

Water, Sanitation and Hygiene competency framework for low- resource contexts

Supporting documents

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Development of a Competency Framework for the Humanitarian WASH Sector.
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Acknowledgements

The draft framework is inspired by and uses the approach taken by the Institution of Structural Engineers (IStructE) with their Humanitarian and International Development Competency Framework¹, which complements their Initial Professional Development Guidance². Some of the text is based on this document. The framework uses the Chartered Institution of Water and Environmental Management's (CIWEM) Mandatory Competence Attainment Report Guidance³ as its foundation, rather than the IStructE competencies.

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¹ ISTRUCTE, 2021. *Humanitarian and International Development Competency Framework*. London, UK: Institution of Structural Engineers. <https://www.istructe.org/resources/guidance/humanitarian-international-dev-framework/>.

² ISTRUCTE, 2025. *IPD Guidance*. London, UK: Institution of Structural Engineers. <https://www.istructe.org/training-and-development/ipd/>.

³ CIWEM, 2023. *C.WEM Mandatory Competence Attainment Report Guidance*. London, UK: CIWEM. <https://www.ciwem.org/assets/pdf/Membership/Application%20Guidance/C.WEM%20MC%20Guidance.pdf>.

These supporting documents have been developed to support your use and understanding of the competency framework, whether you are an individual working on WASH in low-resource settings, a mentor to a WASH practitioner, an employer, trainer or educator contributing towards the WASH sector. These are in four groups.

- An introduction for everybody
- Advice and support for individuals, their mentors and assessors
- Information for Human Resource Managers, educators and trainers.
- Background material for people who want to know how the framework was developed.

Guidance for all readers

1. Introduction to the framework

This provides a general overview of the framework and how it can be used.

Support for individuals, mentors and assessors

2. Assessment guidance

A detailed description of the steps **individuals** can follow to conduct a self-assessment with support of a peer or mentor, and the process of having their competencies formally assessed. **Peers, mentors** supporting someone working towards assessment and **assessors** will find relevant information here as well.

3. List of suggested development activities

A list of recommended activities for each competency area that can help individuals gain the knowledge and experience they need to build their competence.

4. Personal Development Plan Template

A practical tool that individuals can use to assess themselves against the framework, recording progress and defining a professional development plan.

5. Examples of WASH competencies

A variety of examples from different strands of WASH provide individuals with ideas of how the competencies can be demonstrated.

6. Continuing Professional Development guidance

A description of the value and role of continuing professional development (CPD) with practical guidance on how to approach it.

Support for employers, trainers and educators

7. Guidance for employers, trainers and educators

A description of how employers, trainers and educators can use the framework to support their work of recruiting, training and supporting WASH staff working in low-resource settings.

8. WASH job descriptions

Several example generic job descriptions for certain WASH roles indicating the relevance of the competency areas.

9. On the route to competency - using the WASH framework at different levels

The framework uses a minimum standard of staff working without direct supervision. Early career professionals can use the framework to guide their professional development. This note looks at the staged attainment of the competencies.

Background material

10. Professionalising the WASH sector

This note describes the reasons for ensuring that WASH staff are competent. It provides some suggestions of ways forward.

11. Measuring WASH capacity

This note examines different ways of measuring the quality of WASH staff.

12. Development of the WASH competencies

This background note describes how the framework was developed building on the work of the WASH Road Map since 2019. It covers what decisions were made and what feedback was received.

13. Bibliography

This is a list of publications relevant to this topic.

14. Glossary of terms

The framework has been written in plain English where possible. However, some specialist terms have been used. This word list may help people unfamiliar with the terminology.

1. Introduction to the framework

This water, sanitation and hygiene (WASH) competency framework is designed to illustrate the knowledge and skills that individuals will need to demonstrate to be considered a proficient professional in low resource settings.

WASH

WASH is an *interdisciplinary* sector, requiring a combination of engineering, scientific and social engagement knowledge and skills. Topics include water supply, excreta disposal, wastewater management, hygiene promotion, solid waste management, vector control and surface water management. Each area strongly influences environmental health, sustainable development and social equity and inclusion. This means that your competence as a WASH practitioner will be judged not only on your immediate area of expertise, but on your knowledge and ability to operate effectively across disciplines.

	Water supply	Excreta disposal	Wastewater management	Hygiene promotion	Solid waste management	Vector control	Surface water management.
Technology	X	X	X	X	X	X	X
Economics	X	X	X	X	X	X	X
Social	X	X	X	X	X	X	X
Environmental	X	X	X	X	X	X	X
Health	X	X	X	X	X	X	X
Management	X	X	X	X	X	X	X

WASH covers a range of topics requiring a variety of knowledge and skills

There are specialist roles within WASH that are not covered by this framework. Water quality scientists, epidemiologists, gender experts or hydrogeologists have distinct sets of skills that may not extend beyond their particular area.

The competencies presented in this framework describe the knowledge, skills, practices and behaviours that are considered necessary for a WASH practitioner to operate independently, efficiently and effectively in their area of work. The descriptions define the minimum standard that WASH practitioners should be able to demonstrate for them to be considered competent professionals, able to work without direct supervision.

Application in low-resource settings

This framework applies to WASH professionals working in low-resource settings. It is based on a global framework that was developed for all contexts. This global framework has been adapted to make it easier to understand when applied to low-resource contexts.

Low resource settings

The term “low-resource settings” covers a range of contexts, such as humanitarian relief, fragile states, low-income countries, remote rural areas and low-income urban areas. Many of the WASH challenges in these contexts will be similar due to lack of funding, few qualified staff, limited equipment, lack of time, weak enabling environments or logistical constraints. There will be differences, for example humanitarian contexts in urban or rural locations will require different responses, but many of the underlying skills, approaches and technologies will be common to all these low-resource settings.

There are differences in knowledge and skills required between the work of a WASH professional employed in a typical organisation in a medium or high resource setting and one working in a low-resource setting. Key differences for low-resource settings include working in smaller teams or even as the only WASH professional. This leads to:

- Increased project management responsibility, going beyond just technical design to a wider range of tasks
- Accountability for your own competence and practice
- Recognition of the fact that WASH practitioners cannot be just the engineering, scientific or community engagement expert, but will be playing a leadership role in the conceptualisation, design and delivery of entire projects.

The lack of resources available may result in:

- Lack of support from either WASH colleagues or official guidance documents and challenges of working in unfamiliar environments
- There are fewer resources – less money, skilled “manpower”, machinery than in better resourced contexts. This is contrasted with higher or more urgent needs than better resourced settings.

Other differences may include:

- The work relationships are different. There may not be an obvious client, but a mixture of donors, partners, government bodies and inputs from the service users.
- Specific technologies and approaches may be used. Pit toilets may be required rather than sewers, household water treatment and safe storage may be needed when water supplies are intermittent.

It is important to recognise the wider consequences of a WASH practitioner’s decisions in low-resource settings. This could include the social, political, economic and environmental impacts of projects may all be the responsibility of the WASH practitioner. Thus, topics such as health and safety will extend beyond construction site safety to the protection of vulnerable people accessing WASH services.

Who is this framework for?

This framework is designed for individual professionals as they progress through a WASH career. It is not tied to a particular role or employer, but maps out the qualities expected of a WASH professional after several years of experience in the sector.

- For those wanting to enter the sector, the framework sets out the range of skills they will require and challenges they will face over their career.
- For practitioners with some experience, it allows them to focus their training and development goals, identifying their strengths and weaknesses.
- For experienced professionals who have been working in well-resourced contexts, it may help them identify any knowledge, skills or experience gaps they need to address if they are intending on engaging in work in low-resource settings.

As this framework is for individuals, many of the documents use the word “you” to emphasise the personal achievements required.

This framework can also be used by:

- training providers to develop learning opportunities that address the needs of the sector,
- project designers to better define the “manpower” required for the project activities,
- employers within the sector when evaluating potential candidates in the hiring process, and
- client/ donors/ commissioners when assessing the suitability of a practitioner, or practice, for their project.

What is this framework for?

The primary purpose of this framework is to assess your competency for working in the WASH sector in low-resource settings. To be competent, you will have several years work experience plus various types of training. To demonstrate the required depth and breadth of experience, you may need to have worked on several projects or in different roles to gain exposure to a variety of tasks and a range of contexts. If you are new to the WASH sector or have limited experience of working in low-resource settings, then you may find this framework a helpful guide to your career, identifying areas to gain experience in and develop.

These competencies allow you to show the formal and informal skills and qualities that you have developed throughout your career. They will demonstrate:

- your ability to work independently and as part of a team,
- how you take initiative to work effectively and apply yourself to a variety of situations, and
- how you have reached a stage in your career where you can competently lead in your technical field and influence others.

Benefits of assessing the competencies of staff

Quality of projects

The effectiveness, impact and quality of a WASH project will depend upon the quality of its inputs. Using an objective method to measure the quality of resources, such as machinery, “manpower”, materials and methods, is a component of ensuring project success. Specifications and tests can be used to assess the quality of machinery and materials. Standard Operating Procedures and sector standards, such as those described in the Sphere Handbook, can be used to determine the quality of methods employed and the services provided. Measuring the quality of “manpower” or staff is often subjective and difficult.

For these reasons, this framework has been developed to set a benchmark or standard against which the quality of WASH practitioners can be assessed. Competencies define the knowledge and skills that an individual requires to perform a task adequately. Assessment of competency requires

an individual to demonstrate how they have routinely performed over time. Assessments often rely on interviews and discussions with the individual, combined with a record of work done (through project reports) and evidence of how relevant learning and training has been obtained and applied. A competency framework helps guide this assessment process, ultimately contributing to the professionalisation of the sector.

Career development

As a WASH practitioner, using this framework will allow you to identify your strengths and weaknesses. It can show where you need more training or experience to develop expertise and skills. By collecting evidence of your abilities, you will be better placed to progress your career, seek promotion and apply for new jobs. Whilst this framework considers application in low-resource settings, it is based on a global framework. This may make applying for formal recognition of your abilities easier.

Framework relationship with the Professional Review

This framework is based on the official CIWEM competencies but it has been adapted to suit low-resource contexts. The activities outlined in this framework may contribute towards achievement of the official core objectives, but candidates for recognition are advised that demonstration of competence should be based on the official regulations. Candidates are advised to always check that they are referring to the most up-to-date version of the regulations.

Organisations who employ and work WASH practitioners in low-resource settings will be able to identify and recruit competent staff more easily if the framework is used widely. Identifying and developing staff development actions will also become more efficient

Accountability

There is an ethical obligation to identify and use the most appropriate resources to deliver services in low-resource settings, which includes meeting the immediate needs of those facing shocks such as displacement, disease outbreaks and/ or natural hazards. WASH organisations need to be held accountable for the quality of resources that are used.

“There were instances where the response was untested, chaotic, amateurish, doubled-up, overlapping, done by ‘Mom and Pop’ operations... if you’re not a professional in this game, you have no right to descend on someone in their moment of crisis and do on-the-job training. Saving human lives is no place for amateurs. Why is that? Because the poor, dispossessed and disaster-prone should have at least one basic right left to them: to be protected from incompetence.

Jan Egeland ¹

Ultimately, the professionalisation of the sector will help safeguard the quality of WASH services provided to populations in low-resource settings, increasing the level of accountability between end-user and service provider.

How is the framework used?

Primarily, this framework can be used to check your own competencies as a WASH practitioner at an individual level. The competencies set out in this framework can be achieved through a mixture of independent learning, formal training and on-the-job experience. You should be able to provide evidence of how you can meet each competency. Assembling evidence may require you to refer to project reports, assessments and evaluations that you have personally contributed towards. You may check your own competencies by yourself, or you may want to discuss them with a colleague or

¹ Action by Churches Together (ACT) International (2009) *Jan Egeland: Saving Human Lives is No Place for Amateurs*. See <http://reliefweb.int/report/indonesia/jan-egeland-saving-human-lives-no-place-amateurs> (accessed 04/03/2016).

a mentor. Checking competency is not a one-off exercise. You are expected to be able to demonstrate a career-long commitment to maintaining the knowledge and skills to meet the competency descriptions

In the supporting documents you will find a **Personal Development Plan Template** to help you prepare your written evidence. Preparing a half-page summary of your career roles and sector experience to-date as part of your written submission can help others better appreciate how your examples fit into your career progression. There is a **list of suggested development activities** to help you identify actions to build the knowledge, experience and skills you need to reach each competency. You will also find **examples of WASH competencies for low-resource settings** that you may help you write your own evidence. You may find it helpful to keep a record of your work experience as it develops, so that collating evidence at a later stage is made easier, rather than trying to remember work you did several years ago. Assessment of competency is not a one-off exercise. You are expected to be able to demonstrate a career-long commitment to maintaining the knowledge and skills to meet the competency descriptions

In the future, there may be opportunities to have your competencies independently assessed. The supporting materials describe the process of assessment in more detail. Preparing for and completing the assessment itself will require significant time and effort. Completing a self-assessment with feedback and guidance from a mentor, peer or line-manager, can help you judge how close you are to meeting the framework before seeking external assessment. It may take you several weeks, or even months, to work through every competency. The time commitment required should not be underestimated.

Independent third-party assessors will need to review the examples you have provided for each competency area. At the end of the assessment process, your assessors will conclude which level of competency you are currently operating at for each competency area.

Use in recruitment, promotion and training

The supporting materials include more information on the rationale behind this framework, guidance for individual continuing personal development (CPD), and guidance for other stakeholders such as education professionals and training providers.

The structure of the framework

The framework aligns with CIWEM's Mandatory Competence Attainment Report. This is a global document, relating to any work in water and environmental management. The framework can be applied to engineers, social scientists and water resource managers, amongst other roles operating in WASH. This competency framework is not a comprehensive listing of all competencies that will ever be required. It should be interpreted for any particular context. Organisations may want to use this alongside their own internal framework or some of the generic frameworks that have been developed.

The framework consists of 14 competencies grouped into five sections, A through E. Each competence is broad in nature and can be applied to any discipline within WASH.

Section A reviews your knowledge of wider existing and emerging factors that influence the WASH sector (A1), and your ability to anticipate, plan and respond to these changes (A2).

Section B considers your ability to plan, implement and evaluate work, stepping through the project cycle from initial problem analysis (B1), through identifying and evaluating options (B2), to implementing and monitoring the effectiveness of the selected solutions (B3). This section also assesses your ability to anticipate and deal with variation, changes to the project situation, developments in the wider context in which you are operating and working with ranges of institutions and users (B4).

Section C considers your approach to safe and effective working, through the effective management of resources (C1), your knowledge and promotion of health, safety and wellbeing (C2), your understanding of issues such as sustainability, inclusion and health (C3), and your knowledge of quality assurance and enhancement approaches (C4).

Section D reviews your approach to communication (D1) and knowledge of professional ethics (D2).

Section E considers your appreciation and approach to professional development (E1) and your commitment to the sector (E2).

There is some overlap between competency descriptions. For example, issues of safe working (C2) will also apply to the design (B2) and implementation (B3) stages of the project cycle. Inclusion of vulnerable groups is explicit in B4 but also expected in to be covered in A1 (sector issues), C1 (communication) and C3 (sustainability). This allows for important topics to be viewed from several angles. It recognises that work does not fit into separate topics and a single work example may demonstrate a variety of skills.

The competencies

For each competency there are four elements:

1. The **competency definition** is a short statement e.g. *“B1. Ability to analyse and evaluate water, sanitation and hygiene problems”*. The definition can be applied broadly across each discipline within WASH, from water treatment to the promotion of handwashing.
2. The **competency description** provides a generic explanation of what you should be able to demonstrate to an assessor, in terms of the knowledge, skills, practice and behaviour required to satisfy this competency. These are based on the CIWEM mandatory competencies descriptions.
3. The **application in low-resource settings** section provides additional guidance on how the competency requirements and expectations may occur in low-resource settings. This may highlight certain restraints or additional responsibilities that you are likely to encounter. You will find WASH examples and explanations specific to low-resource settings.
4. The **indicators of achievement** provide a series of *possible* prompts that you may wish to use when preparing your example. An assessor may use these prompts as questions during the assessment, to help you provide an example(s) that meets the competency description.

Each of these four elements provides more detail or additional description, but the main competency definition is the core element. The other elements support the application of this competency in practice.

Levels of competency

Overall, the minimum standard set is for individuals to be able to work independently on WASH topics, without direct supervision. However, the level of competency varies for each of the 14 topics.

There are four levels that are expected.

Ability

This is the main level used in this framework. At this level you can demonstrate that you can perform effectively and independently in the competency area and can advise others. You no longer require close supervision. The threshold for satisfying the core competencies under section B (*Planning, implementation and evaluation of work*) have all been set at the ability level. Other topics requiring a clear ability to carry out work in the area are *ability to develop strategies or plans to address changes in your sector (A2)*, *ability to manage resources effectively and efficiently (C1)* and *ability to communicate effectively (D1)*. These are all core WASH tasks, that are essential for professionals working in WASH. These include all the technical areas of competence plus those project management skills required to implement WASH services.

Experience

At this level you can demonstrate that you have practical hands-on experience of the competency area but may be working according to procedures developed by others. This applies to *experience of Health, Safety & Wellbeing* (C2) and *experience of quality enhancement/ assurance* (C4). These are important topics, but you are not expected to develop the processes yourself. It is important you **understand** these issues and have put them into practice. You should be able to carry out work in these areas unsupervised, but not necessarily produce such procedures by yourself.

Knowledge

At this level you can demonstrate you **know** about the competency area, without needing the area to be explained to you. However, you may not yet have much experience applying this competency area in your work. You should know about *wider WASH issues* (A1) and of *working professionally and ethically* (D2) but you may not have experience working on these topics directly. You may not have experienced working on topics such as climate change or using the Sphere standards, but you should know what they are and be able to discuss them. Many of us will (hopefully) never have difficult professional or ethical dilemmas to make, but we should know about professional standards and codes of conduct.

Appreciation

At this level you have a general appreciation of the competency area. You can explain why the area is important without needing to be prompted. These are: *appreciate the issues of sustainability, inclusion and health* (C3), *appreciate the importance of CPD* (E1) and *appreciate your commitment to the sector* (E2). These expect you to have a positive attitude to these areas and an intention to support them when possible.

For each of the levels below “ability”, there should be other people who are more expert in these areas than you are. You can work with them to complement your skills. For example, WASH staff are not expected to be experts in issues of inclusion, but should know that the issue is important. There are other professionals outside of WASH who are competent in the area of inclusion and are able to give advice. WASH professionals should be able, however, to put the principles of inclusion into practice within the area of WASH. Similarly, inclusion professionals should know something about the importance of WASH. The two groups should share some common understanding and their skills should complement each other.

Building competence

New entrants to the sector will build their competence over time. For the areas that require “ability”, individuals will go through the stages of being aware of the topic (appreciate), then learning about it (knowledge). Once they know about a topic, they can put it into practice (experience) for a while before becoming confident that they can do the work unsupervised (ability). People will not progress evenly through all the levels at the same rate as they will have more opportunities for training and experience in some area compared with others. Indeed, some of the “appreciate” and “knowledge” competencies may take longer to achieve as opportunities for progression may be rarer.

This framework defines the minimum standards of competency. This does not mean individuals will stop developing in those areas. You may find that your level of competence will exceed these thresholds as you gain experience and expertise in a certain area of work. Some people may go beyond “ability” to become “expert” in some areas. Expertise is gained after extensive experience and additional study. It is unlikely that many people will be expert in more than one area.

The following table presents the level of competence that has been defined under this framework. As you build knowledge and gain experience in each of these competency areas you will be able to recognise your current level of competency, and how close you are to meeting the threshold.

Table: Levels of competence

Competency \ Level	Appreciation	Knowledge	Experience	Ability
A1. Knowledge of wider issues				
A2. Ability to address changes in your sector				
B1. Ability to analyse & evaluate WASH problems				
B2. Ability to solve problems by options				
B3. Ability to anticipate, adapt & manage changing contexts				
B4. Ability to plan, implement & monitor solutions				
C1. Ability to manage resources effectively & efficiently				
C2. Experience of Health, Safety & Wellbeing				
C3. Appreciate the issues of sustainability, inclusion & health				
C4. Experience of quality enhancement/ assurance				
D1. Ability to communicate effectively				
D2. Knowledge of working professionally and ethically				
E1. Appreciate the importance of CPD				
E2. Appreciate your commitment to the sector				

The Global Framework

The framework for WASH in low-resource contexts is based on a global set of competencies for water and environmental management. This goes beyond WASH to include topics such as water resource management, environmental science and environmental assessment. It was developed by the Chartered Institution of Water and Environmental Management.

The Chartered Institution of Water and Environmental Management - CIWEM

CIWEM represents and supports a community of thousands of members and organisations in over 89 countries who are dedicated to improving water and environmental management for the benefit of the public.

