that factors are areas of concern, which can be measured by many different indicators. The list below is for guidance and do not represent an exhaustive list¹⁰

#	Sustainability factor	Suggested Indicator(s)	Main data sources & data collection techniques ¹¹	Monitoring tool	Comments
A. SCHOOL/HEALTH CENTRE LEVEL					
1	Local participation in the planning, implementation and monitoring of WASH facilities (includes school management committees, parent and teacher associations, students, health workers, or others as locally appropriate)	<ul style="list-style-type: none"> – Percentage of schools where there has been active involvement of local actors in planning, implementation and monitoring of WASH facilities 	<ul style="list-style-type: none"> – Key informant interviews with school managers, appointed WASH managers in schools or healthcare facility, and student leaders – Focus group discussions and/or structured interviews with teachers, students, parents, and health workers 	Project monitoring and sustainability checks	Participation should be active and meaningful at all stages
2	Quality of design, construction, and quality control over the process Alternate: quality/functionality of facilities	<ul style="list-style-type: none"> – Percentage of water points constructed by a trained professional – Percentage of facilities in good condition per the use of sanitary surveys 	<ul style="list-style-type: none"> – Field check a sample of water supply system and sanitation facilities in specific geographical area(s) and timeframe, using sanitary surveys – Review of documentation of the quality of the process – Interview with a key informant: person most directly in charge of operating/ maintaining/ repairing the WASH facilities 	Project monitoring and sustainability checks	<ul style="list-style-type: none"> – Soil and ground conditions include, for example: not prone to flood, not rocky, sandy, no high ground water table – Climate conditions include, for example: no heavy rains, periodic hurricanes – Good design and location
3	Alignment with users' preference	<ul style="list-style-type: none"> – Percentage of schools where girls and children with limited mobility report the ability to access and use WASH facilities in line with their needs 	<ul style="list-style-type: none"> – Key informant interview with girls and children with limited mobility 	Project monitoring and Sustainability Checks	
4	Existence of WASH clubs in schools to reinforce the student body to practice and promote hand washing, drink clean and safe water and keep pit latrines/toilets clean and hygienic	<ul style="list-style-type: none"> – Number of schools with student WASH clubs that meet regularly promote behaviour change on WASH and reinforce curriculum 	<ul style="list-style-type: none"> – Direct observation of WASH club activities in schools in a geographic area of focus – Records of activities – Key informant interviews with communities and WASH focal point teachers and students 		WASH clubs should be institutionalized as part of the school structure for sustainability
5	Adequate operation and maintenance of school WASH facilities	<ul style="list-style-type: none"> – Percentage of schools and health care facilities with a responsible person identified for WASH maintenance – Percentage of schools and health care facilities with budget allocated for WASH maintenance – Percentage of schools and health care facilities that have utilised budgets for WASH maintenance 	<ul style="list-style-type: none"> – Structured interviews with school heads, clinical officers, committees – Review of documents 	Project monitoring and sustainability checks	Dedicated operation and maintenance budgets to ensure maintenance and sustainability of facilities from school grants, funding from ministries of education and health, or from local revenues, parent contributions
6	Availability of cleaning supplies for maintenance of pit latrines and toilets	Percentage of schools and health care facilities with a stock of supplies for cleaning school toilets on the day of the visit	<ul style="list-style-type: none"> – Field check/observation 	Project monitoring and sustainability checks	Suppliers and supplies should be locally available
7	Local facility-based capacity for monitoring and maintenance of WASH facilities	Percentage of schools and health care facilities where teachers, committees, clubs and health care workers, are trained in planning, budgeting, implementing and monitoring of WASH activities and facilities	<ul style="list-style-type: none"> – Structured interviews with school heads, Clinical Officers, committees Focused group discussions 	Project monitoring and sustainability checks	School heads, clinical officers and WASH committees/ clubs are trained and should possess transferable knowledge and skills.

#	Sustainability factor	Suggested Indicator(s)	Main data sources & data collection techniques ¹¹	Monitoring tool	Comments
8	Integration of WASH practices into facility rules and routines	Percentage of schools and health care facilities with handwashing, water treatment, or other WASH practices recorded in school rules and/or with specified time for practice, such as before meals	– Review of facility posted rules and schedules, substantiated via observation and interviews with children, teachers, or other key informants	Project monitoring and sustainability checks	
B. GOVERNMENT LEVEL					
9	Adequate annual budgets are allocated to schools and health care facilities for new WASH facilities and maintenance of existing ones	– Number of schools and health care facilities that have budgets allocated to provision of new WASH facilities and maintenance of existing ones	– Review of budgetary plans in schools in a geographic area of focus	Sustainability checks	
10	WASH integrated into education management information system (EMIS) and health Information management system (HMIS)	– Number of schools and health care facilities where WASH is integrated into EMIS/HMIS for effective monitoring ¹² – Percentage of schools and health care facilities that consistently report on WASH indicators of the EMIS/HMIS	– Analysis of data from management information systems	Sustainability checks	Sustainability Checks EMIS and HMIS are information management systems for monitoring interventions in schools and health care facilities
11	Regular inspections by local health and education offices	– Number of schools with inspection reports	– Key informant interviews – Review of inspection documentation where available	Sustainability checks	

10 It is suggested that for most factors to be analysed, a triangulation of data is necessary. We would suggest to employ a mixture of field observation, interviews with key informants, and questionnaires for a representative sample of facilities. In some cases, it may also be appropriate to use focus groups and/or desk reviews of some documents including national guidelines for WinS, school or health care facility rules/standards, and/or local councils, as well as agreements with service providers, etc.

11 It is suggested that for most factors to be analysed, a triangulation of data is necessary. We would suggest employing a mixture of field observation, interviews with key informants, and questionnaires for a representative sample of households. In some cases, it may also be appropriate to use focus groups and/or desk reviews of some documents including national guidelines for open defecation, meeting records for WASH committees and/or local councils, etc.

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12 Refer to JMP guidance

ACCOUNTABILITY FOR **SUSTAINABILITY**



*Empowered lives.
Resilient nations.*