CIWEM has a history of working in environmental management dating back to 1895, when the Institution of Public Health Engineers was formed. In the succeeding decades, engineers, scientists and other professionals came together to combine their expertise across a broad range of environmental disciplines. The present-day Institution was formed in 1987, when the Institution of Public Health Engineers merged with the Institution of Water Engineers and Scientists and the Institute of Water Pollution Control to form the Institution of Water and Environmental Management.

CIWEM aims to work towards a safer, more sustainable world. Their mission is to build a global community of water and environmental professionals dedicated to working for the public benefit.

As an independent charity championing professional standards, impartiality and the use of scientific evidence in the management of the environment, CIWEM supports:

- Highly qualified water and environmental managers, engineers and scientists who are recognised globally for their professional expertise and conduct.
- Protection of the public from pollution, environmental destruction and natural hazards through the promotion and sharing of best practice.
- Application and scientific rigour and impartiality to plans and policies ensuring the best outcomes for society now and in the future.

CIWEM culture and organisational strategy is founded upon two principles: being relevant and accessible to all.

<https://www.ciwem.org>

2. Assessment guidance

This briefing note presents how to assess if an individual meets the competencies in the framework. It describes:

- **self-assessment**, led by the individual, for which the support and review of a peer or mentor is encouraged, and
- the process for conducting a more **formal assessment**.

Self-Assessment

Step 1: Consider your career pathway and goals

Before commencing an assessment of your WASH competencies, consider what your career goals are and the career pathway you intend to follow. If you plan to work in the WASH sector in low-resource settings for several years, then this framework is a useful tool to guide your career development. If you are unsure how much of your career will be spent supporting WASH initiatives in low-resource settings, following this competency framework should still be of value to you. This is because the competency descriptions were originally based on global settings and therefore should remain applicable. Using this framework may help you familiarise yourself with similar approaches used in better resourced settings. If you intend to specialise in one area of WASH seeking to reach a high level of expertise or if you are planning to move into management of work beyond the WASH sector, this framework may still be relevant to you, but you may not want to follow every detail.

Demonstrating that you are competent does take time. It requires you to gain relevant experience across a broad range of knowledge and skills. It requires you to dedicate time to learning and developing a better understanding your sector beyond your immediate area of work. You may need to attend courses or carry out independent study. You may have to do some extra work, seek a secondment or carry out voluntary activities to demonstrate some competencies that lie outside your current employment.

You will need to keep a record of your activities and create opportunities to gain relevant experience. Trying to remember events a long time after they have occurred is hard. You will benefit from setting some time aside on a regular basis to document your experiences and progress. You may want to gather photos, project assessments, reports and evaluations that you can use as evidence of your progress.

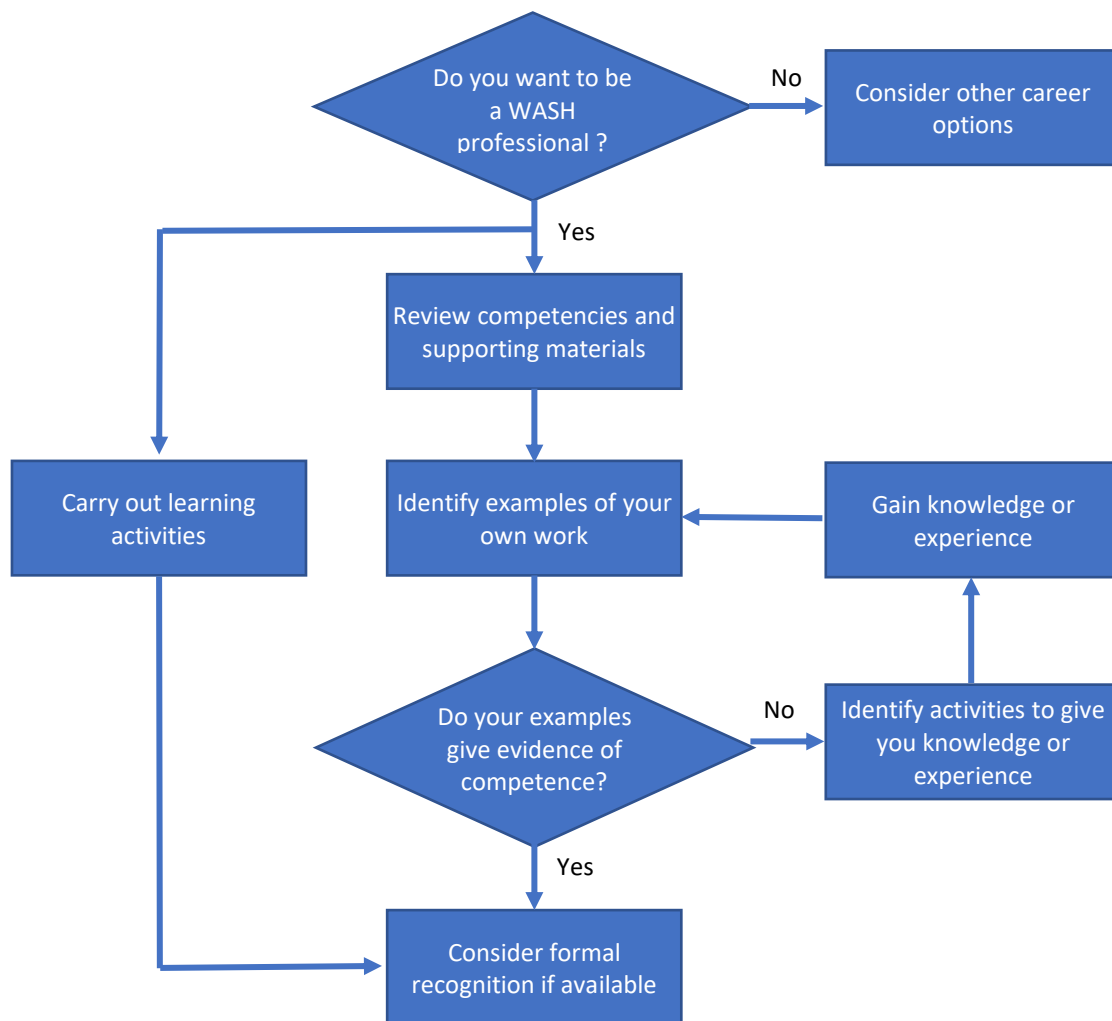
If you are prepared for this investment in time and effort, then carry on.

Step 2: Familiarise yourself with the framework and supporting materials

The framework consists of fourteen competencies grouped around five broad themes. The competency descriptions describe how you can show that you can operate independently in that competency area. The competency descriptions are broad. You should be able to apply them to any discipline within WASH. The framework uses four **levels of competence** from a level of appreciation up to the highest level of ability. The level of competence varies for different competencies. Some competencies will require you to demonstrate appreciation or knowledge in the competency area. Others will require you to demonstrate experience and ability. These four levels represent how your knowledge and experience builds over time.

As you become familiar with the competency descriptions you will appreciate how, when combined, they present the broad range of knowledge and skills that you require as a WASH practitioner to operate successfully, efficiently and independently. You will probably be able to quickly identify the competency areas that you feel confident you can demonstrate. For other competencies your relevant experience may not be as obvious. Look at the supporting materials. These provide advice, examples and templates that may help you.

To gain a better understanding of your own experience it can be helpful to work through the assessment process with a peer, mentor, or at the same time as other colleagues. Receiving external perspectives on your work experience may help you appreciate how and where you can demonstrate the competencies.



The self assessment process

Step 3: Identify examples and assemble evidence

You will need to provide examples from your experience that illustrate how you meet the competency in your area of work. You may find it helpful to identify examples that you can use for each competency, before preparing the details of each example. This may show you which competencies you find easier or more difficult to identify examples for. You will not be expected to identify a single piece of work or project that covers all the competency areas. In fact, you are encouraged to use a range of examples from different parts of your work. This will help demonstrate the breadth of your knowledge and experience.

The layout of the competencies does not represent the order in which they should be completed. You can work on them in any order and can work on different competencies across all levels simultaneously.

When preparing your examples you should collect evidence that demonstrates the competency requirements. You may want to refer to project assessments, reports, drawings, photographs and evaluations. You may want to collate communications that confirm the work and level of responsibility you had from previous or current employers and/ or clients. When preparing your examples you should be using the competency description as your primary reference. The application to low-resource settings gives more description and you may find it helpful to use the indicators of achievement as prompts.

Ideally, you should be preparing a written record of your examples. It is acknowledged that for some people it can be easier to recount experiences orally. You are encouraged to discuss your examples with a peer or mentor as part of this process. Be sure to have a way of making notes from these discussions that you can then write down.

As this is an assessment of your individual abilities, you will need to use your examples to describe your **personal contribution** towards each competence. One challenge is writing about yourself, rather than a project, your team or your organisation. The examples you provide need to be presented in the “first person” – “I did this”, not “we did this” or even “this was done”. If you were working as part of a team, it is important that you highlight what your role and contribution was. Your evidence needs to be based on what you can do (or know, or are aware of), rather than repeating current practice or organisational policy.

A good approach is to use “STAR”, with a focus on the last two elements.

- **Situation** – what was the context?
- **Task** - what needed to be done?
- **Action** – what did you do?
- **Result** – what was the outcome?

It is good, but not easy, to write about “failures”. Showing you can learn from mistakes and find out why something went wrong demonstrates your professionalism. It is one way of illustrating your experience and personal development.

Any formal review should be carried out by WASH professionals. They should have already demonstrated that they can meet the WASH competencies. You do not need to explain issues such as the SDGs, the F diagram or the impact of WASH on socially excluded groups as they will already know about these issues. Some background may be needed to give some of your examples context, such as the size of teams or aim of any projects.

Step 4: Review your examples with a peer or mentor

Once you have prepared your examples you can ask for feedback from a peer or mentor. They will consider the extent to which they judge that you have demonstrated the competency to the required threshold level from the evidence that you have provided. A different perspective can help you appreciate both your strengths and gaps in knowledge and experience. A third party can help you get a better understanding of what the competency description means for your area of work.

A peer or mentor will likely have questions that they want you to answer. Noting down their feedback, questions and your responses will help clarify, confirm, and provide the evidence the reviewer considers necessary for demonstrating the competency area. You may want to add these details and clarifications to your written record. In some cases, you may realise that the example you had prepared is better placed under a different competency area or could be used for several competency areas. The exchanges with a reviewer may mean that completing the evidence is an iterative exercise, producing several versions before being complete.

The process of working through a peer or mentor review is good preparation for a more formal assessment of your competencies.

Step 5: Judge your current level of competence

Once you (and your mentor) judge that you have provided relevant information and evidence for each competence, you will each need to determine the level of competence you have achieved for each competency area. Each competency area has a threshold set at a certain level that you need to demonstrate. You could be above the level of competence needed, so if you can show that you have experience of doing something, it can be assumed you appreciate and know the topic as well.

You may think you are competent in an area, but you need to **prove** it to others. At the start of our careers, it is easy to overestimate our abilities as we are not aware of the relevant issues. Later in our careers we often underestimate our competence as we become much more aware of the breadth and depth of our areas of work.

Step 6: Identify and plan development activities

Your self-assessment will indicate the competency areas that you will need to work on to reach the threshold level required and those that you can already demonstrate adequate competence.

To help you gain the additional knowledge, experience and evidence required, you need to identify suitable actions and development activities. You may need to gain an understanding of an area that is new to you. You may need to deepen your knowledge in an area you are already familiar with. For other areas you may have the understanding and knowledge but lack the practical experience. It might be that you feel confident in an area but lack the evidence to demonstrate this.

Your mentor or peer may be able to make relevant suggestions based on their experience. To help you build these activities into your schedule, estimate how much time these activities will require, and identify any resources you may need to complete them. You may find it helpful to set a date by which time you expect to have completed these activities. Given that these activities will benefit you as an individual beyond your immediate job tasks, you may be expected to spend time outside of your normal working hours to progress these actions. You may need to identify or obtain resources, such as funding, and/ or agreements from line management to carry out these activities.

Maintaining competence

It is recommended that you identify activities that will help consolidate the knowledge and experience you have already gained. This will help you maintain these areas of competence. Much like learning a language, you may find that you need to actively practice each competency area so as not to lose the skills that you have developed. Continuing Professional Development can help you keep up to date in areas that may be developing through research and innovation.

Step 7: Record your continuing professional development (CPD)

As you complete your development activities, you can add them to your record of Continuing Professional Development (CPD). As a professional, you are expected to demonstrate how you have maintained a broader awareness and understanding of the emerging issues and trends influencing your sector through keeping records of your lifelong learning. This may include detailing workshops, conferences and trainings you have attended. It could include journal articles, policy and guidance documents that you have studied.

Being formally assessed

Completing the self-assessment will give you a strong appreciation of how close you are to meeting the competency framework. The feedback you receive from a peer or mentor will help you identify the areas where you can comfortably demonstrate competence, and the areas that you need to work on. Ultimately, it is only other experienced practitioners working in WASH who can judge whether you are demonstrating the required competency. That is why we recommend users to move on to the next step of having their competencies more formally assessed by others.

Note that at present, there is no established formal independent assessment process for this competency framework. Nonetheless, you can use the evidence you collect as a way of demonstrating your knowledge and abilities to employers, present and future, and other stakeholders, such as donors and clients. At the time of writing it is hoped that such validation / accreditation will be possible in the future. If you were to be assessed in this way, you can expect the following steps to be followed:

Step 1 – Identifying assessors

The people assessing an individual should have:

- experience demonstrating the competencies found in the framework beyond an independent level of working (i.e. over several years),
- knowledge and experience of the sector of WASH as it is relevant to low-resource settings, which ideally should include the particular field of work of the individual (though this may not always be practical),
- no prior connection with the candidate and their employer,
- some training on the assessment process, and
- experience of having had their own competencies assessed, or of having already assessed the competencies of others.

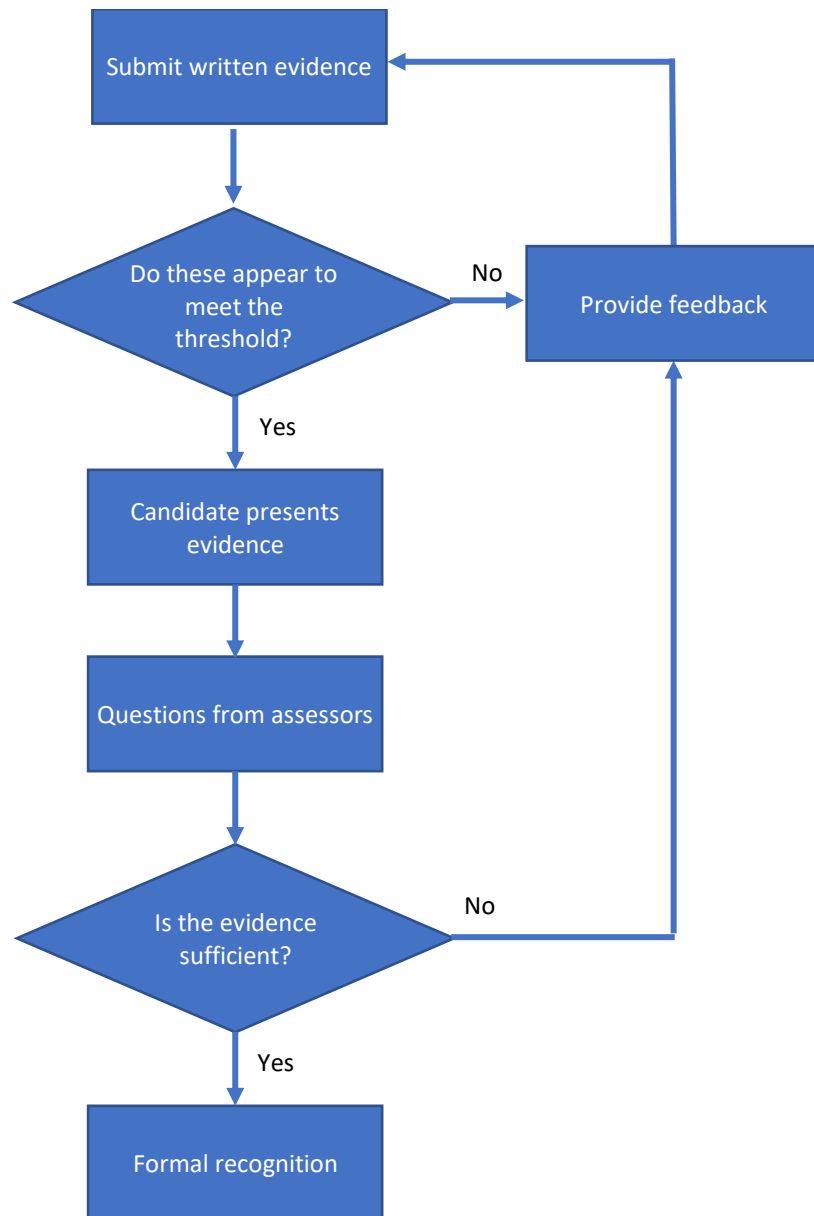
To help create a well-balanced profile, three people should form a panel of assessors. This approach can help make the assessment process be as accurate and representative as possible. As many of the judgements are subjective, having three people can help provide a range of views, rather than relying on the judgement of an individual. Several people can help manage the tasks required during an assessment. This will include chairing the session, keeping notes, keeping to time and leading on questioning. Assessing someone fairly is a skill, so having assessors with prior training and experience is valuable.

Step 2 - Preparing for the assessment

The assessment can be based on a variety of supporting evidence, such as:

- a series of personal examples illustrating how you meet each competence,
- an extended, narrative career report (this is like a CV but with more description of individual responsibilities),
- project documents such as proposals, plans, assessments, reports and photographs,
- an in-depth report on a specific project,
- a record of training and education (including any relevant qualifications),
- a presentation and
- an interview.

The extended narrative of the individual's career will help the assessors better frame and understand the examples they provide.



The formal assessment process

Step 3 - Examining the evidence

Some of the evidence can be provided in advance. When reading through these examples assessors should consider:

- If the candidate gives enough detail on their personal contribution as an individual?
- If they think some of the examples could have gone under other competency headings
- If they think the candidate reach the required standard.

If it is obvious from the evidence that the required level of competency has not yet been reached, then the assessors can provide feedback on the areas that need more experience or better evidence.

The assessment of an individual should not be based on written records alone. Holding a discussion or conducting an interview with the individual provides an important opportunity to probe and better appreciate their experience and how it relates to the competency descriptions. As communication and presentation skills are part of the competencies that are hard to judge from a

report, having the candidate present an overview of his or her career and / or a detailed presentation of a project is a direct demonstration of their abilities. This is a good way to start any assessment as the assessors can get to know the candidate and their career.

The assessors should encourage the individual to provide evidence demonstrating their knowledge and abilities and show how they match the required competencies. If the candidate has submitted written examples or presented them verbally, then probing for more information based on these is a good start. Probing questions “help to clarify meaning and encourage participants to elaborate on their thoughts”¹, providing the assessors with the evidence they need to reach a judgement. CAWST provide the following examples of probing questions that could be used.

- Could you expand/ elaborate on...?
- Is there anything else you would like to add?
- What are the reasons for that?
- In what way does this relate to...?

The assessors can use the indicators of achievement as probing questions, by reformulating the statement in part, or full, in question form. For example, under the competency B1 you could ask:

- How did you consider the different factors in your analysis of the problem, such as social, economic and environmental?
- Assessors need to make sure that the candidate is describing their **personal contribution** when giving their examples. The assessors need to distinguish the contribution that the individual made, rather than what the team or organisation achieved.

It is better not to ask direct questions but invite examples of personal experience. The candidate should not have learnt “answers” for each competency, so rephrasing questions can help draw out experience or knowledge. If answers are not clear, then asking a similar question or requesting other examples can help provide more evidence. Only when a candidate has repeatedly avoided talking about a topic would you really address a direct question to make sure that they have understood what is being asked of them.

As the candidate presents their example and responds to questions the assessors should be comparing these with the competency descriptions. The assessors should be familiar enough with the competency descriptions to be able to inform the candidate if their example would be better placed to demonstrate another competency than the one they are describing. The assessors may find it helpful to mark down when the candidate has demonstrated any of the indicators of achievement. This is where having several people can be helpful during the assessment process. Keeping a note of which indicators have been demonstrated can help keep track of the evidence provided and the areas that may not have been covered.

Step 4 – Judging competency

Once the individual has been able to express their full experience and there are no more probing questions, the candidate should leave the room while the assessors reach a conclusion of the candidate’s competency based on the available evidence. This is where having three assessors is useful as they can discuss the evidence and agree on a verdict. This is not an exact science. Someone with better knowledge or experience relating to the candidate’s area of work may have more influence than people who are not so familiar with the issue. They may notice errors that the other assessors did not notice.

The assessors can compare notes to reach a consensus on the level of competency demonstrated by the candidate for each competency area. Achievement of the competency should be primarily based on the competency description. Combined, the evidence provided should give the assessors the

¹ CAWST, 2013. *Trainer Essentials : Effective Questioning and Think Time* [online]. Calgary, Canada: CAWST. Available from: https://resources.cawst.org/trainer_essential/43c87bf3/effective-questioning-and-think-time.

confidence that the individual is competent to work independently for this competency area. The assessors can then consider whether the candidate has satisfied the framework as a whole, by meeting the threshold level for each competency area. This is where judgement, based on experience and knowledge of what is required for the sector, will be used to reach a conclusion.

The assessors can either determine that the candidate meets or fails to meet the competency framework. The outcome for the candidate is pass or fail. This framework does not use any scoring or a points-based system.

If the candidate is informed that they do not meet the levels required by this competency framework, they can expect to receive feedback from the assessors on the areas where more evidence, knowledge or experience is required. Candidates are reminded that gaining the knowledge and experience required to meet the thresholds in this competency framework can require years of experience over several projects and through various roles.

Regardless of the outcome of the assessment, the candidate should be encouraged that they are already demonstrating their commitment to quality by embarking on this process.

3. List of suggested development activities

Introduction

From your individual assessment you may conclude that you do not yet have sufficient appreciation, or knowledge or experience in all competency areas. In this document you will find lists of suggested activities that can help you deepen your appreciation and knowledge, and build up your experience, for each of the competency areas included under this framework.

Four levels of competence are used in this framework: **appreciation, knowledge, experience** and **ability**. Their definitions can be found in the framework document itself. Different levels of competence have been assigned to the different competency areas. The suggested activities only go up to the minimum required threshold for each competency. Where there are several levels, you should be able to demonstrate all levels, not just the highest level.

If you are new to the WASH sector or unfamiliar with operating in low-resource settings, then you may find these suggested activities a helpful way of planning your professional development. If you already have several years' relevant experience, you may find these suggested activities a helpful way to address the gaps in your knowledge and experience that you have identified through the self-assessment process, as you work towards the thresholds set by the framework. Your mentor and peers should also be able to recommend activities and resources to you based on their experience. Be wary of the bias and limitations that search engines and generative artificial intelligence (AI) may contain in the examples they provide.

You can act where you identify these gaps. This may require several steps. If you are not **aware** of the competency area, you may need to find various publications or websites so you can find out more. Reading a variety of these (rather than just a single source of information) should improve your **knowledge** in the competency area. There may be relevant courses available. If there are several early career professionals working in the same location, then having discussion groups or giving presentations on different competency areas can improve your knowledge in each. You can also ask questions to more experienced professionals.

Just having knowledge does not mean you can deliver good work. You need to gain **experience** and put the knowledge into practice. This can be dependent on having opportunities to work in this area. This may not always be possible (at least in the short term) within your current job description, especially if you do not already have experience in that area! The process of getting experience across all competencies may take several years, taking advantage of opportunities as they arise.

There are other ways of creating opportunities, such as:

- Talking to your employer (perhaps as part of an appraisal) to identify opportunities,
- Job shadowing someone carrying out the area you want to get experience in,
- Getting a secondment to a partner organisation, perhaps as part of a job swap for a few months. This can be useful for designers and operators to gain experience of each other's roles,
- Do some voluntary work – your experience does not have to be in employment, or
- Change job, as this may be better for your longer-term career.

Over time, the experience will give you confidence, so you are **able** to carry out the work unsupervised and with confidence. Increasing your experience and knowledge further will give you **expertise** in different competencies, allowing you to specialise or train others. This higher level is beyond the scope of this framework.

As you identify relevant activities, estimate how much time you will be required to complete them, and the timescales which you think you will need. You may need to identify or obtain resources, such as funding, and/or agreements from line management to carry out these activities. You should expect to spend time outside of your normal working hours and commitments to progress your professional development. You should keep a record of the activities you complete in your *Continuing Professional Development (CPD)* record. Furthermore, you may wish to integrate these activities into the templates used by your organisation.

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A. Existing and emerging factors influencing water, sanitation and hygiene issues

A1. Knowledge of wider social, economic, health and environmental issues and trends

Suggested activities for deepening appreciation and knowledge

- Study global frameworks and standards — SDGs, the Sphere Handbook, the WHO drinking water quality guidelines, or regional environmental policies.
- Look at the websites of key actors such as the Global WASH Cluster, the WHO, the Joint Monitoring Programme [JMP], and government ministries.
- Read the Humanitarian Needs Overview and Humanitarian Response Plans for the countries where you operate to better understand the adverse impacts of limited WASH services, the wider needs of affected populations across sectors, and how these needs change depending on the phase of the humanitarian response.
- Follow updates from key organisations and networks (e.g. ReliefWeb, Global WASH Cluster).
- Complete a module on Humanitarian Essentials, such as those offered online through the Humanitarian Leadership Academy's Humanitarian Essentials Pathway at Kaya.
- Complete a short online course on an introduction to humanitarian WASH coordination. UNICEF has a global WASH Cluster training pathway at their Agora site.
- Discuss how WASH services are affecting populations with community leaders and users.
- Keep a “sector influences” journal — when a major outbreak, climate event, or policy change occurs, document how it affects WASH priorities and operations.
- Attend national or regional WASH sector coordination meetings or cluster trainings to understand institutional structures and inter-agency roles [many are now held online].
- Participate in webinars or briefings from organisations such as the Global WASH Cluster, WHO, UNICEF, or REACH on global trends and priorities.
- Conduct an informal mapping exercise with your team to identify key actors and coordination mechanisms at local, national, and international levels.
- Interview colleagues from other sectors (e.g., health, education, protection) to explore how WASH supports their outcomes.
- Volunteer to represent your organisation in a multi-agency working group, where you can observe decision-making and learn about issues influencing your sector.

A2. Ability to develop strategies or plans to address changes in your sector

Suggested activities for deepening appreciation and knowledge

- Complete a short online course on climate change / climate resilience to better understand how these factors are influencing the WASH sector [e.g. UN-CC Learn, UNICEF and TU Delft].
- Complete a short online course on *Innovation Essentials* to learn how to develop and support innovation in your work, or consult a sector guide such as ELRHA's Humanitarian Innovation Guide
- Attend or watch back recordings from sector conferences and webinars on research and emerging technologies, such as the Emergency Environmental Health Forum [EEHF].
- Study WASH strategy documents to identify where there are gaps in your knowledge and organisation's approach (e.g. institutional donors such as ECHO, FCDO and UNICEF, and coordination mechanisms such as the Global WASH Cluster and the German WASH Network).
- Liaise with individuals and organisations working in WASH research or innovation, to share stories of challenges, emerging technologies and innovation.

Suggested activities for gaining experience

- Shadow a senior colleague or manager during strategic planning sessions to observe the influence of evidence and stakeholder perspectives.
- Conduct an after-action review or lessons learned workshop after a project or emergency response, to better understand how effective strategies have been in addressing sector changes.
- Assess current ways of working in your organisation or sector to identify bottlenecks, and areas of waste and inefficiency.
- Contribute to or set-up a mini research project to assess how a new approach could help future strategy (e.g. trialing a new or emerging technology).

B. Planning, implementation and evaluation of work**B1. Ability to analyse and evaluate water, sanitation and hygiene problems***Suggested activities for deepening appreciation and knowledge*

- Review assessment tools and reflect on their relevance to your context, such as
 - HARVEY, P.A., BAGHRI, S., and REED, R.A., 2002. Emergency Sanitation. Assessment and Programme Design. Loughborough University, UK: WEDC,
 - HOUSE, S. and REED, R.A., 2004. Emergency Water Sources: Guidelines for selection and treatment . 3rd edn. Loughborough University, UK, WEDC.
 - WASH'Em – Designing handwashing behaviour change in emergencies <https://washem.info/en>
 - WASH FIT – an improvement tool for healthcare facilities <https://www.washinhcf.org/wash-fit/>
 - UNHCR Needs Assessment Handbook <https://www.unhcr.org/handbooks/assessment/general/needs-assessment-handbook>
 - IASC Operational Guidance for Coordinated Assessments in Humanitarian Crisis
 - ALNAP's Humanitarian Needs Assessment: The Good Enough Guide
- Identify and study a range of data collection and analysis methods including participatory approaches, (e.g. Emergency WASH Compendium publications <https://www.emergency-wash.org/> .
- Complete a short online course on Needs Assessments to learn the fundamentals of planning and carrying out assessments, such as the HLA's Introduction to Needs Assessments in Emergencies on the Kaya platform .
- Complete a short online course on Monitoring Evaluation and Learning (MEAL) or obtain certification using guidance such as MEAL DPro <https://pm4ngos.org/methodologies-guides/meal-dpro/> to develop your knowledge and practice of collecting and analysing data .
- Complete a short online course on Data Collection, Protection and Management to learn how to ensure data is organised and stored safely and ethically.
- Liaise with peers in other organisations to compare how each conducts needs assessments, identifying limitations, challenges and best practice.

Suggested activities for gaining experience

- Shadow an experienced colleague conducting assessments to observe stakeholder engagement and data verification techniques.
- Join a joint assessment exercise with local authorities, Cluster partners and/or peer organisations.
- Practise triangulating data (e.g., comparing site observations with community feedback and organisational or government reports and statistics).
- Review needs assessment reports to identify the perspectives of different stakeholders and whether there are any stakeholders' points of view missing.
- Invite a more senior member of staff review your work to check the quality of the data and data analysis you have used.

B2. Ability to solve problems by identifying, developing & evaluating options

Suggested activities for deepening appreciation and knowledge

- Carry out a *problem tree* and *solution tree analysis* for the solution you are developing to help understand the extent to which the solution meets the intervention's objectives.
- Read relevant WASH standards, specifications, codes and guidance.
- Create a collection of WASH compendia, design guides and handbooks.

Suggested activities for gaining experience

- Maintain a personal record of WASH designs, case studies, and local innovations that have worked (or failed) in your context.
- Review *post-project evaluations* to analyse why certain technical or behavioural options were successful or not.
- Conduct a stakeholder analysis of the potential solutions, identifying how the needs, interests and perspective of each stakeholder are affected.
- Shadow a project manager or technical specialist as they weigh-up costs and benefits of various solutions during problem solving and project planning.
- Liaise with procurement or logistics teams to learn how design choices affect implementation feasibility and cost control.

B3. Ability to plan & implement solutions & monitor their continuing performance

Suggested activities for deepening appreciation and knowledge

- Complete a short online course on Monitoring Evaluation and Learning (MEAL) or obtain certification using guidance such as MEAL DPro <https://pm4ngos.org/methodologies-guides/meal-dpro/> to develop your knowledge and practice of selecting indicators, measuring performance and evaluating project outputs and outcomes.
- Study example contracts and contract management guidelines.
- Liaise with peers and colleagues to learn about best practices and potential issues when establishing contracts with third parties.
- Learn how to use project management tools to plan and track progress and facilitate making changes to plans.
- Study the indicators used in sector-wide guidance, assessing how feasible they would be to monitor in your context (e.g. donor indicator guidance, indicators from the Sphere handbook).
- Study and critique the operational manuals and handover notes issues on previous projects, liaising with service users and the project team where possible.
- Meet with diverse stakeholders to present, review and discuss progress (e.g. WASH service users, donors, partners, local authorities).

Suggested activities for gaining experience

- Conduct visits to warehouses and sites with logistics staff to better understand how the use of materials and equipment is tracked.
- Participate in a peer review of project plans or monitoring reports to strengthen critical appraisal and planning skills.
- Join a multi-partner coordination meeting or cluster platform to understand how implementation progress is tracked across agencies.
- Maintain a personal "implementation tracker" — noting lessons from delays, cost overruns, or quality challenges and how you resolved them.
- Review real project reports or logframes from previous assignments and evaluate what worked or didn't in planning and execution.

B4. Ability to anticipate, adapt and manage changing contexts

Suggested activities for deepening appreciation and knowledge

- Study Project Cycle Management (PCM) or Adaptive Management approaches that explain planning, monitoring, and response adjustments, using guidance such as the Project DPro Guide <https://pm4ngos.org/methodologies-guides/project-dpro/>.
- Read guidance, manuals and case studies on WASH provision at schools and health centre facilities, such as the WHO's publications on standards for low-cost settings.
- Read publications on WASH for vulnerable groups such as women, children and people with disabilities (e.g. UNICEF's Disability Inclusive WASH Practices, WEDC's WASH for people with disabilities and other vulnerable groups, and WaterAid's case studies).
- Study assessments of future risks and trends in the areas and sectors where you work (e.g. as described under the Humanitarian Needs Overview).
- Complete a short online course on Humanitarian Futures and Foresight to better understand how to anticipate and plan for disruptions to your organisation's work.
- Complete a short online course on adaptive management, such as through the FIELD programme offered on the Kaya platform.
- Check humanitarian coordination platforms (e.g. ReliefWeb, Global WASH Cluster) to stay aware of evolving contexts, reading situation reports.
- Liaise with other organisations and peers to study case studies of how common WASH solutions have been adapted to a variety of contexts.
- Interview colleagues from other sectors (e.g., health, education, protection) to understand how different sectors adapt to changing contexts.

Suggested activities for gaining experience

- Participate in simulation exercises or contingency planning drills that test WASH systems during crises (e.g., cholera outbreak, displacement, or flooding).
- Keep a "context tracker" journal, noting key external changes (e.g., funding fluctuations, epidemics, droughts) and reflecting on their implications for WASH delivery.
- Conduct informal scenario discussions with your team ("What if a major flood hits our service area next month?") and identify flexible options.
- Shadow a programme or emergency coordinator during a response phase to observe rapid adaptation in decision-making.
- Review past projects to identify how plans were adapted mid-course — what worked, what didn't, and why.
- Meet with diverse stakeholders to present, review and discuss progress (e.g. WASH service users, donors, partners, local authorities).
- Conduct a risk analysis with partners, local authorities to identify hazards and vulnerable service users.

C. Safe and effective working practices

C1. Ability to manage resources effectively and efficiently

Suggested activities for deepening appreciation and knowledge

- Learn how to use *project management tools* to plan and track progress and facilitate making changes to plans including Gantt Charts and budget management tools.
- Complete a short online course on finance, grant and budget management and accounting (e.g. from the HLA's FIELD programme available through the Kaya platform, or from Humentum's budgeting essentials course).

- Study guidance and examples of value for money (VfM) analysis as used in the humanitarian and development sectors (e.g. FCDO’s Sustainability and Value for Money in WASH, IRC’s step-by-step guidance on VfM analysis for WASH programmes).
- Study lean approaches that evaluate the waste and efficiency of operations, to identify ways for improving efficiency and effectiveness of activities.
- Review donor guidelines or organisational policies on cost efficiency, procurement ethics, and financial accountability.
- Complete a short online course on team management such as performance management, remote working, handling difficult conversations and using various methods to organising workloads such as scrum teams (e.g. through online courses available through the Kaya platform).

Suggested activities for gaining experience

- Meet with diverse stakeholders to present, review and discuss progress (e.g. WASH service users, donors, partners, local authorities).
- Lead or co-lead the development of a detailed project budget and procurement plan, ensuring all key inputs are costed and justified.
- Shadow procurement or logistics staff during supplier selection and quality checks.
- Map informal and local WASH markets (skilled labour, suppliers) to better understand cost, quality and delivery capacity.
- Conduct training needs assessments (TNAs) for yourself and your team based on project and sector priorities (CAWST provide guidance in their Trainer Essentials on TNAs).
- Develop and use distress plans to more readily notice when you and your team are experiencing stress, establishing actions to help deal with stress as it arises.
- Research learning and training opportunities that meet the needs of yourself and your team, consulting training catalogues (e.g. UNICEF’s training catalogue).
- Establish opportunities to share learning with and from other organisations through formal networks such as the WASH Cluster, or informal exchanges.

C2. Knowledge of the promotion and application of Health, Safety and Wellbeing

Suggested activities for deepening appreciation and knowledge

- Study health, safety and wellbeing legislation, policies and guidelines relevant to the WASH sector (e.g. guidelines on infection protection and control [IPC] in healthcare settings and disease outbreaks), and how these apply to your work.
- Study guidance on self-care of staff such as Plan International’s Manual for Humanitarian Aid and Development Workers, recording practical actions you can apply with yourself and team.
- Complete a short online course on safety and security before deployment, or personal safety and security (e.g. through online courses available through the Kaya platform).
- Enrol in first aid and basic life support training relevant to the context where you work.

Suggested activities for showing application

- Conduct regular risk assessments ahead of work activities.
- Review and develop standard operating procedures (SOPs) for work activities, ensuring health, safety and wellbeing requirements have been included.
- Maintain a personal health and safety checklist for every deployment or site visit, including emergency contacts and local hazards.
- Keep a wellbeing journal — note triggers of stress or fatigue, and how you mitigated them.
- Discuss health and safety challenges openly in team meetings, normalising a culture of care and prevention.
- Share lessons from past incidents (“near misses”) to build learning and reduce future risks.

C3. Appreciate issues of sustainability, inclusion and health

Suggested activities for deepening appreciation and knowledge

- Complete a short online course on safety and security before deployment, or personal safety and security (e.g. through online courses available through the Kaya platform).
- Conduct an audit of your work environment and organisation, to review how sustainable and inclusive current practice is, identifying improvements that could be made.
- Conduct a “*sustainability audit*” of a completed WASH project — assess whether services are environmentally sound, inclusive, and maintained over time.
- Study guidance notes on protection, gender, inclusion and sustainability (e.g. guidance notes from IRC, World Vision and WaterAid).
- Complete an *Environmental Impact Assessment (EIA)* or *Sustainability Appraisal* course to understand tools for assessing long-term effects of WASH projects.
- Work with a mentor or inclusion advisor to review project designs for equity and environmental considerations.
- Organise the promotion of healthy behaviours linked to international days, or cultural events (e.g. global handwashing day).

C4. Knowledge of the promotion & application of quality enhancement & quality assurance

Suggested activities for deepening appreciation and knowledge

- Study quality standards and frameworks —the Sphere Handbook, the WHO drinking water quality guidelines, the Core Humanitarian Standard, guidance and best practice for healthcare settings and schools.
- Study guidance and best practice on water quality testing (e.g. CAWST’s manual and learning materials), and measuring behaviour through observation and knowledge, attitude and practice surveys (KAP).
- Complete a short course on Water Quality Assessment and Monitoring (or equivalent), such as courses offered by IHE Delft and CAWST.
- Liaise with procurement and logistics staff to identify material and equipment quality checks, their safe transport and storage.
- Share your own “failure story” within a safe learning space or community of practice to contribute to collective improvement, and to promote a culture of acknowledging failure.
- Conduct a peer audit or cross-site inspection with another team to share good practices and identify areas for improvement.
- Work with a mentor to review and update SOPs (standard operating procedures) or technical specifications for your programme.
- Participate in a post-construction inspection or commissioning process to understand quality control from design to operation.

D Communication and professional ethics

D1. Ability to communicate effectively

Suggested activities for deepening appreciation and knowledge

- Complete a short online course or attend a workshop on report and proposal writing, donor communication and participatory approaches (e.g. through those available through the Kaya platform).
- Study donor and organisational guidance and best practice for report and proposal writing.
- Ask a peer, line manager or mentor to give you feedback on the reports you submit, and the instructions and messages you give.
- Study the use of plain English when communicating, assessing your messages for clarity.
- Study guidance on facilitation skills such as active listening, using probing questions and giving clear instructions (e.g. CAWST's Trainer Essentials – A Reference Guide for Trainers).
- Complete a short online course on responsible data management and data visualisation.
- Complete a short online course on meeting skills, effective minute writing, incorporating the use of generative AI tools (e.g. through those available through the Kaya platform).

Suggested activities for gaining experience

- Practise using active listening, effective questioning and giving clear instructions, asking colleagues to provide you with feedback.
- Keep a record of stakeholder feedback on projects, and how you and your team have responded.
- Practise explaining the technical components of your work using plain English and visuals for non-technical audiences
- Develop an *accessibility checklist* when setting-up meetings, either in-person, online or hybrid.
- Study how to use computer aided drawing tools such as AutoCAD.

D2. Knowledge of working professionally, ethically and comply with relevant codes of conduct

Suggested activities for deepening appreciation and knowledge

- Conduct a *self*-assessment of your knowledge, skills and competencies using a framework such as this one, to identify your expertise and areas of limitation.
- Identify areas of your work where you would need to seek expert advice, identifying key individuals and organisations you could consult.
- Read guidance on humanitarian principles, codes of conduct and ethics (e.g. the Sphere Handbook, the Core Humanitarian Standard, the Code of Conduct for NGO workers from the Red Cross and Red Crescent Movements, Hugo Slim's Humanitarian Ethics).
- Complete a short online course or attend a workshop on safeguarding and protection from sexual exploitation, abuse and harassment (e.g. available through the Kaya platform).
- Conduct a conflict sensitivity assessment of your work to identify aspects that may contribute to creating connections or divisions (e.g. Tearfund, Save the Children, Oxfam).
- Conduct an assessment of team dynamics with those you work most closely with, identifying the strengths and potential points of conflict.
- Complete a short online course or attend a workshop on anti-corruption and fraud prevention (e.g. through those available through the Kaya platform).

E. Professional development

E1. Appreciate the importance continuing professional development

Suggested activities for deepening appreciation and knowledge

- Conduct a self-assessment of your knowledge, skills and competencies using a framework such as this one, to identify your expertise and areas of limitation.
- Research learning and training opportunities that meet the needs of yourself and your team, consulting training catalogues (e.g. UNICEF's training catalogue).
- Develop and maintain a Personal Development Plan (PDP), such as this one, or one used by your organisation.
- Enrol in a Professional Membership Scheme (e.g., CIWEM) that requires evidence of CPD.

E2. Appreciate your commitment to the sector

Suggested activities for deepening appreciation and knowledge

- Participate in mentoring or coaching programmes, either as a mentee or mentor, structured around professional growth.
- Contribute to knowledge products such as case studies, blog posts, or lessons-learned papers.
- Join a *working group* to support the development of an initiative important to the WASH sector (e.g. TWiGs, WASH Cluster working groups, inter-agency working groups).
- Attend coordination meetings, webinars and conferences related to WASH and the wider humanitarian and development sectors (e.g. through the WASH Cluster, the RWSN, and the EEHF).
- Volunteer your time and expertise to support research initiatives (e.g. through universities).
- Take part in a sector campaign or awareness event (e.g., World Water Day, Menstrual Hygiene Day, World Toilet Day).
- Give examples of the impact of WASH interventions when in meetings with colleagues and partners working in other sectors, highlighting the contribution WASH makes to shared goals.

4. Personal Development Plan Template

Introduction

This form can be used to record evidence for competencies. It can be also used to identify further development and learning activities intended to gain the knowledge and experience required to satisfy the framework.

Under each competency definition there are various boxes that can be used:

- A written example from your experience for each competence
- Feedback on your example from a peer / mentor review
- The level of competence you have achieved as judged by you and your reviewer
- Identified development activities for advancing or maintaining your competencies

Once you and/ or your reviewer judge that you have provided all the relevant information and evidence for this competence that you can, you can each indicate the level of competence you consider you have achieved by indicating the date when it was reached. You can complete the summary table, indicating the level of competence you have achieved for each competency area.

You may conclude that you do not yet have sufficient appreciation / knowledge or experience in this competency area. You can date the lower level you have achieved to record your progress. You may find the list of suggested development activities in the supporting materials helpful. Your mentor or peer may be able to make relevant suggestions based on their career experience. To help you plan and keep track of your progress, estimate how much time these activities will require and fix a date by which you expect to have completed them. Once completed you can add the records of these development activities to your Continuing Professional Development (CPD) record.

You may conclude that you can now demonstrate the required level of competence for this competency area. In that case you can turn your attention to other competencies in the framework.

Once you have completed the assessment for each competency area, you can consider whether you have satisfied the framework as a whole. You will need to have reached the required threshold in all of the fourteen competencies to be meeting this competency framework.

By meeting this competency framework, you have demonstrated that you can operate independently, efficiently and successfully in your area of WASH in low-resource settings. It means that you are a well-rounded WASH practitioner, with both depth of knowledge and experience in your area of expertise and relevant understanding of the wider issues influencing the sector. You have demonstrated that you act professionally, recognising where you lack specific expertise and need to seek the advice of others. You can take on new tasks with confidence, as you have shown how you gain and maintain your knowledge and skills.

Template for each competency

Competency description

[This is what you are trying to demonstrate]

Your example (s)

[Set out the evidence you have that demonstrates you are competency in this area. This may need more than one example]

Feedback and questions from reviewer

[In response to your example(s), your reviewer can provide written comments]

Level of competence achieved

Threshold required <i>[highlighted as appropriate]</i>	<u>Appreciation</u>	<u>Knowledge</u>	<u>Experience</u>	<u>Ability</u>
Candidate Self-Assessment	[Date]	[Date]	[Date]	[Date]
Mentor / Peer Review	[Date]	[Date]	[Date]	[Date]

Recommended next steps and/ or suggested development activities

[Details of possible activities and suggested timings. Set a date for the next review]

Summary of competencies Enter date competency reached (DD/MM/YY)	Appreciation	Knowledge	Experience	Ability
A. Existing and emerging factors influencing water, sanitation and hygiene issues				
A1. Knowledge of wider social, economic, technical, health and environmental issues and trends				
A2. Ability to develop strategies or plans to address changes in your sector				
B. Planning, implementation and evaluation of work				
B1. Ability to analyse and evaluate water, sanitation and hygiene problems				
B2. Ability to solve problems by identifying, developing and evaluating options				
B3. Ability to plan and implement solutions and monitor their continuing performance				
B4. Ability to anticipate, adapt and manage changing contexts				
C. Safe and effective working practices				
C1. Ability to manage resources effectively and efficiently				
C2. Experience of the promotion and application of Health, Safety and Wellbeing				
C3. Appreciate the issues of sustainability, inclusion and health				
C4. Experience of the promotion & application of quality assurance & quality enhancement				
D Communication and professional ethics				
D1. Ability to communicate effectively				
D2. Knowledge of working professionally, ethically & complying with relevant codes of conduct				
E. Professional development				
E1. Appreciate the importance of continuing professional development				
E2. Appreciate your commitment to the sector				

A1. Knowledge of wider social, economic, health and environmental issues and trends

<p>Your example(s)</p>
<p>Feedback and questions from reviewer</p>

Level of competence achieved

Threshold required	<i>Appreciation</i>	<u>Knowledge</u>	<i>Experience</i>	<i>Ability</i>
Candidate Self-Assessment				
Mentor / Peer Review				

<p>Recommended next steps and/ or suggested development activities</p>

A2. Ability to develop strategies or plans to address changes in your sector

<p>Your example (s)</p>
<p>Feedback and questions from reviewer</p>

Level of competence achieved

Threshold required	<i>Appreciation</i>	<i>Knowledge</i>	<i>Experience</i>	<u>Ability</u>
Candidate Self-Assessment				
Mentor / Peer Review				

Recommended next steps and/ or suggested development activities

B1. Ability to analyse and evaluate water, sanitation and hygiene problems

<p>Your example (s)</p>
<p>Feedback and questions from reviewer</p>

Level of competence achieved

Threshold required	<i>Appreciation</i>	<i>Knowledge</i>	<i>Experience</i>	<u>Ability</u>
Candidate Self-Assessment				
Mentor / Peer Review				

Recommended next steps and/ or suggested development activities

B2. Ability to solve problems by identifying, developing and evaluating options

<p>Your example (s)</p>
<p>Feedback and questions from reviewer</p>

Level of competence achieved

Threshold required	<i>Appreciation</i>	<i>Knowledge</i>	<i>Experience</i>	<u>Ability</u>
Candidate Self-Assessment				
Mentor / Peer Review				

<p>Recommended next steps and/ or suggested development activities</p>

B3. Ability to plan and implement solutions and monitor their continuing performance

Your example (s)

Feedback and questions from reviewer

Level of competence achieved

Threshold required	<i>Appreciation</i>	<i>Knowledge</i>	<i>Experience</i>	<u>Ability</u>
Candidate Self-Assessment				
Mentor / Peer Review				

Recommended next steps and/ or suggested development activities

B4. Ability to anticipate, adapt and manage changing contexts

Your example (s)

Feedback and questions from reviewer

Level of competence achieved

Threshold required	<i>Appreciation</i>	<i>Knowledge</i>	<i>Experience</i>	<u>Ability</u>
Candidate Self-Assessment				
Mentor / Peer Review				

Recommended next steps and/ or suggested development activities

C1. Ability to manage resources effectively and efficiently

Your example (s)

Feedback and questions from reviewer

Level of competence achieved

Threshold required	<i>Appreciation</i>	<i>Knowledge</i>	<i>Experience</i>	<u>Ability</u>
Candidate Self-Assessment				
Mentor / Peer Review				

Recommended next steps and/ or suggested development activities

C2. Experience of the promotion and application of Health, Safety and Wellbeing

<p>Your example (s)</p>
<p>Feedback and questions from reviewer</p>

Level of competence achieved

Threshold required	<i>Appreciation</i>	<i>Knowledge</i>	Experience	<i>Ability</i>
Candidate Self-Assessment				
Mentor / Peer Review				

<p>Recommended next steps and/ or suggested development activities</p>

C3. Appreciate the issues of sustainability, inclusion and health

Your example (s)

Feedback and questions from reviewer

Level of competence achieved

Threshold required	<u>Appreciation</u>	Knowledge	Experience	Ability
Candidate Self-Assessment				
Mentor / Peer Review				

Recommended next steps and/ or suggested development activities

C4. Experience of the promotion & application of quality assurance & quality enhancement

<p>Your example (s)</p>
<p>Feedback and questions from reviewer</p>

Level of competence achieved

Threshold required	<i>Appreciation</i>	<i>Knowledge</i>	Experience	<i>Ability</i>
Candidate Self-Assessment				
Mentor / Peer Review				

<p>Recommended next steps and/ or suggested development activities</p>

D1. Ability to communicate effectively

<p>Your example (s)</p>
<p>Feedback and questions from reviewer</p>

Level of competence achieved

Threshold required	<i>Appreciation</i>	<i>Knowledge</i>	<i>Experience</i>	<u>Ability</u>
Candidate Self-Assessment				
Mentor / Peer Review				

<p>Recommended next steps and/ or suggested development activities</p>

D2. Knowledge of working professionally, ethically & complying with relevant codes of conduct

<p>Your example (s)</p>
<p>Feedback and questions from reviewer</p>

Level of competence achieved

Threshold required	<i>Appreciation</i>	<u>Knowledge</u>	<i>Experience</i>	<i>Ability</i>
Candidate Self-Assessment				
Mentor / Peer Review				

<p>Recommended next steps and/ or suggested development activities</p>

E1. Appreciate the importance of continuing professional development

Your example (s)

Feedback and questions from reviewer

Level of competence achieved

Threshold required	<u>Appreciation</u>	Knowledge	Experience	Ability
Candidate Self-Assessment				
Mentor / Peer Review				

Recommended next steps and/ or suggested development activities

Sample CPD record

Date	Hours	CPD category	Key points	Future plan	Key benefits

E2. Appreciate your commitment to the sector

<p>Your example (s)</p>
<p>Feedback and questions from reviewer</p>

Level of competence achieved

Threshold required	<u>Appreciation</u>	Knowledge	Experience	Ability
Candidate Self-Assessment				
Mentor / Peer Review				

<p>Recommended next steps and/ or suggested development activities</p>

5. Examples of WASH competencies

Introduction

These examples of the use water, sanitation and hygiene (WASH) competency framework are designed to show how WASH professionals could demonstrate their abilities to delivery sustainable WASH services in low-resource settings.

<i>A1. Knowledge of wider social, economic, health and environmental issues and trends</i>	<i>3</i>
<i>A2. Ability to develop strategies or plans to address changes in your sector.....</i>	<i>7</i>
<i>B1. Ability to analyse and evaluate water, sanitation and hygiene problems</i>	<i>8</i>
<i>B2. Ability to solve problems by identifying, developing and evaluating options</i>	<i>11</i>
<i>B3. Ability to plan and implement solutions and monitor their continuing performance ...</i>	<i>13</i>
<i>B4. Ability to anticipate, adapt and manage changing contexts.....</i>	<i>15</i>
<i>C1. Ability to manage resources effectively and efficiently.....</i>	<i>17</i>
<i>C2. Experience of the promotion and application of Health, Safety and Wellbeing</i>	<i>19</i>
<i>C3. Appreciate the issues of sustainability, inclusion and health</i>	<i>21</i>
<i>C4. Experience of the promotion & application of quality assurance & quality enhancement</i>	<i>23</i>
<i>D1. Ability to communicate effectively</i>	<i>25</i>
<i>D2. Knowledge of working professionally, ethically & complying with relevant codes of conduct</i>	<i>27</i>
<i>E1. Appreciate the importance of continuing professional development</i>	<i>29</i>
<i>E2. Appreciate your commitment to the sector</i>	<i>31</i>

These examples are from the point of view of a variety of WASH staff working in different contexts on a range of WASH activities e.g. the context may be peri urban or rural, it may be in an emergency or a stable situation, it could be looking at water supply or behaviour change. They do not form a single narrative and no person could be expected to have such as wide-ranging set of experiences. These are all quite short. A real person might have three paragraphs for each topic, drawing on different professional or life experiences to provide evidence of being competent in each area.

These examples are shown as a written submission, but they could be given as a presentation, in a conversation with a mentor or as answers in a job interview. A report or presentation may focus on a single project and highlight how this project demonstrates various competencies, rather than focusing on one competency at a time.

The examples use the Personal Development Plan template. A full example (that uses all boxes) has been given for the first competency A1 only. Detailed instructions and hints for completing the template are provided. For the remaining competencies only shorter examples are provided.

When reading through these examples consider:

- do you think they reach the required standard?
- do they give enough detail on the personal contribution of the individual?
- do you think some of the examples could have gone under other competency headings?

An assessor may want to discuss any of these, to probe further. For some of the examples, some follow up questions are provided. These show how a report or presentation could be probed by a mentor, manager or assessor to discover more about the individual's competence. Real life does not fit under headings and competency assessments are not "tick box" exercises and so discussion can help demonstrate what the individual was able (or not able) to do.

A1. Knowledge of wider social, economic, health and environmental issues and trends

From the perspective of a WASH trainer

Example: Global WASH capacity

I began my career in the WASH sector in 2010 as an internationally recruited project manager responding to the cholera outbreak in Haiti. At that time, there was already growing recognition that humanitarian responses would be more effective and sustainable if they were led by qualified and experienced locally recruited staff. I supported this approach by handing over project leadership to a Haitian team lead at the end of my contract. In subsequent roles with Medair in Madagascar and the DRC, I continued to prioritise capacity strengthening by creating learning opportunities for locally recruited staff, including training on behaviour change approaches such as Wash'Em and on project design using problem tree analysis and logical frameworks. These experiences helped me understand how workforce capacity directly influences the quality and sustainability of WASH programming.

I observed a significant sector shift with the introduction of the Grand Bargain in 2016, which reinforced localisation as a core humanitarian priority. This included increasing the leadership role of local actors and strengthening their technical and managerial capacity. From 2020, I focused my work on supporting the sector through learning and professional development, contributing to the design and delivery of training and mentoring support as a learning specialist with the Humanitarian Leadership Academy. I collaborated with and supported local trainers and drew on models such as CAWST's approach to locally led learning. Through this work, I gained insight into how training systems themselves must adapt to localisation, not just programme delivery.

I also observed persistent weaknesses in how the WASH sector defines and measures professional competence. There is no commonly agreed benchmark for assessing whether a WASH practitioner can operate independently, making it difficult to align training outcomes, compare courses, or identify learning pathways. I noted that learning opportunities are fragmented, often inaccessible to locally recruited staff, and variable in quality, with limited assessment or mentoring support. Recent reductions in aid funding have further constrained capacity strengthening efforts, increasing the risk that workforce competence and service quality will decline. These challenges highlight the need for a coherent, sector-wide approach to defining competency and strengthening professional capacity in WASH.

Feedback and questions from reviewer

Based on the evidence provided, you are meeting the requirements of A1 at the **knowledge level**. Your example demonstrates a clear understanding of the WASH sector as a system, including how global actors, donor priorities, localisation agendas and organisational practices influence capacity strengthening and service quality. You show awareness of key sector initiatives and shifts, such as localisation and the Grand Bargain, and how these affect institutional roles, funding availability and professional development. You distinguish between different organisational and institutional models and recognise how context, humanitarian phases and resource constraints shape learning needs and workforce capability. While not all indicators (such as legislation and funding flows) are addressed in detail, your response demonstrates a coherent and well-informed understanding of the sector, its challenges and its current direction, consistent with the requirements of A1 at knowledge level.

- Who do you see as the most influential global, regional and national actors shaping WASH policy and practice today, and how do their roles differ?

- In your view, what are the most significant positive and negative impacts that WASH interventions can have on public health and local economies?
- How would you distinguish the roles and incentives of governments, UN agencies, INGOs, local NGOs/CBOs and the private sector in WASH delivery?
- Which global standards or frameworks most strongly influence WASH programming, and how do they complement or differ from one another?
- How do WASH priorities and service levels typically change across different phases of a humanitarian response?

Level of competence achieved

Threshold required	<i>Appreciation</i>	<u>Knowledge</u>	<u>Experience</u>	<u>Ability</u>
Candidate Self-Assessment		06/01/26		
Mentor / Peer Review		08/01/26		

Recommended next steps and/ or suggested development activities

- Look at the websites of key actors such as the Global WASH Cluster, the WHO, the Joint Monitoring Programme [JMP], and government ministries.
5 hours independent research over 3 weeks
- Study global frameworks and standards — SDGs, the Sphere Handbook, the WHO drinking water quality guidelines, or regional environmental policies.
10 hours independent study over 6 months.
- Participate in webinars or briefings from organisations such as the Global WASH Cluster, WHO, UNICEF, or REACH on global trends and priorities.
1.5 hours per webinar. 4 x webinars over 1 year.

From the perspective of an urban sanitation professional

Sewer legislation

I have been working on a project to extend the life of the city's sewerage network on behalf of the Water Utility. Increasing rainfall due to climate change is causing the network to overflow. This leads to complaints from the city authority and the public as it disrupts traffic and damages roads. It is also an environmental health risk. Part of the issue is inflow from the road drainage network, which is managed by the Roads Department. Besides the increased flows, poor road maintenance (such as intermittent street sweeping) is causing siltation and blockages in the sewers. The problem is worst in some of the poorer areas of the city.

There are no clear standards for managing this problem and the Roads Department does not see drainage as a priority. Legislation is unclear as there is no distinction between foul sewers and surface water drains. I have coordinated a task force, convened on behalf of the City Council to examine the problem and identify sources of finance. Other stakeholders I have identified are representatives of taxi companies, residents' associations and the City Council environment department.

Feedback and questions from reviewer

- How are the complaints received? Do you (or your employer) actively seek feedback?
- Why are you deciding it is due to climate change not due to increases in impervious surfaces?
- What are the health risks? How can you measure them? Are there standards relating to health?
- How are you monitoring the situation?
- Is the problem a lack of funds or just no budget line for flood control?

From the perspective of rural water supply professional working in an area that floods.

Sustainable flood relief

I have had experience of several cycles of disaster relief in my area. The frequency and severity of flooding events is increasing due to changes in the climate. Recovery is becoming harder as people who are able to are moving away from the affected area. Most of the limited funding that is available is used for immediate relief rather than flood prevention, rebuilding livelihoods or expanding services in nearby towns where people are moving to. I make sure that my work meets the SPHERE standards but we seem to be missing the bigger picture – the adverse environmental impact and effects on people's livelihoods in the long term.

My organisation does consider livelihoods, by working with the agricultural department to provide multiple use water points. However, we are having problems with conflicts over water between domestic and livestock use. The livestock are also causing water quality concerns.

Feedback and questions from reviewer

- How are you assessing the changes in rainfall and flooding? Is it due to more intense rainfall or an increase in total precipitation?
- What do you mean by "recovery"? Is this infrastructure or people's livelihoods? Why is out mitigation causing problems?
- Can you give more information about your personal role in this situation?
- What are the relevant policies, rights, laws and standards for this situation?

A2. Ability to develop strategies or plans to address changes in your sector

From the perspective of a vector control officer

Nature based vector control

A project I am leading on for my employer is a study on the control of vector borne disease in small towns in the west of the country. Climate change projections are forecasting a warmer and wetter climate and this will increase the breeding of mosquitoes. Recent legislation has restricted the use of some insecticides. Due to ongoing funding limitations, I have been reviewing low-cost ways of controlling the various diseases – particularly those spread by mosquitoes. Bed nets are available but continuing efforts on behaviour change are hard to sustain. Therefore, I am investigating nature-based methods of controlling breeding through improving urban drainage. I carried out surveys of the surface water drainage system identifying problems with sewage contamination and blockages of solid waste. Further research has found guidelines from the 1970s on mosquito control that fell out of use when DDT was used. I am using these to create building standards for all new construction.

Feedback and questions from reviewer

- What is your opinion on the legislation? Is the balance between protecting health and protecting nature right?
- What could you do to improve the use of bed nets? Are they affordable?
- Are your building standards for buildings or drains?

From the perspective of a WASH trainer in a UN agency

Setting capacity standard

UN water has published a series of accelerators for the SDGs, one of which is capacity strengthening. However, there are no clear goals for these accelerators. I am currently reviewing competency frameworks for the WASH staff in my organisation as there are no current standards for WASH staff and a wide range of job descriptions. We do not have good records of WASH staff as many are employed locally with weak technical oversight. There is a strong move to localisation under the Grand Bargain, but repeated WASH failures are pointing to inadequate capacity rather than other resources being the main problem. The plan I am developing with the HR department is a set of minimum technical competencies for recruitment – to help us get the people with the knowledge and skills required to do competent work. We are currently discussing the options if no competent staff can be recruited, such as intensive support and mentoring for local recruits or expanding the recruitment area to the wider region.

Feedback and questions from reviewer

- How did you learn about competency frameworks? What examples have you reviewed?
- Why is a lack of standard job descriptions a problem?
- What skills gaps are you finding?
- Is the problem with staff records about the quality or quantity of staff?
- Should local recruitment be scaled back?
- What could be done to improve local recruitment in the longer term?

B1. Ability to analyse and evaluate water, sanitation and hygiene problems

From the perspective of a sanitation officer

Identifying sanitation problems

I was working for an international NGO. My job was identifying a more effective and equitable service for toilet pit emptying for a refugee settlement. Many organisations before us had financed the construction of simple pit toilets in the camp. These pits were now getting full. From reports I have read and from people I have spoken to working for these organisations, it seems like little to no thought was given to how these pits would be emptied when they became full. I wanted to get a better understanding of the situation. I wanted to speak with both users and service providers. I planned to run a short survey. I also wanted to see some of the emptying for myself!

I learnt that there were existing mechanical emptying services available to camp residents. However, when speaking with households I understood that the cost was beyond what they could afford. Many have had to dig a new pit instead. They complained that this uses up valuable land that they could otherwise use to grow crops and help improve their livelihoods. Users also reported that they faced challenges when digging pits. Rocky ground, high water tables and unstable soil conditions meant that the depth of excavation was limited. As a result, their pits were smaller than they had hoped. This meant emptying was required more frequently.

I observed that unemptied pits represented a health hazard, with the risk of vectors getting access to the faeces and the environment becoming polluted after heavy rainfall. I also learnt that conflict had been occurring between households who had been sharing toilets when it came to deciding who had responsibility to empty them. Some people confided in me that they had resorted to openly defecating when the toilet was no longer usable.

When I spoke to the existing emptying teams, they explained that they cannot physically access some of the household pits. Backstreets are too narrow, and their hoses don't reach the pit openings. They also explained that the pits contain a lot of solid waste, which clogs up their equipment, making the process lengthy and messy. One organisation had proposed using chemicals to help decompose faecal matter. However, it turns out it would be difficult to access the chemicals on the local market. There were also concerns that households' health could be adversely affected if exposed to the product.

One of my team members is keen for us to test out the gulper – a hand-operating pit emptying tool. I can see how this would help emptying teams access difficult-to-reach toilets. It may be a more affordable service as well. However, no-one seems to be talking about what will happen to the waste when it is collected! For me, I believe we need to see the sanitation system from start to finish - from user to end disposal (or re-use). Before I jump ahead with selecting an emptying method, I want to know that each part of the system is feasible and works together as a whole. I have read some studies shared via the Global WASH Cluster that container-based solutions can be effective options where there is no sewerage network and where access for digging and emptying pits is a challenge. My next step is to learn more about this option!

Feedback and questions from reviewer

You have chosen a complex issue as your example. The complexity is an accurate reflection of the challenges faced in providing WASH solutions in low-resource settings. There are many factors and reasons behind the problem(s) you are looking to address. Likewise, there are varied consequences, both positive and negative, of the different solutions you have considered. The multi-faceted nature of this issue also makes it a challenge for you, to bring together all the

information in a coherent way – that helps someone, like an assessor, understanding the approach and rationale you have used to understand the issue(s).

You are right to highlight that what will happen to the collected sludge needs to be decided upon in advance! What options have you considered for the safe transportation and treatment of faecal sludge collected using gulpers? Could intermediate storage tanks be considered, from which mechanical emptying services could collect sludge for transport to treatment/disposal sites?

It is important that you demonstrate an understanding of the “bigger picture” of sanitation. One method that you may find helpful is to map out and analyse the flows of human waste through the creation of a “shit-flow diagram”, see <https://sfd.susana.org/> . The diagram helps quantify how and where human waste is collected, transported and disposed of. This can help quantify the volumes and associated costs of managing human waste.

With regards to how effective and appropriate the use of gulpers is as part of addressing the sanitation challenges, an assessor would want to know more about the financial implications of this option. You indicate the costs of toilet emptying, indicating that the use of gulpers would extend the lifespan of a toilet, indicating cost savings for the household. An assessor may want you to demonstrate your understanding of the lifespan costs of using on-site pit toilets for households, including their associated emptying costs, and how income generated through pit-emptying covers the expenses of collection, transport and treatment/disposal. You will need to indicate the extent to which using gulpers would require subsidized support, and to what extent services could be run independently. This will require an understanding of the willingness to pay for this service by users.

Container Based Solutions (CBS) do require establishing a new service, but one that could potentially be linked to appropriate treatment and re-use. What treatment methods have you considered that can generate income such as biogas creation, or composting?

Finally, an assessor may ask you to review your work using the understanding you have today. If you were to go back and re-do this piece of work, what would you do differently and why?

From the perspective of a community engagement officer

Identifying sanitation resources

I have been tasked with reviewing current toilet designs with a range of community groups. Before starting I searched for standard books on sanitation to understand the main technical issues and the options available. I also collected a series of pictures of different types of toilets. I ran some initial focus groups with existing organisations from local churches and mosques. I revised the questions to look into specific issues in more detail and then organised several smaller discussion groups with just young men/ older men, school girls, mothers, older women, young children (mixed) and a session at the local community centre for people with mobility problems. I presented the findings to the technical team and together we worked on a guide for builders. This guide was tested with some of the same focus groups and the final version agreed.

Feedback and questions from reviewer

- How did you decide the books were trustworthy?
- Can you show how the various sanitation options fit on a sanitation ladder?
- Why did you use pictures of toilets?
- How accurate was the data from the focus groups? Was information missing? How was it captured and stored?

- How can you acknowledge the contribution of community groups but allow them to speak anonymously if they want?
- Did you involve the builders in writing the guide?
- Do you think that a guide is the best way of presenting the information to the builders?

From the perspective of a groundwater scientist

Mapping disease routes

There is a problem of diarrhoea. Poor quality groundwater at a handpump is being blamed. Reviewing the data, I noticed that there seems to be a seasonal pattern, with more illness in wet periods. A few water quality tests show little or no E. coli in the sample in dry periods so the groundwater may not be the problem. I have been identifying other routes of contamination including surface water, livestock and poor water storage. A sanitary inspection and a series of targeted water quality tests show a deterioration of water quality before it is drunk, with most contamination post collection. I was not able to carry out a test after rainfall but users report some turbidity right after a rainstorm.

Currently both surface water contamination and a lack of safe storage seem to be the main problems. Rather than research more, my recommendation was not to conclude the quality of the groundwater being the issue but to focus efforts on reducing surface water contamination and improving safe storage.

Feedback and questions from reviewer

- Who blamed the diarrhoea on the handpump? What evidence were they using?
- What did the SI reveal?
- How did you target water samples? Was this along the supply chain or between different categories of users (e.g. wealth, location)
- Did you find out why the contamination post collection was happening?
- Who did you make the recommendations to? How did you justify your conclusions?

B2. Ability to solve problems by identifying, developing and evaluating options

From the perspective of a water supply engineer

Solar solution

I had been leading a project to rehabilitate existing deep wells. Pumps and generators were no longer working and needed to be replaced. Prolonged dry periods are common to the area. This leads to frequent droughts, water scarcity and dependence on seasonal rivers. I was already aware that existing boreholes could be upgraded to run with solar powered systems. I decided to compare this option with simple like-for-like replacement.

The water points are in remote areas. I realised that even getting fuel itself to run the generators was a challenge. There was little to no transportation to get to the sites. Fuel came from a long way away and was expensive. The cost of fuel had been increasing sharply the last few months due to conflict in the area. There were also reports that boreholes powered by diesel generators were not reliable. At many sites the cost of running diesel generators had become too expensive for end users. Users also suspected fuel was being siphoned off by some of the operators.

I visited some existing solar powered schemes. I learnt that maintenance tasks were simple and easy to do. The day-to-day running costs were minimal compared to diesel generators. At several sites solar panels had been stolen or damaged. Other panels had simply not been cleaned. On some occasions the pumps and panels had not been sized correctly.

Although there would still be challenges in maintaining solar powered schemes, I decided that with the correct support in place they would provide a more reliable option than diesel generators. Looking at the costs involved, I judged that solar powered systems would be cheaper over their life cycle. There would also be less environmental pollution. A factor which would likely made it easier to source funding given the promotion of environmentally friendly solutions.

My next steps were to make sure the design followed best practice – starting with understanding the sustainable production from the borehole and getting the sizing of the pumps and solar panels correct. I spoke with peers to learn about the best ways to secure solar panels – there are anti-theft fixings you can use at installation. I also identified local electricians who could be trained up to repair electrical issues. I also decided to allow the operators to set-up a phone charging station that they can generate income from, to encourage them to look after the panels.

Feedback and questions from reviewer

You have demonstrated how you have evaluated the costs and benefits between diesel powered generators and solar power for water pumping systems. You have looked not just at the technical issues, but have considered economic, environmental, management and social factors.

- How did you estimate the future inputs and resources that would be needed for the long-term sustainability of the solar powered system?
- And how would these funds, future inputs and resources be obtained?
- What future threats or barriers could influence the success of this solution in the future?
- What analysis, calculation and design methods and tools did you use to determine the water demands of the population, the appropriate sizing of the borehole pumps, the borehole yield limits and the sizing and selection of the solar array?
- What relevant standards, specifications, codes and guidance did you use during the design, if any?
- When doing your design, was there any missing data or reasons that meant design compromises had to be made? If so, what were these?

From the perspective of a humanitarian sanitation manager

Emergency sanitation solutions

My current role is coordinating the sanitation in a camp for displaced people. The main standards I have been working to are set out in SPHERE but as these are hard to achieve immediately, I have been using the recommended minimum objectives set out in “Emergency Sanitation” by Harvey, Baghri and Reed. Moving towards household toilets is proving difficult. I helped organise a series of focus groups which helped identify a range of problems, such as many female headed households, lack of digging equipment, hard soils and a preference for open defecation due to the smell of the shared toilets not being cleaned. The costs of maintaining the existing toilets was increasing as they were not designed to be emptied.

The self-help approach was not working very quickly. I decided a direct labour approach would need more staff so an alternative market-based approach would be easier to manage and implement. I have shared the idea with the cluster to ensure a joined-up approach across the whole area – otherwise conflicting approaches could endanger the project’s success. I have drawn up small scale tenders to engage local construction companies to manually dig pits. One contract also uses a mechanical digger. I have calculated the costs of the current option of routinely emptying shared toilets and the possible market-based option of having toilets built for each household. I assumed householders would maintain their own toilets, so I predict although capital costs will increase, over the life of the initiative, maintenance costs should fall. There should be an improved safety and security of toilets for female headed households and an increase in economic activity locally – through the construction contracts. I am working with the livelihoods team to support the tendering process as there is not much experience of commercial contracts locally.

In a separate area, an FSM project was treating pit sludge. Various options for treatment have been proposed but setting the standards has not been agreed. These range from disinfection to little or no treatment and burying the waste. Existing standards and the health officials support a high quality of discharge whilst some farming users want minimal treatment to maintain nutrient content. Ongoing operation and maintenance is not being discussed as much as design. There is a sliding scale of total costs (including staff skills) from high to low. Funds are short so the high-cost option would deprive other people of any sanitation provision.

I am trying to work out the environmental impact of each option. There is a lot of open defecation so the reduction of pollution from the FSM programme may not have a major impact. My recommendation is probably going to be a lowering of current official standards until the whole area can be cleaner but some stakeholders already have made their choice known.

Feedback and questions from reviewer

- How do you distinguish FSM from “sanitation”? Were the examples in the same project?
- What was the overall goal of the project? How would you know if you achieved it?
- How did distinguish between the SPHERE standards and the interim objectives you used?
- Why were you concerned about female headed households?
- Who chose the self-help approach? Were operational costs estimated at this stage?
- Why was a direct labour approach going to require more staff?
- Who did you consult when deciding against the self-help approach? Were users engaged?
- Is there a host community? Did the project involve them?
- If the construction was being contracted out, how did you carry out community engagement?

B3. Ability to plan and implement solutions and monitor their continuing performance

From the perspective of a water quality technician

Monitoring piped water supplies

I oversaw monitoring the performance of a piped water supply. First, I selected the indicators that we would use to measure water quality – the chlorine residual level at the point of collection, and the volume of water consumed. I selected three people to become operators of the system. I decided on three, so that they could rotate their role. I was aware they had other jobs and commitments.

I gave the operators a logbook for each water point. I tasked them with keeping a record of chlorine residual levels and meter readings. Every month I would make visits to take water samples myself and review the logbooks with the operators. This gave me a good understanding of how the system was performing. For example, if there was more production than consumption [for one part of the system] that could indicate there was a leak.

Later, I installed a remote monitoring system that relayed the water meters to an online platform through a satellite connection. This meant that I could observe the water consumption rates from my office. If there was something that didn't look quite right, I could call the operators to find out what was going on. Perhaps they had to close the tap and shut down this part of the system because there was a pipe that had been cut.

Understanding water consumption also helped me to set appropriate tariffs. I worked out the lifetime maintenance and operation costs of the system and compared this to the consumption. This means that I could work out how much revenue would be needed based on how much water was being consumed vs how much it costs to pay the operatives and cover the costs of any future replacement and repairs that would be needed through the lifetime of the system.

Feedback and questions from reviewer

You have described the indicators that you selected to measure the performance of the water supply system – uptime, and water quality. You have described how data is recorded in logbooks by operators living where the system is located. You also describe how you could observe live water consumption rates from water meters through a satellite connection. You explain how this remote sensing, combined with at-site visit checks of logbooks helped you supervise the activities of the on-site operators. You also explained how the financial performance of the system could be measured using revenue data, real expenditure, estimated life-time costs for maintain the system.

An assessor may want you to give evidence on how this system was performing compared to the original design parameters. You could explain how the system was expected to function from the start, and how its functionality and performance changed over time, if at all.

You may also need to give evidence on the financial performance of the system, detailing the revenue that was obtained, the actual costs of operation and maintenance, together with the anticipated future costs – again comparing this to what had originally been envisaged.

- Identified risks that may compromise the success of the solution.
- Scheduled activities and resources in response to progress and performance updates.
- Prepared operational manuals, standard operating procedures, handover notes and training programmes to ensure sustainable WASH services.
- Reported on progress, challenges and achievements to a range of stakeholders.

From the perspective of a municipal solid waste manager

Implementing a solid waste system

After a recent disaster, my employer (the municipal authority) was very disrupted, with staff absent and equipment damaged. I have developed a plan for the rehabilitation of public services, starting with solid waste management as UN agencies are looking after water and sanitation already. This does not need specialist skills or equipment that is hard to source. I have developed a programme of clearing rubbish from each area of the town and moving it to a basic landfill. There are no funds for major infrastructure developments at the moment, so a staged approach is being used, removing rubbish from near people's homes. As finding indicators for uncollected rubbish is difficult, I have set up a series of photo posts so I can take pictures every month to record the presence of solid waste.

The main resource for this work is staff time, with operatives collecting the waste. I have tried various types of contracts to improve efficiency as it was difficult to monitor staff working all over the town. Payment on volume of waste or weight skewed what was collected (e.g. just plastic bags or just rubble). I have finally chosen a team-based remuneration scale, based on complete removal of waste from defined zones.

Feedback and questions from reviewer

- What risks may cause problems for this initiative? How did you identify these?
- What do you mean by major infrastructure investments? Are there funds to employ people?
- Who is employing the workers? Is this direct employment or through a contractor?
- Why did you find it hard to monitor the performance of staff?
- How successful was the project compared to your initial goal?

From the perspective of a municipal water supply manager

Using Water Safety Plans

I have drafted a Water Safety Plan to monitor the performance of the water supply network. This has mainly been about carrying out inspections and some strategic water quality tests. The main implementation activity has been staff training and the development of reporting forms and data collection methods. I do have to do spot checks to ensure that staff are carrying out the right inspections at the right time and recording them properly. This process has already identified some weak points in the water supply system, such as intermittent flow in one section of pipe.

The move to monitoring was initially seen as expensive, but a shift to preventative maintenance has seen reactive repair costs drop. I will be presenting the results at an upcoming national meeting on water supply.

Feedback and questions from reviewer

- What sort of inspections have you carried out?
- How did you identify training needs and how are you measuring the impact of the training?
- What data are you collecting on the system (e.g. water losses, number of leaks, intermittent flow)?
- How are you analysing the data collected? Who is involved in this analysis?
- Why have repair costs dropped?
- How are you documenting this process?

B4. Ability to anticipate, adapt and manage changing contexts

From the perspective of a WASH project manager

Changing costs

I was leading a WASH project in an area where the security situation was very volatile. At one location the water system and sanitation block had been destroyed. When we came to rebuild the infrastructure the price of materials had doubled. This came as a big surprise to us and our donors. I had to write a cost amendment to agree with the donor. We conducted a market assessment with the team so that we had the justification to request the funds to re-build the WASH infrastructure.

To mitigate the additional costs, I asked community committees to provide us with locally available materials such as aggregate and sand – materials that were available to them in the community. I also agreed for some community members to volunteer their time as daily labourers [for the construction]. These contributions helped reduce the overall cost of the works.

Furthermore, in these areas we had to be very flexible, moving from location to location as the security situation changed. I was not always sure that we would be able to reach sites. I had to maintain close communication with the leaders from different tribes, so that they could spot [danger] and move with us. Community leaders could anticipate problems [due to insecurity] and inform us early, so that we knew not to be travelling at those times. I also identified different roads [less at-risk] to reach the areas that we were supporting.

It was difficult to get the necessary approvals and permits from government authorities. Sometimes I would ask community leaders to accompany us on visits. This would help reduce the risk of the government authorities pushing us to move our intervention to an area of personal interest to them. The community leaders helped explain the work we were doing in their areas – demonstrating how it had already been agreed in advance. In addition, the personnel at the government level were often changing [due to the unstable government].

Feedback and questions from reviewer

You have demonstrated where you have had to respond to rapidly changing circumstances, including physical damage to infrastructure you had built, increases in material costs, restrictions in access to locations, and changes in government personnel. It seems you have been able to effectively respond to these changes to maintain your humanitarian work, going ahead with plans to re-build despite inherent risks, negotiating agreements with communities to provide construction materials and labour, whilst obtaining cost amendments with donors. You have demonstrated you can negotiate access and approval from decision-makers when put under stressful circumstances.

- To what extent had you anticipated or made mitigation plans for some of the changes and challenges you described when designing and planning your projects?
- When faced with changes and challenges as you described, how did you go about evaluating the implications of these changes on your project?
- How did you go about identifying the mitigation actions and options you could pursue to continue your project plans?

From the perspective of a water quality regulator

Managing change in water regulation

The WHO have launched their new Drinking water guidelines. I am part of a team working on sector wide guidelines. The current expectation of community management is being widened to include private sector, local authority and householder management. I am working through the current legislation and national guidelines to identify areas that need to be amended. I have sent a draft of the amendments to key stakeholders in the sector to ask for early feedback. These changes may result in a reduction in funding to the community management support team, with the budget transferred to the new regulator. I have identified staff that can be transferred to the new unit to bring their knowledge of rural areas.

Feedback and questions from reviewer

- Do you agree with the new guidelines? Can you explain the changes?
- Do you think that funding a regulator will improve access to water services?

From the perspective of a sanitation engineer

Discovering hidden waste

The current provision is a combination of regular emptying of pit toilets and some composting toilets. A partner has provided disposable sanitary pads and incontinence pads. When I was selecting the sanitation option, I had not considered these items entering the system. These are causing problems with emptying and composting. Emptying is taking longer than planned, with blockages having to be manually removed. I am having to change the sanitation plans to cope with this. The option of stopping the use of these sanitary items has been discounted. I am liaising with the partner to investigate re-usable options for MHM but not incontinence pads. I am trialling sanitary bins in toilets but maintenance is a problem and some people prefer to keep their waste private and hidden. The use of local waste pits and burial of items are not popular due to cultural acceptance. Similarly, the compost is being rejected by farmers. I have rescheduled the emptying timetable to allow for an increased number of blockages. A burial site for the used pads and contaminated compost has been set aside.

Feedback and questions from reviewer

- Are you working on hygiene promotion to support the use of bins?
- Do the hygiene promotion team have experience of solid waste/ MHM or have they been focused on handwashing? What support do they need?

From the perspective of a sanitation engineer

Discovering hidden users

I am working in a refugee settlement. We have a requirement to make the toilets accessible. The standard approach has been to provide ramps, but there are no suitable pathways for people with severe mobility problems. I decided to stop spending money on ramps and move to a container-based system for people with mobility problems. This has meant getting the revised standard toilet design approved, funding budgets being updated and setting up a reporting system to identify people who need this support.

Feedback and questions from reviewer

- Are there other hidden groups?
- What is being done about the menstrual hygiene and bathing needs of people who cannot leave their homes?

C1. Ability to manage resources effectively and efficiently

From the perspective of a WASH technician

Managing water and human resources

I was responsible for overseeing WASH services for a large IDP settlement. The settlement had been designed to receive 20,000 people. When I was tasked with this work the population had reached 120,000 inhabitants. Water resources were limited. We needed to optimise how we could make the most of this resource to meet people's needs.

Firstly, I decided to increase the water storage capacity, almost doubling it. The system was powered by solar. Increasing the water storage capacity meant that we could pump more water during the daylight hours, so that there was more water available from the start of the day before pumping could recommence.

I also recruited hygiene promoters from the community. It was unsustainable for our staff to travel around the camp to do the risk communication messaging. We ran community engagement sessions where we identified focal points from each age category. This meant that in the shortest time possible we had trained up community members, from the IDP community, who could do the risk communication messaging. I had limited budget. So, this was an efficient use of the resources that I had. To measure the effectiveness of the messaging work done by hygiene promoters I would routinely organise a Knowledge, Attitude and Practice (KAP) survey.

I was also on site myself overseeing the hygiene promotion and risk communication activities. I have a background in epidemiology. During the disease outbreaks I was able to identify hotspots. I did a lot of training and capacity building for national colleagues – as they were the ones directly dealing with the locals. My role was to track, monitor [the prevalence and trends of the outbreak] and develop SOPs, identifying the most at-risk populations. For example, when there was an outbreak in the camp in 2022, I went straight to the cholera treatment centre [CTC] and reviewed the patient register. I found out that everyone who had been admitted came from a particular zone in the camp. I went there with the team to do a rapid community diagnosis (checking the water points and sanitation facilities). We found that a sewerage pipe had broken and was contaminating the water supply system. We immediately fixed it, and within five days the incidence rate of cholera in the camp nose-dived. The health partners and medical team had only been responding to the symptoms, but the root cause was contaminated water.

Feedback and questions from reviewer

You demonstrate that you recruited volunteers from the affected community to do hygiene promotion activities. Working with a volunteer network can be a very effective way to share messages with a large population when you have limited financial resources. You also mention that you used post-distribution monitoring surveys to measure the effectiveness of the messaging work done by hygiene promoters. Making sure that the messages you have developed, and the way in which they are being shared, is effective at promoting hygiene practice is an important aspect of effectively managing resources.

- How did the information from the PDM surveys help you judge the effectiveness of the messaging work done by the hygiene promoters?
- What other ways did you measure the effectiveness, not only of the messages being used, but the way in which messages were being shared [i.e. the means of communication]?
- How did you ensure that volunteers had a manageable workload?
- How did you support and help motivate the volunteer workers?
- How did you measure the effectiveness of the training and capacity building that you had organised for national colleagues?

From the perspective of a hygiene promotor

Efficient soap promotion

I am working in a peri urban area where an intensive handwashing campaign was carried out last year after a cholera outbreak. Use of soap has reduced after free supplies are no longer available. I have set up an informal group of shopkeepers to ensure a range of soap is available. I have run two sessions on advertising so they can market soap better. Also, I am supporting them in buying soap in bulk direct from the manufacturer as a cooperative enterprise.

House to house visits were expensive and slow, so I have changed my community engagement to take place on the main route into the housing area. This does mean I have to reschedule my day to arrive early before people go to work and return again at the end of the day. This does miss out people who do not leave the house, so a volunteer group from the local mosque is identifying caregivers looking after children and elderly/ people with mobility problems so I can plan home visits.

Feedback and questions from reviewer

- Who was providing the free soap? How was it distributed? How was the type of soap chosen?
- Are you only focusing on hand soap or laundry detergent too?
- Why were house to house visits expensive? Was the investment worth it?
- Who are you missing out if you only talk to people going to work? Is this approach valid?
- Could the volunteers do more? What do they gain from volunteering? Do they need support or training?

From the perspective of an emergency response WASH staff member.

Preparing for hygiene promotion

My role in the national response team is to be first on the scene after an emergency. Whilst my main role is needs assessment and reporting, I also attempt to provide some immediate WASH support. From experience, delivering equipment or supplies is slow initially and may not meet the needs until after the assessment has been completed. I now take a series of promotion and information material with me as safe storage of water, safe disposal of faeces and handwashing are low-cost ways of reducing the spread of disease. Apart from my rapid survey, I identify areas that need more detailed or specialist assessment, such as damaged water treatment works or handwashing practices. I do liaise across all agencies to share my findings – so that those with the expertise and supplies can respond.

I also identify key staff members who have local knowledge or specialist expertise. Often a long serving maintenance worker has more knowledge of a system than their manager.

Feedback and questions from reviewer

- How can the community be involved in this assessment process? How can you avoid imposing on them when they are trying to recover from an emergency?
- How can the assessment phase be sped up?

C2. Experience of the promotion and application of Health, Safety and Wellbeing

From the perspective of a Health and Safety Officer

Keeping people safe at work

During all the construction work I make sure that everyone is wearing their personal protective equipment [PPE] – during drilling, during maintenance, during repair. Whenever there are cases of injuries at site, I also try to facilitate their treatment and effective recovery. I encourage them to have a work / life balance. I try not to overwork them, even if they are volunteers. For instance, a water point attendant could have three hours at a water point, and then switch with another person, so they can go on and attend to their private business. It is important to make sure that there is no unnecessary fatigue or burnout – that no one is injured while trying to do their job. I had this policy clearly written, translated into the local language(s). All volunteers to adhere to this policy.

I also carry out risk assessments. Before work starts up at a site, I look at the level of vulnerability and what type of incidents are likely to happen. I then put mitigation measures in place or intensify safeguards at some construction sites.

To make sure that people are adhering to the safety policies, and wearing PPEs, the first thing I do is make sure that PPE is available to them. If they don't have them, they can't wear them. I make sure that PPE is included in every project budget – increased as we increase the number of volunteers that we work with. Furthermore, volunteers do not start working until they have had health and safety training on sites. I also ensure that they have all the tools that need. I also receive progress pictures from the work they are doing. In these pictures I can spot when they are not wearing PPE correctly. If I see non-compliance, I appreciate that some people may have forgotten to begin with, or prefer not to use the PPE, so I would issue a warning. I may ask them to stay home [off work] for a day or two. If the non-compliance is done repeatedly, then we can even terminate someone's appointment. I must be strict on site.

Then when I have work with external contractors, such as on a sanitation facility construction, I check to see if they have quality inspection certification as part of their company profile. I need to be sure that this company is not going to pose a risk to the people on site. I enforce them [the contractors] to adhere to the safety regulatory framework in the country. Likewise, when I procure products, I make sure the product is registered, approved and certified. I don't just buy any product from the market.

Feedback and questions from reviewer

This is a very comprehensive response. You have demonstrated how you implement health, safety and wellbeing policies in practical ways in your context.

An assessor may ask you to demonstrate:

- Your personal approach to promoting health, safety and well-being. i.e. recognising your personal and ethical responsibility for your own health and safety.
- How you determine and ensure the maintenance of personal protective equipment.

From the perspective of a rural water contractor

Well digging

I am responsible for a series of well digging projects in a remote area of the country. As health and emergency services are not available in case of an accident or injury, I have negotiated an enhanced fee rate to cover extra safety measures. These include safety equipment (harnesses etc), rescue equipment (a breathing kit for going into pits with poor ventilation) and secure fencing to keep people out of the site. I have carried out three school visits to warn children of the dangers.

I also send water samples to the government lab before finishing each well. A recent result from a site at a school came back with levels of arsenic above the national standard. I worked with the local Ministry of Health to conduct a local risk assessment and we concluded the risk from the current water supply (untreated surface water) was substantially greater than the risk of the arsenic. The well was completed and the Ministry are proposing rainwater harvesting to supplement drinking water needs at the schools.

Feedback and questions from reviewer

- How are the staff trained and incentivised to use the safety equipment?
- Are the Ministry of Health responsible for water supply in schools?
- Why was arsenic decided to be less risky? How does it relate to water quality standards?

From the perspective of a water quality manager

Standardising safety

I have a national role collecting water and wastewater samples for testing. There are a range of safety issues and hazards, including:

- Safe travel (i.e. not at night off the main highway)
- Safe collection of samples. Septic tanks and other confined spaces are a concern. Fast flowing rivers are also dangerous
- The samples (especially wastewater samples)
- Chemicals used for the tests (e.g. ethanol for disinfecting)
- Solitary working away from home for long periods (e.g. the need to maintain regular check-ins to promote wellbeing)

I have developed a series of standard operating procedures for many of these, including the use of personal protective equipment, but there is a lot of variation. Rapid risk assessments have a default of avoiding a problem if it cannot be properly assessed on site.

Feedback and questions from reviewer

What do you mean by a default of avoiding a problem – is the risk ignored or the task postponed?

C3. Appreciate the issues of sustainability, inclusion and health

From the perspective of a water engineer

Using solar power

In my experience once the emergency needs have subsided, we can move our efforts into early recovery, and even development work. However, often the situation returns to the emergency state. With regards to my contribution to sustainable approaches, I started developing projects that used solar powered systems for pumping water. Before that most of the projects I had been involved in depended on fuel powered generators.

The capital investment for this type of system was large. But there were hardly any running costs, and maintenance was very infrequent – not like the regular generator powered system. The system was sustainable because the community itself was well trained. I trained them with my team. They are really taking care of the systems. The system also contributed to them a source of income through collecting user fees from households who were benefiting from the water supply. I developed a success story [to present this project] that was shared through our wider network and with donors. I feel proud of the work we have done because the system continues to work since a very long time – and that the solution is more sustainable.

I define *sustainability* in that the community will be able to pay for replacement parts using the money they have collected from users. They have set up bank accounts where the money is kept. This means they will be able to replace anything that breaks down without external support.

There was a breakdown at the site after 7 years of operation. It was due to a fault with the inverter. The committee were able to identify an electrician from the area who could identify and fix the fault. The committee used the money they had been collecting from user fees to pay for the labour and materials needed. The system was only non-operational for several days. All this they did on their own without contacting me. The electricians had been trained as part of a skills training programme provided by other actors. Their work is their livelihood. They can diagnose the issue, obtain the replacement part and make the repair. This is normal practice in this area.

Feedback and questions from reviewer

In your example you have given a very comprehensive account of how you have incorporated sustainability into the solutions you deliver. You have described technical, social and economic factors that you have considered when developing a WASH system.

An assessor may ask you:

- Do you have any concerns of any factors that may hinder the long-term sustainability of these water supply systems in the future?

For this competence you are also being asked to describe how you live out your definition of sustainability in your own work practice, workplace and life.

An assessor may ask you to describe your personal approach to sustainability, and the approach you promote for your organisation.

From the perspective of a water treatment engineer

Single use devices

I have been researching alternatives to the single use household water treatment devices that we are currently promoting. I have rejected boiling water due to the fuel consumption and costs, but SODIS and various locally made systems are possibly more sustainable. The ongoing transport, packaging, and disposal costs of the disposable systems and their environmental impact are hard to justify. Bottled water is even more unsustainable. This is both for my personal use and future projects. Some products do seem to have longer usable lives, but I am not sure how these can cope with the high turbidity water I sometimes have to use. I am starting to trial some of these products at home to learn how effective they are.

When I am inspecting a water treatment system (and regard it as safe) I do publicly drink the water to encourage others to use the supply.

Feedback and questions from reviewer

Are plastic bottles acceptable if it means people drink safe water?

From the perspective of a solid waste manager

Promoting waste sorting

In my role I normally only look at waste from the household and how it is transported to the disposal or recycling site. Recently I have become more aware of activities within the household. I have been wanting to understand how the design and selection of containers and bins used in the home affects different members of the household and their safety. I don't seem to be able to find much in the literature, with little work on inclusion in solid waste management apart from the role of female waste pickers. The WASH inclusion literature focuses on water mainly. How waste is managed within the home and more importantly, who does this, needs more information. So I am aware of the issue, but action at the moment is mainly about finding out more.

What I am looking at in more detail is the size and design of common household waste storage bins that are available, ensuring that they provide safety from sharp objects, that they can be covered to stop flies and insects and reduce smells and are easy for everyone in the household to carry.

Feedback and questions from reviewer

Have you asked local shop keepers to find out what they are selling?

C4. Experience of the promotion & application of quality assurance & quality enhancement

From the perspective of a WASH supervisor

Quality materials and processes

When I first joined the organisation, I was not satisfied with the quality of materials that we were using. When raising a purchase request, I would ask suppliers to bring samples of their items as part of their quote. These samples are then kept in the warehouse. When deliveries are made, these are checked against the sample. If it does not match the sample the delivery is rejected. This has helped me to maintain the quality of the items I procure and use during the construction process.

Likewise, when drilling boreholes, I make sure that there is always WASH engineer on site. They check the depths to make sure that it is in accordance with the geophysical survey. The engineer does not leave the site during operation hours. The contractor does not act in the absence of the engineer – right up to the pump installation, until the borehole is capped. When working on a distribution system I ensure that there are no leaks. I ensure that water sources are a safe distance away from latrines.

I also ensure that the correct ratios of sand, gravel and cement are used when preparing concrete. This is something that was not done previously. I've heard of instances where people have fallen through weak concrete slabs. My rule became that there would be no concrete casting or ratio mixing during the absence of a staff member from the agency. If a contractor had cast concrete without one of our staff members being there, I would request that they demolish the slab and redo it.

I also create platforms to obtain real-time feedback from staff – both WASH engineers, hygiene promoters and community leaders. In these meetings we would discuss non-compliance from the work we had seen contractors do. It might be that the contractor, say a drilling contractor, considers themselves an expert and does not need to listen to the instruction of the WASH engineer on site. When I hear about this I will reach out to the company and insist that the WASH engineer is representing us and that they need to do whatever they say.

With regards to hygiene promotion messaging, given that we are working with community members who are sometimes speaking in languages that our staff are not familiar with, I need to make sure that they are passing on the right messages. I organise refresher training sessions every month. At random I ask volunteers to present their message, asking another to interpret. This helps me ensure the consistency of messaging. I also have a standard hygiene promotion manual.

Feedback and questions from reviewer

- Were these various checks written down as standard operating procedures?
- How were these made standard practice?
- Did you have a quality procedure for curing concrete?

From the perspective of a sanitation officer

Paying for quality

I have been working on a CLTS programme for two years and I have noticed an increasing level of failing pit toilets. There are collapses due to inadequate shoring and also ingress of surface water during the monsoon. Some of the concrete slabs break during delivery. Some of the pits are too shallow and rapidly fill up.

I have drawn up a simple agreement between householders and the local builders that sets out milestone payments rather than single lump sums. I have also worked with the builders to prepare best practice guidance for each part of construction, using photos to illustrate the quality of work required. I will inspect and sign off each stage of the work. When there is a failure, I hold a meeting of the builders to discuss the cause and refine the guidance.

Feedback and questions from reviewer

- What design (if any) are the builders and household using?
- Are people willing to pay for a better-quality toilet?

From the perspective of a general WASH manager

Identifying “failures”

I have been working with my staff on interpreting the SPHERE standards. One challenge has been getting them to prioritise positive outcomes. Currently they look at output level indicators and do not compare these to overall improved health or dignity. We have just postponed a water treatment project in favour of safe storage promotion as this was seen as the weakest point in the water supply chain. We are shifting our water quality monitoring to the point of use rather than point of collection. This has meant the monitoring team have had to develop community engagement skills as they need to enter people’s homes.

This has also meant I have had to develop a better sampling strategy. Before we surveyed every water point monthly. We now have to measure several homes in each area to get a broader view of water quality at the household level. This is increasing costs and makes analysis harder as there are more causes of poor water quality (which may still include poor water quality at the collection point or even source). To address this I have introduced a triage system. A set of sanitary inspection forms is used to assess the household storage and the point of collection. Only if there are no (or very few) risks is a sample taken for bacteriological testing. If there are risks, then the water is deemed (possibly) unsafe. This has reduced testing costs but increased staff costs. Another problem is the reporting. Some people prefer the simplicity of the bacteriological results, but these are difficult to analyse in terms of focusing action – whereas the sanitary inspection forms highlight practical improvements that can be made.

Feedback and questions from reviewer

Household safe storage requires behaviour change. How are you managing quality in promotional activities?

D1. Ability to communicate effectively

From the perspective of a government WASH inclusion officer

Incremental steps

My role is to ensure inclusive activities in the government water ministry. Most of the staff have engineering, science or management backgrounds. There are guidelines on equity and inclusion but these are often ignored or carried out according to the letter rather than spirit. As the current situation is not improving, I carried out some internal focus groups to find out colleagues' views on E&I. The meetings showed that the current guidance was abstract and my colleagues did not like the jargon. I decided to work in incremental steps. So the current activities just focus on making facilities more accessible. The engineers have accepted the challenge of ensuring access for people with disabilities as it is easy to include with their design work. I am supporting them in design consultation sessions with various people with disabilities to improve the engineers' focus group skills.

Feedback and questions from reviewer

- How are you judging the impact of the guidelines?
- How are you going to expand activities to less visible forms of social exclusion?

From the perspective of a market-based NGO officer

Dirty words

I work for a container-based sanitation NGO and the challenge we have is introducing the topic of excreta disposal to people. This ranges from local politicians to householders. There is a reluctance to engage with the topic. I have been using sketches rather than photos to provide a softer set of images. The language used is also a challenge. "Excreta disposal" is useful for formal and policy situations, but for less formal occasions, more vernacular language has to be used to ensure understanding. Euphemisms can cause confusion but more direct language can shock. Menstrual hygiene, perimenopause and incontinence are also topics that have to be talked about carefully. The terminology tends to medicalise these issues. I have been writing a style guide on the use of the language for my colleagues.

Feedback and questions from reviewer

Have you got examples of how different terminology can cause problems?

From the perspective of a cholera response team lead

Negotiating land-use

During a cholera outbreak response, I was responsible for securing land for emergency treatment units and sanitation facilities. The proposed site was owned by multiple families with competing claims. Effective communication was critical. I first met individually with each family head, listening to their concerns. They were concerned not only about the loss of their land, but the fear of stigma they may receive from the wider community. They were also worried about how much they would be compensated. I used simple, non-technical terms to explain the public health urgency of having the land available – and the role it would play in bringing the outbreak to a stop.

I then convened a single mediation meeting with all stakeholders. To facilitate the discussion, I prepared visual aids: a clear map of the proposed site layout and a simple chart showing the projected reduction in cholera cases with the treatment unit in place, and another, without. I

acted as the meeting chair, ensuring each party could voice their concerns. I summarised points of agreement and conflict, carefully recording action items. Through patient negotiation I helped draft a memorandum of understanding that addressed compensation and a post-outbreak land restoration plan. It was decided that compensation would be provided as food aid, not cash. My ability to adapt my communication—from one-on-one empathetic listening to structured group facilitation—secured the land within 48 hours, enabling a rapid life-saving response.

Feedback and questions from reviewer

You have demonstrated your ability to listen to stakeholders to understand their perspectives and priorities. You have described how you have adapted the language of your communication so that stakeholders can understand the issues in plain, non-technical terms. You have also demonstrated how you have been attentive to facilitate discussion between stakeholders and keep records of these discussions and the decisions that were agreed.

- How did you maintain this dialogue with the affected families once the land had been selected and the emergency treatment units and sanitation facilities had been installed?
- How were the families concerns of stigma addressed?

D2. Knowledge of working professionally, ethically & complying with relevant codes of conduct

From the perspective of a peri urban sanitation designer

Responding to users

I have been working in a peri urban area on FSM projects. Due to an increase in water supply to the area, water consumption has gone up and also the production of greywater. The local people are complaining about the wastewater but the funds available for urban sanitation improvements are all going on a sludge treatment works for pit emptying. There is a mismatch between the inhabitants' requests and the funding priorities of the department. I have consulted the local university on methods of managing the increasing amount of greywater but the only solution they have is sewerage, which is not in the current policy. This situation has not been resolved but has been flagged for the next budget meeting.

Feedback and questions from reviewer

What form of complaints are there about the greywater?

From the perspective of an emergency WASH officer

Encouraging professionalism

In a recent earthquake response there were many volunteers from outside of the region, bringing supplies and trying to help. The majority did not have appropriate skills or knowledge, or were water engineers with no relief experience. This was creating confusion at best and dangerous practices at worst. I invited as many I as I found to a Cluster meeting – many did not know it existed. This required diplomatic skills as I did not want to dismiss their efforts but also the needs of the local population had to be prioritised. We used a discussion method to identify strengths and weaknesses of those present. Solutions included partnering those with technical skills (but not relief experience) with people more experienced in earthquake response. Those with no relief experience or relevant knowledge were encouraged to help manage the supplies or use social media to discourage random donations that were inappropriate.

Feedback and questions from reviewer

How do you balance the natural desire to help with the need for a professional response?

From the perspective of a WASH project manager

Responding to unethical behaviour

I am aware of the tools that organisations use to define ethical behaviour, such as Codes of Conduct. In my role I recognise that I need to make sure that everyone in the team is familiar with these policies. The policies include fraud and corruption prevention. I need the team to understand that there is a zero-tolerance approach to fraud and corruption. I would organise meetings to discuss these issues. I would also organise regular refresher trainings, to keep these issues at the forefront of people's minds.

I also need to make sure I act with impartiality as the project manager – especially when managing conflicts. I must ensure that I don't take sides. On one occasion a staff member [to confirm] was abusing their power to have someone be one of the daily labourers. After an investigation took place, it was revealed that the staff member had been demanding sexual

favours of a project beneficiary [perhaps in promise of aid]. This person's contract was not renewed.

In another case, it had been agreed that the community would freely collect and provide the gravel required for construction. One of the supervisors [a team member] later submitted a receipt from a supplier that included the provision of gravel. I was present to negotiate the community's contribution. Therefore, when I saw the receipt come to my desk for approval. I raised this incoherence with my line manager. We began an investigation. We learnt that the supervisor and the supplier had agreed to falsify the receipt to gain extra profits. His contract was stopped.

Feedback and questions from reviewer

You have demonstrated how you have stayed sensitive to the issues that go against the agreed code of conduct, responding to suspicions and concerns through investigations and appropriate disciplinary actions.

- You mention that you need to act impartially. Can you give me an example of when you have had to act impartially? What does "acting impartially" look like for you in your role?
- What, if any, work have you declined because you were concerned that you did not have the training or knowledge required?
- When have you sought expert advice when assessing or developing a WASH solution – perhaps for something outside of your direct area of expertise?

E1. Appreciate the importance of continuing professional development

From the perspective of a water company manager in a small town

Changing CPD pans

My recent CPD record is below. I recognise it is mainly technical and my current role requires more knowledge on budgeting and team management. I am discussing opportunities with the HR department.

Continuing Professional Development record

Date	Hours	CPD category	Key points	Future plan	Key benefits
2/4/24	1	Conferences, seminars, webinars	Webinar on incontinence	Downloaded report for future reference	Gained awareness of new topic
4/6/24	2	Research	Reading new WHO drinking water guidelines	Apply guidelines to future projects	Adopting new SI forms
8/6/24	6	Supervised study	Full day RWSN workshop on corrosion of handpumps	Pass on information to colleagues	Should improve O&M and reduce costs

Feedback and questions from reviewer

What CPD opportunities are you finding difficult to identify?

From the perspective of an emergency WASH support worker

Finding gaps in knowledge

My organisation has a good series of planned training events. In the last 2 years I have attended 2 intensive 10-day WASH courses. These did not just cover theory but had lots of project work to put theory into practice. It also developed wider professional skills such as presentations and team work

These courses help identify gaps in my knowledge. Working with my work mentor, she identified suitable MOOCs and publications to work through on these topics. She has set a review for 6 months' time.

Feedback and questions from reviewer

What were the strengths and weaknesses of the courses?

From the perspective of a monitoring and evaluation lead

Identifying learning to support project challenges

I was working as the monitoring and evaluation lead for the project. The WASH needs in our area of intervention exceeded the funds that we had available. I needed to find a way to decide which locations the project should be making investments to WASH infrastructure and services. I learnt that spatial analysis of WASH vulnerability data would be used to make these assessments. This was a skill area I was not familiar with.

To address this skill gap, I prepared a continuing professional development (CPD) plan. Over one year:

- (1) I completed a 20-hour online certificate course in QGIS for Beginners.
- (2) Attended two regional WASH webinars where GIS case studies were presented.
- (3) Subscribed to the "Waterlines" journal and specifically studied articles on geospatial analysis.
- (4) Under the mentorship of a colleague, applied my learning by mapping water point functionality and overlaying it with poverty data for my district.

Applying my learning in this way helped secure funding for a targeted rehabilitation project. The donors were impressed how comprehensive our analysis was. I maintain a CPD log. This learning journey accounted for over 35 hours of my CPD records last year. It has fundamentally enhanced my professional ability to design evidence-based, equitable WASH interventions.

Feedback and questions from reviewer

This is a great example of how you have responded to a project challenge by identifying the knowledge and skills you would require overcoming the issue. You have shown how you have used a variety of learning methods, including practical on-the-job mentoring.

- How were your skill gaps in your ability to spatially analyse WASH vulnerability data limiting the targeting of your programmes?
- What were the adverse consequences / limitations of this inability on your programme's performance, and the quality of services provided to those the programme was seeking to serve?
- What did you learn / observe from mapping water point functionality overlayed with poverty data for your district? What metrics did you use to measure poverty?
- How did the application of what you had learnt help secure funding for a targeted rehabilitation project?

E2. Appreciate your commitment to the sector

From the perspective of an NGO WASH lead

More than just pipes

As the WASH lead, I act as mentor to all my WASH staff but that is also a line management activity. When visiting projects I will have conversations with them, and also with their WASH partners working on the project. Within the wider organisation I am trying to challenge the image that WASH is all about pipes and pits. I'm raising the importance of WASH as a preventative activity with my health colleagues and as an entry point for inclusion issues with my gender colleagues. My organisation is a member of the WASH Road map and I attend meetings and give feedback on various initiatives.

Feedback and questions from reviewer

How can you separate the needs of your programmes with the career development needs of individuals? What compromises are needed?

From the perspective of a local government environmental health officer

Organising training

As the WASH elements of my work are the main part of my work in environmental health, I see my career in environmental health going down this route rather than other parts of environmental health (food hygiene or occupation health) or public health (e.g. vaccination programmes or general health promotion). To this end I am working with the Ministries of Water, Health and Works to develop better guidance for local government officers. I have organised annual meetings for other environmental health officers in my region, inviting speakers from the WASH field to present to the group.

Feedback and questions from reviewer

How do you compare the Environmental Health sector to the WASH sector?

From the perspective of a country-level WASH Advisor

Supporting sector-wide initiatives

During my time with an INGO in DRC, in 2018 I championed that we trial the innovative Wash'Em approach to behaviour change. I closely collaborated with the main partners as I supported the team in learning and applying the approach. I have continued to support the initiative through my work as an independent consultant after working at the INGO, presenting work experiences at online webinars the group were running, and independently promoting the initiative. I have often given my time to support the facilitation of Wash'Em training courses taking place online – with a mixture of live and remote support.

Feedback and questions from reviewer

What stood out to me the most was that you had taken the initiative to trial Wash'Em whilst you were working for Medair. This initiative was not asked of you or directed to you by the organisation. You wanted to support an innovation that was going on elsewhere in the sector.

- How is the Wash'Em approach still being used in the sector today?

6. Continuing Professional Development guidance

These guidelines set out the criteria for satisfying the Continuing Professional Development (CPD) requirements. These are based on the guidance from the Chartered Institution of Water and Environmental Management.

What is CPD?

CPD can also be called lifelong learning, capacity development or on-going training. CPD refers to a range of learning activities through which WASH professionals maintain and develop skills. Throughout your career you should ensure that you retain your capacity to operate safely, effectively, and legally within your sphere of WASH. Continual learning and development enables individuals to keep professional skills and knowledge up to date, and is a way for individuals to show they are committed to learning and development throughout their careers.

Your CPD Record

- You should maintain a reflective CPD record with a minimum of 90 hours over a three-year rolling period
- In addition to factual details, such as time spent and content of specific activities, CPD records must also contain planning and objectives together with constructive assessment and reflection of the personal professional development benefits gained from each activity
- The record must demonstrate that your CPD activities include a mixture of learning activities relevant to your current or future practice

The need for CPD

WASH professionals hold positions of high responsibility, which involve planning, designing, operating and maintaining the water and sanitation services and assets on behalf of the wider public. In both your everyday activities and in planned participation at specially organised events and courses, you should:

- keep up to date with technological changes;
- keep up to date with legislative changes.

You should also seek to enhance your:

- knowledge and understanding;
- skill and aptitude;

- breadth of experience.

These activities (whether formally planned or informal), may be carried out in order to:

- respond to a specific need;
- prepare for a specific role change;
- follow a particular career plan;
- improve a personal weakness in competence.

It is your responsibility to define your own learning needs and undertake appropriate CPD to maintain and develop the professional knowledge, skills, and competence you need.

How much CPD is required?

A minimum amount of CPD activity required is ninety hours, over a three-year rolling period. This flexible approach means that your CPD can take account of how you work, and you can plan your CPD activities to address your changing needs.

In addition to factual details, such as time spent and content of specific activities, CPD records must also contain planning and objectives together with constructive assessment and reflection of the personal professional development benefits gained from each activity, this should include details of how the CPD benefits the quality of your practice and the users of their work.

Qualifying CPD

CPD is not just about going on training courses, although these may be useful. WASH professionals must make their own decisions about the kind of CPD activity that is relevant to their role and their work. For example, CPD activities could include going on secondment, in-service training, mentoring, or reading or reviewing journal articles etc. You must demonstrate that your CPD activities are a mixture of learning activities relevant to your current or future practice.

You can structure CPD activities around your personal development plan. This flexible approach means that you can plan your own CPD in a way that suits your work, your learning needs, your preferences and the time and resources available.

The activities listed below are suggestions for CPD opportunities that you may wish to consider:

Research, or acquiring knowledge in new technology pertaining to the environmental or water sector

This might be in response to: a new client brief; a change in role within the organisation; an expansion of duties within a current role; a new post with a new company; a change of specialism within the sector. A maximum of 75% qualifying CPD credit can be obtained from such activity in each year. Records of the professional benefit obtained and the time spent must be kept by the individual.

Conferences, seminars, webinars and technical meetings organised by an appropriate institution, university, other professional body, course provider and employer

Notes should be made both of the activity itself, and of the time spent in actually receiving professional benefit during the activity. Where a CPD credit is allocated by an organiser, an individual's claim for CPD time must not exceed this allocation, unless he or she then deliver some further outcome from the event; for example a lunch-time presentation to colleagues.

Conferences, committees and working parties, in a managerial capacity

Details of the nature of involvement in the event and time spent on the event must be recorded by the individual. A maximum of 20% qualifying CPD credit can be obtained from such activity in each year.

Private studies that are suitably structured

Before undertaking private study a formal statement of the aims, objectives and source material should be made. Upon completion of the private study the time spent and the benefits gained by the individual can be assessed against the stated aims and objectives.

Correspondence or online courses, and other supervised study packages

Records of acceptance on to the course, professional benefits of the course, and the time spent in studying must be kept by the individual.

Technical authorship and the preparation of lectures for organised events

The time spent on these activities must be recorded. An honest, objective evaluation of their professional development value must also be made by the individual.

Undertaking a formal role in the running of the WASH sector at either national or local level

Details of the nature of the involvement in the event and time spent on the event must be recorded by the individual. A maximum of 20% qualifying CPD credit can be obtained from such activity in each year.

Undertaking the duties of interviewer at professional reviews and/ or a professional development mentor

Details of the nature of the duties and time spent in their execution must be recorded by the individual. A maximum of 20% qualifying CPD credit can be obtained from such activity in each year.

Planning CPD

CIWEM recommends that members follow a regular CPD cycles and review their learning needs on an annual basis. This process should identify development needs through a personal development plan. Your personal development plan should:

- specify a focus (keeping up to date; career move (target position); more in-depth knowledge of a topic; winning business from a new client/sector);
- identify gaps/ goals (they should be specific, measurable, achievable, relevant, time-delimited);
- schedule events/ activities to meet the gaps/ goals
- review and assess progress against the schedule on a regular basis;
- reflect on the success achieved by comparing current status against the previous year's plan

Recording CPD

You must keep your own record of CPD undertaken each year. In addition to factual details, such as time spent and content of specific activities, CPD records must also contain planning and objectives together with constructive assessment of the personal professional development benefits gained from each activity. The precise format of this record can suit the individual's own preference, for example in long hand notebook and/ or excel files. Although ownership of CPD records remain with the individual member, reasonable requests for access to the material may also be received from an employer, registration authority or court of law.

When recording CPD activity you should include:

- the type of activity (for example private studies, formal training, event attendant etc.)
- identification of the main developmental outcomes required of the event/ activity;
- identification of the principal learning benefits of the event/ activity;
- identification of whether further events/ activities need to be undertaken;
- identification of whether other paths of research need to be pursued as a result of the activity

Sample CPD record

Date	Hours	CPD category	Key points	Future plan	Key benefits
2/4/24	1	Conferences, seminars, webinars	Webinar on incontinence	Downloaded report for future reference	Gained awareness of new topic
4/6/24	2	Research	Reading new WHO drinking water guidelines	Apply guidelines to future projects	Adopting new SI forms
8/6/24	6	Supervised study	Full day workshop on corrosion of handpumps	Pass on information to colleagues	Should improve O&M and reduce costs

7. Guidance for employers, trainers and educators

Although the primary focus of this competency framework is to assess the competency of individual WASH practitioners working in low-resource settings, it can be used in a variety of ways by various stakeholders across the sector. This note describes how the framework can be used to support the work of other key stakeholders such as employers and those engaged in training and education.

As a reminder, this framework can be used by individual WASH practitioners to:

- Demonstrate that they have reached a stage in their career where they can **lead in their technical field**, influence others and be entrusted with new tasks.
- **Identify gaps** in their competency that can be improved through tailored capacity strengthening through professional development, as they work towards meeting the framework.
- Provide those desiring to **enter or transition** into the WASH sector in low-resource settings to assess the suitability of their expertise and practice to date.
- Establish a clearer indication of their **career progression**, encouraging those working in WASH in low-resource settings to build a life-long career in the sector.
- Allow for the **experience gained** in one organisation, context or country, to be more appropriately valued in others – providing a common “currency” of expertise.

Employers

Organisations operating in low-resource settings need to be able to demonstrate the quality of their work to their partners, those funding the work and WASH service users. Employing competent staff is a major element of demonstrating the quality of an organisation’s work. In line with accountability mechanisms, donors and end-users should be able to expect that work on WASH services is carried out by competent staff. When bidding for funds or contracts of work, being able to demonstrate that you have an appropriately competent workforce is a significant advantage. The framework provides employers with a benchmark for this, especially if individuals are independently accredited.

Employers can use the framework to:

- Support the **recruitment** of personnel, making the process more transparent and effective
- **Assess job performance**, comparing it to defined standards
- Equip **project designers** and **proposal writers** with the information required to better define the “manpower” required for the project activities

Recruitment

The competency descriptions in this framework can be used during interviews to assess the quality and breadth of the work experience presented by candidates. The indicators of achievement can be used to form questions to help prompt a candidate’s response. Employers may wish to state in job adverts and job descriptions that adherence to this framework is desirable. Candidates that can

demonstrate the full range of competencies indicate to employers how well-rounded their knowledge and experience is.

Job descriptions

Job descriptions used for employment or promotion tend to be more specific than a competency framework. They are focused on immediate work requirements rather than career development. However, the competency descriptions and indicators of achievement can provide inspiration for job descriptions. Employers may wish to identify which of the competencies are most relevant to job roles, by matching the competencies to the job descriptions. Meeting the competency levels gives a useful method of shortlisting job candidates or a clear threshold for promotion. Employers may want to set their own threshold levels of competency for each competency area when developing job descriptions or making decisions on promotion, using one of the four levels found in the framework.

Staff appraisals

The framework can be used by employers to guide performance appraisals and staff development plans. Using the framework can ensure that staff develop in a rounded manner rather than just responding to immediate work requirements. This can help organisations be better prepared for changing circumstances and emerging needs within the WASH sector. Furthermore, staff may extend their commitment to an organisation if they can see the wider opportunities for them to develop their career beyond their current roles and responsibilities.

Trainers and educators

Competencies describe the behaviours required from WASH professionals to independently lead in their areas of work in low-resource settings. The content of training courses and educational resources help practitioners gain the building blocks of knowledge, skills and attitudes, that when combined with experience lead to competent behaviour.

Trainers and educators can use the framework to:

- Develop learning opportunities that clearly **address the needs** of the sector
- Ensure that course content and learning methods give opportunity for learners to **practice the skills** they will need to work effectively in the sector
- Identify **existing gaps** in training provision that are not yet provided for

Course design

One underlying WASH issue is the need for a **holistic approach**. Any WASH course should acknowledge this, ensuring that the relevant aspects of economic, environmental, inclusion, social and technical issues are raised, whatever focus the course has. This means that inclusion and social issues are included on technical courses and that technical elements are included on social courses.

Another element is the need for **cross cutting or employability** topics. Skills in communication, teamwork and project management are essential for WASH practitioners to plan and deliver solutions effectively. Including them in the learning experience can make WASH courses more relevant to the real-world experiences that WASH staff face. Integrating these skills into courses and training assessments can provide individuals with evidence that they have some skill and knowledge in these areas. Furthermore, WASH practitioners are more likely to find cross-cutting competencies (such as inclusion, communication or consultation) more relatable when presented in a WASH context rather than generic courses that may not have clear, practical application.

The competencies look at what people can do, rather than just what they know. Including some practical elements into courses help people gain some experience of applying theory. This also supports learning approaches such as the Kolb Cycle. It is unlikely that attending a course will satisfy many of the competencies by itself, apart from some at the “appreciation” level, but they can provide a good foundation for the others.

Identifying learning needs and gaps

Trainers may want to use the framework to assess the knowledge and experience levels of learners before, during or at the end of learning initiatives. This could take the form a self-assessment tool that uses the competency descriptions and/ or indicators of achievement.

The supporting materials include a list of suggested development activities for each competency area. Many of these activities are practical ways individuals can gain experience and develop their practice. Learning resources and courses also feature. At the time of publication, some competency areas seem to be better covered by existing learning opportunities than others. For example, there seems to be various learning resources for the analysis and evaluation of WASH problems and technical design guidance. However, it seems that there are gaps in methods for option appraisals such as cost-benefit / effectiveness analysis, and risk-based decision-making during project implementation. Training on quality assurance systems and analysing ethical dilemmas also appears limited.

There is a need for non-technical courses. These may focus on one competency such as health and safety or ethics. Some of the background knowledge of how the WASH sector works is hard to learn as it is rarely written down in a comprehensive manner. Some courses may be able to be mapped on to several competencies, whilst others may focus on just one area. Individuals can combine courses to cover a range of competencies. A more thorough review of available learning resources and courses could help confirm **gaps in learning coverage**. Additions to existing courses and materials or the development of new resources can then be proposed to meet these gaps.

As experience grows in the use of the framework, there will be feedback on what areas of professional development need more support. If, for example, people find it difficult to demonstrate good health and safety practice, then this reveals that educational support may be needed in this area.

One requirement of the framework is for continuing professional development/ lifelong learning. This does not have to be formal training courses as it includes attending webinars, reading around the topics, job shadowing and carrying out more in-depth research. However, the need to demonstrate a commitment to keeping skills up to date may **open up demand** for courses for more experienced staff as opposed to introductions to the subject.

Competent instructors

Good training relies on good instructors. There are sets of competences for experienced trainers but WASH trainers also need to demonstrate they know the subject matter well. Meeting the competency threshold can show prospective learners that the trainers are experienced WASH professionals.

Raising the profile of staff capacity

The aim of the competency framework is to raise the importance of staff quality. It provides a way for staff and employers to be **accountable** to funders and the users of WASH services. Courses and qualifications are part of this, as is experience. The framework brings these elements together.

By supporting this strategic framework, different training providers can cooperate on raising the standard of WASH staff across the sector.

8. WASH job descriptions

Competencies and job descriptions are similar, in that they try to describe the work of individuals, but there are differences.

	Competencies	Job descriptions
Ownership	Competencies are “owned” by professional groups, with members working together to set standards.	Job descriptions are decided by employers.
Assessment	Competencies are assessed by peers in the professional who have already reached a reasonable standard of conduct.	Meeting job descriptions is judged by managers.
Approach	Competencies are “bottom up”, with individuals in the sector working together to define them.	Job descriptions are “top down” defined by the employer to employee.
Detail	Competencies are broad, covering a wide range of professional roles.	Job descriptions are mainly specific to the role, with clear boundaries. Wide job descriptions are hard to fulfil. Narrow descriptions can lack flexibility.
Scope	Competencies are sector wide.	Job descriptions are specific to each employer.
Time scale	Assessments are based on experience over several years.	Job descriptions can be reviewed every year, often in annual appraisals or reflecting on single incidents.
Variation over time	Competencies stay the same over a career. Once the minimum threshold is reached, individuals are deemed competent.	Job descriptions vary between jobs. Being promoted or changing job results in a different job description.
Purpose	Competencies are external evidence to clients, funders and wider society that the individual has reached a certain professional standard. It is about accountability .	Job descriptions form part of an internal employment contract , specifying what the employee should do in return for wages.
Focus	Professional focus, including ethics, lifelong learning, attitudes, commitment to the sector.	Focused on core aspects of work.
Assessment	Can be subjective and judged by peers.	Needs to be objective and enforced with a contract.

These are general observations, there can be some overlap at times, with some specific competencies (e.g. for water quality technicians) having a close relationship with job descriptions for that role.

Model job descriptions can provide a base for employers to draft their own work contracts. A generic job description can be edited and adapted to suit the employer's needs. Two current job descriptions are reproduced here. One is generic WASH manager and one is more detailed (but shorter) for a hygiene promotion coordinator.

The standard job descriptions have been mapped onto the framework. For each topic or sub topic, a competency is suggested, e.g. **A1**. This is not precise, as some descriptors may contribute to two or more competencies. Not all job descriptions map on to a competency, as these may be a requirement of a job, rather than a sector wide requirement.

Some areas (like the "B" topics), have many job descriptors, whilst others (such as ethics or training) may only have one descriptor. Some of the sector competencies, knowledge of the wider sector (A1), personal continuing professional development (E1) and commitment to the sector (E2) may not appear at all as these are for the sector and the individual, rather than the employer. Some cross cutting topics (communication or inclusive approaches) may be summarised in a single job descriptor and not be reflected throughout the whole job description.

Water, Sanitation & Hygiene Project Manager Job description

Acknowledgement

This job description was prepared by the Bioforce Institute in October 2016

Objective and definition of the Water Sanitation and Hygiene Project Manager (WASH-PM) job description

The WASH-PM job description is intended to describe the key competencies (responsibilities) and duties of a water, sanitation and hygiene manager.

In certain cases, the WASH PM may be specialised in a particular field (e.g. boreholes, urban networks, etc.). The job description does not take account of such specialisations; instead, it presents the general scope of the job.

The job description aims to be a generic, consensual and comprehensive.

Approach and use

To ensure its relevance, a job description has been developed:

- By analysing profiles and job offers provided by the main aid agencies working in the water, sanitation and hygiene sector.
- With input from WASH head-office & field staff of the main aid agencies working in the sector (answers from questionnaires, interviews, steering committee).

Bioforce uses the job description as a benchmark tool to develop the training programmes, modules and sessions it delivers. This job description was developed in line with the core humanitarian competencies framework developed in 2011 by the Consortium of British Humanitarian Agencies.

Job title and job descriptions

The job of the WASH Project Manager can be performed by an international or national employee. Different titles are used depending on the organisation:

- WASH Project Coordinator
- WASH Programme Manager
- WASH Project Officer
- Field Water & Sanitation Manager
- Technical Water & Sanitation Manager
- WatHab Delegate
- WASH specialist
- WASH Project Manager
- WATSAN Log

The job descriptions vary across organisations depending on different criteria, including:

- Organisation type
- Field work context
- Programme/project type
- Scope of the role
- Tasks and responsibilities

Role, competencies and qualifications

The WASH Project Manager is responsible for managing WASH projects in humanitarian, rehabilitation or development contexts in rural, peri-urban or urban areas. From the moment these projects are conceived or implemented, the WASH-PM will be responsible for:

- ensuring that beneficiaries have enough drinking water;

- developing and promoting access to collective or individual sanitation structures;
- coordinating hygiene promotion and setting up a water-management system.

This work mainly takes place within the Non-Governmental Organisations, United Nations agencies, International Committee of the Red Cross agencies, Red Cross and Red Crescent Societies, and governmental agencies in countries and geographic areas where water and sanitation is a major public-health issue.

The WASH PM must have a diverse range of competencies and/or technical knowledge in order to effectively assess sanitation conditions and implement WASH activities. The WASH PM is self-managed to a great extent and has key project-management duties: assessment, planning, managing tasks, managing teams, finance and logistics management.

The duties of the WASH PM in an international humanitarian context also require specific behavioural and interpersonal competencies:

- Good analytical skills, discernment and ability to see the bigger picture
- Good organisational skills and a self-starter
- Realistic, reliable and flexible
- Ability to adapt to different, often stressful circumstances
- At ease in a multicultural environment
- Tact, patience and diplomacy
- Ability to communicate and built trusting relationships
- A team player with team spirit.

Finally, basic competencies are also necessary: good written and spoken English, good writing skills, and good hands-on knowledge of the principal computer software tools.

To qualify for this job, candidates must have professional experience in one of the technical fields (water, civil engineering, environment, geology, hydrology, sanitation) and/or a validated training programme related to the sector. Previous international experience is also useful for this job.

Sector-specific competencies

1. Analyse the context in which WASH projects are conducted in the international humanitarian sector **A1**.

- Participate in analysing the political, geopolitical, humanitarian, safety, socio-economic and environmental issues affecting access to water, sanitation & hygiene in the host countries and in particular in the specific project area. **A2 B1**
- In the context analysis, include humanitarian response coordination mechanisms, risks associated with protecting and organising communities socially. **A2**
- Identify the different stakeholders involved in WASH management working in the specific project area and understand their positioning and strategy. **A1**
- Review and include international and national standards in the WASH sector. **A2 B1 C4**
- Analyse the social organisation and the specific socio-cultural characteristics of the project's beneficiaries. **B1 B2**
- Identify legal and ethical frameworks that might orient the project: international state law, humanitarian law, codes of conduct, organisational charter. **A2 B1 D2**
- Depending on the context, make use of the standard tools and methodologies for quality and accountability (Core Humanitarian Standard (CHS), Organisation for Economic Co-operation and Development (OECD), Active Learning Network for Accountability and Performance (ALNAP), Sphere, Quality COMPAS, cluster, Sustainable Development Goals (SDGs), etc.) **A2 D2**

- Contribute to analysing the local market and use appropriate analysis tools (e.g. Emergency Market Mapping and Analysis (EMMA), Pre-crisis Market Mapping and Analysis (PCMMA)). **B1 B2**

2. Identify and assess sanitary conditions, access to water resources and sanitation infrastructure in the intervention areas **B1**.

- Collect and analyse available technical documents (SDGs report, ministerial data, etc.). **B1**
- Collect and analyse epidemiological data related to the WASH-PM's specific field of competence, by working with health specialists. **B1**
- Coordinate/ conduct sanitary surveys (pollution risks) and water quality checks (bacteriological and physicochemical risks). **B1**
- Draw up an inventory of water resources: type, flow, recharge, geological & hydrogeological context, rainfall, climate, etc.). **B1**
- Use monitoring and data-collection tools to assess water resources and conduct a hydrological assessment (e.g. piezometer, rain gauge). **B1**
- Adopt a comprehensive, integrated approach in assessing the water resources: **B1 B4**
 - Assess the water needs for the target communities, priority organisations (health care facilities) as well as humanitarian and farming requirements (livestock, markets, industries etc.) **B1**
 - Assess the needs of other humanitarian programme sectors (nutrition, food security, disaster risk reduction) **A1**.
 - Include social engineering and include cultural, social, economic, legal (land use plan), technical (type of soil, water table) and environmental dimensions (integrated management of water resources, resource protection) in the assessment) **B1 B4**
- Assess whether water requirements are compatible with available resources. **B2**
- Draw up an inventory of access conditions to water, sanitation & hygiene infrastructures: **B2**
 - Carry out field visits and assess access conditions (availability, infrastructure type, maintenance, etc.) **B1**
 - Use minimum standards, tools and benchmark methods (The humanitarian charter and the minimum standards - SPHERE, Participatory, Hygiene and Sanitation Transformation (PHAST), etc.) to carry out an analysis. **B2**
- Integrates in its analysis WASH cross-cutting issues (WASH and gender, handicap, HIV, nutrition...) **A1 B2 B4**
- Assess WASH infrastructure requirements for target communities and priority facilities (health-care centres, markets etc.) **B1 B2 B4**
- Make use of information and communication technologies (e.g. Geographic Information Systems (GIS), survey software etc.), in order to interpret and correlate the hydrological, hydrogeological and sanitation data collected. **B2**

3. Design and carry out tasks related to the action plan and the organisation's strategy **A2**.

- Provide sectoral intelligence for the project **A2**
- Together with the department concerned, draw up the WASH intervention strategy in the host country, and especially in the project area, to ensure it meets the organisation's mandate **A2**
- When developing the strategy, include objectives to use and strengthen the local market **A2**
- When developing the strategy, include the specific types of intervention such as 'Wash in Nut' and 'Wash in Schools' **A2 B2 B4**

- Organise discussions with beneficiary communities about the projects and include their opinions in decision-making and the continuous quality improvement process of the projects implemented **D1 B2 B4**
- Design and implement the project's activities:
 - Carry out the assessment in the project area: use rapid assessment tools to identify any needs or gaps related to water, hygiene and sanitation **B1**
 - Propose an intervention strategy **B2**
 - Study what actions are possible and suggest new activities to develop the WASH programme **B2**
- Develop a quality-assurance implementation plan: **C4**.
 - Coordinate actions that can be implemented either on site or remotely **C1**
 - Programme resources in line with the technical staff while keeping within budget **C1**
 - Develop and/ or improve activity monitoring tools and indicators **B3**
 - Control the quality of completed activities (monitoring, continuous improvement mechanisms) **C4**
 - Prepare & organise internal and external project evaluations **B3**
 - Get the team involved in the project evaluation **B3**
 - Keep the authorities, partners and beneficiaries informed about the activities (accountability principle) **B3 D1**
 - Ensure that the WASH PM's activities are appropriate to the explicit and implicit requirements of beneficiaries. **B3 C1 D2**
 - Check that the activities conform to donor requirements **B3 C1**
 - Check that the activities implemented meet professional standards **D2**
- Contribute to capacity strengthening actions **E1**
- Propose a project exit strategy while ensuring the continuity of the activities or the sustainability of the implemented systems **B3 C3**
- Measure the impact of the actions conducted (surveys) **B3**
- Collaborate on project evaluations **B3**

4. Develop partnerships and networking

- Analyse existing partnerships **B1**
- Work with existing operational and technical networks **A1**
- Analyse the positioning and strategies of the different stakeholders **B4 C4**
- Develop operational networks and partnerships **A2**
- Connect and encourage interactions between the various partners in order to strengthen access to water, sanitation and hygiene in related programmes **D1**
- Represent the organisation with external bodies (local authorities, clusters, etc.) **A2, E2**
- Put forward relevant proposals on the technical approach for the project **B2**
- Negotiate with project partners **B3 D1**
- Develop, conduct and evaluate WASH advocacy actions focused on partners and responsible bodies (water utilities, ministries, etc.) **B3 E2**
- Support, train and build capacities with staff and WASH project partners **B3 E1**

5. Recruit, develop and manage the project team **C1**

- Recruit team members: **C1**
 - Participate in writing WASH job descriptions **C1**
 - Recruit team members and participate in individual interviews **C1**
 - Induct new team members and help them integrate into the team **C1**
- Manage and lead a project team: **C1**

- Organise and run team meetings **C1 D1**
- Organise teamwork to meet objectives **C1**
- Draw up and manage work schedules **C1**
- Develop individual and collective competencies (technical skills, leadership...) **C1 E1**
- Prevent and manage conflict between the different team members **C1**
- Set objectives and conduct performance-appraisal interviews **C1**
- Ensure a two-way flow of information and decisions between management and the field team **C1 D1**
- Ensure that the internal rules and regulations are applied **C1**
- Support and train team members: **C1 E1**
 - Identify training needs **C1 E1**
 - Identify competencies and potential and facilitate professional development **C1 E1**
 - Draw up a training plan for the team **C1 E1**
 - Support the team in adopting water, sanitation & hygiene methods and techniques **C1 E1**
 - Provide team members with on-the-job training and supervision **C1 E1**
- Transfer part or all of their responsibilities for handover or delegation including operational, functional and inter-personal aspects **B3 C1**

6. Handle reporting, administrative management & budgetary management for WASH projects **C1**.

- Administrative reporting and management: **C1**
 - Approve/supervise the team's professional reports (monitoring reports) **C1 D1**
 - Develop and draft internal progress reports **C1 D1**
 - Draft project proposals by factoring in donor constraints **C1**
 - Develop and draft external reports in accordance with donor requirements **C1 D1**
 - Ensure that the administrative procedures required by the organisation and necessary for the correct project implementation are in place **C1**
 - Write concise, analytical reports and emails **C1 D1**
- Manage the budget **C1**
 - Present a budget related to the WASH-PM's specific field of activity **C1**
 - Manage, allocate and plan the project's material and budgetary resources **C1**
 - Manage budgets for the project and notify when there are differences between the forecast budget and reality **C1**

7. Coordinate a WASH construction site as delegated project manager or contracting authority **B1, B2, B3 C1**.

- Draft calls for tenders together with the departments concerned **C1**
- Identify partners/ service providers **B2**
- Design and model simple WASH structures (latrines, shower blocks, tanks etc.) **B3**
- Produce/ interpret WASH construction plans **B3**
- Bring in specialists (e.g. design firms) to design complex structures (e.g. for urban water networks) **C1**
- Validate technical choices for construction projects and the choice of materials **B3**
- Approve construction quotes and estimates **C1**
- Coordinate the different workers on site (service providers and tradespeople) **C1**
- Develop quality-control tools for facilities constructed and monitoring building sites **C4**
- Ensure compliance with safety regulations: technical equipment, stored materials, perimeter fences for construction sites and structures **C2**
- Organise delivery of completed facilities to beneficiaries or authorities **C1**

8. Coordinate hygiene promotion & encourage community participation **B1**, **B2**, **B3** **C1**.

- Analyse communities' social organisation systems, their attitudes and practices in terms of hygiene in order to design, implement and monitor actions: **B1** **B2** **B3** **B4**
 - Mobilise people with specific social skillsets (e.g., anthropologists, social workers etc.) **B3** **C1**
 - Organise the qualitative and quantitative studies necessary to assess, design, implement and monitor the work **B1**
 - Assess the hygiene practices that represent a health risk (e.g., Knowledge, Attitudes, Practices (KAP) surveys) **B1** **B2** **C2**
 - Include the analysis of the local market in the assessment **B1** **B2**
 - Integrates in its analysis WASH cross-cutting issues (WASH and gender, handicap, HIV...) **A1** **B2** **B4**
 - Use the specific methods and tools for developing hygiene-promotion programmes (participatory assessment tools, PHAST, Community-Led Total Sanitation (CLTS), social marketing, etc.) **B2**
 - Determine the indicators specific to the context for hygiene assessment and monitoring **B3**
- Coordinate hygiene-promotion activities: **C1**
 - Set objectives aimed at changing hygiene behaviours and practices that present a health risk **B2**
 - Select and train a hygiene-promotion and community-mobilisation team **C1**
 - Develop a communication strategy by using available, relevant media, suited to the context (radio, theatre, posters, meetings etc.) **B2** **D1**
 - Develop a strategy to create the conditions for change and community ownership (e.g. CLTS) **B2**
 - Coordinate the design of messages and media for hygiene promotion **B2** **D1**
 - Approve messages and media: technical booklets, posters, cartoons, videos **D1**
 - Supervise the organisation and implementation of awareness-building campaigns with local communities **C1**
 - Approve the contents of hygiene kits and their distribution **C1**
 - Make sure that hygiene products and infrastructure are accessible (e.g. through a market-based approach or hygiene-kit distribution) **B3** **B4**
- Coordinate and collaborate with the competent authorities to implement the WASH-management system and community participation: **C1**
 - Run workshops to choose a system for management and cost recovery **C1**
 - Coordinate and set up WASH-management committees **B3**
 - Coordinate the training on the management and maintenance of facilities, responsible organisations, WASH committees and technicians **B3** **E1**
 - Identify repairers and suppliers of spare parts **B1**
- Manage the implementation or renovation of specific structures (showers, washing areas, hand washing stations):
 - Make technical choices by discussing with the beneficiaries / authorities depending on standards and the context **B1**
 - Design the structures **B2**
 - Supervise the construction or renovation of structures **B3**
 - Monitor and assist in organising maintenance operations **B3**
- Measure the impact of the actions conducted (surveys) **B3**

- Ensure that the beneficiaries are satisfied, deal with their complaints and inform them about the project's activities (accountability) **B4**
- Define a project exit strategy, ensuring the continuity of the activities or the sustainability of the implemented systems **A2**

9. Design & manage the implementation of water-supply systems **B1, B2, B3 C1**.

- Manage the implementation or renovation of water-abstraction facilities (rainwater harvesting, surface water, groundwater): **C1**
 - Select the sites where the structures will be located or renovated, by using appropriate methods and techniques **B2**
 - Determine the appropriate abstraction techniques for the resource **B2**
 - Coordinate the construction or renovation work for the abstraction plants **B3**
 - Supervise the development of specific structures (wells and boreholes) and flow testing **B3**
 - Supervise the disinfection of the structures before operations begin **B3**
 - Determine and implement protection measures for the structures and water resources. **B3**
- Manage and implement or renovate water-pumping systems: **C1**
 - Determine and monitor the implementation and operating parameters for the pumping system **B2**
 - Select pumping systems based on technical, cultural and socio-economic constraints **B2**
 - Supervise the installation and commissioning of the pumping installation. **B3**
- Manage the installation or renovation of gravity-fed water networks (urban or rural contexts, camps and health-care settings, including cholera-treatment centres and nutrition centres): **C1**
 - Carry out feasibility studies for distribution networks **B1**
 - Perform topographic surveys **B1**
 - Produce construction plans including pipelines and facilities **B2**
 - Design distribution networks and facilities **B2**
 - Supervise the construction or renovation of systems **B3**
- Manage the installation or renovation of drinking-water treatment systems (mass treatment, household treatment and specific contexts such as cholera-treatment centres and other health-care facilities): **C1**
 - Perform the initial surveys and physicochemical analyses **B1**
 - Determine and select the techniques and methods for treating drinking water (individual or collective treatment systems) **B2**
 - Design and implement the pre-treatment and treatment procedures **B2**
 - Implement a system to monitor and control water quality **B3**
 - Train users on individual treatment and water storage systems and methods **E1**
- For all the activities:
 - Select the strategic and technical option based on the standards and the social, economic, cultural, political and security context, in collaboration with beneficiaries and authorities **A2**
 - Monitor and organise maintenance operations **B3 C1**
 - Ensure that the beneficiaries are satisfied, deal with their complaints and inform them about the project's activities (accountability) **D1**
 - Carry out the mandatory and recommended physicochemical analyses before handing the facilities over to the beneficiaries or the authorities **B3**

- Provide the technical documents for the completed facilities to the beneficiaries and the authorities, and archive copies **B3 D1**
- Define a project exit strategy, ensuring the continuity of the activities or the sustainability of the implemented systems **B3 C3**

10. Design & manage the implementation of sanitation measures **B1**, **B2**, **B3**. **C1**

- Manage the implementation or the renovation of collection, treatment and disposal of excreta in both rural and urban settings:
 - Conduct surveys **B1**
 - Make technical choices **B2**
 - Design structures **B2**
 - Supervise the construction or rehabilitation of facilities and check for effectiveness **B3**
 - Identify the appropriate sanitation chains and implement the collection transport, storage and treatment, disposal or recycling of excreta **B3**
- Manage the implementation or renovation of systems and plants for collecting and treating wastewater and rainwater run-off: **C1**
 - Conduct surveys **B1**
 - Select and design the collection and treatment systems **B2**
 - Supervise the implementation of the different systems used and check for effectiveness **B3**
- Manage the implementation or renovation of domestic/collective waste collection and treatment systems and plants: **C1**
 - Conduct surveys **B1**
 - Work with the competent authorities on designing sites and treatment facilities for final disposal of the waste as well as the collection, sorting and transport methods, especially in an urban environment **B2**
 - Supervise the implementation of the different systems used and check for effectiveness **B3**
- Manage the implementation or the renovation of healthcare-waste collection and treatment systems and plants: **C1**
 - Design, site and model the waste treatment or final disposal sites **B2**
 - Select the collection, sorting and transport methods in collaboration with the teams responsible for managing healthcare facilities **B2**
 - Supervise the implementation of the different systems chosen and check that the chosen methods operate effectively **B3**
- Manage the measures taken to control disease vectors: **C1**
 - Determine the individual and collective methods for controlling these vectors (mosquito nets, drainage systems etc.) **B2**
 - Coordinate the implementation of programmes to control vectors following established protocols (chemical control, distributing mosquito nets, drainage etc.) **B3**
- For all the activities:
 - Select the strategic and technical option based on the standards and the social, economic, cultural, political and security context etc., in collaboration with beneficiaries and authorities **A2 B2**
 - Monitor and organise maintenance operations **B3**
 - Ensure that the beneficiaries are satisfied, deal with their complaints and keep them informed about the project's activities (accountability) **D1**

- Provide the technical documents for the completed structures and work to the beneficiaries and the authorities and archive copies **B3 D1**
- Determine a project exit strategy, ensuring the continuity of the activities or the sustainability of the implemented systems **B2 C3**

11. Participate in logistics, regulations & security procedures when implementing WASH activities **C1**.

- Apply the organisation's specific logistics guidelines, regulations and procedures: **C1**
 - Identify the logistic and technical resources necessary for the WASH activities together with the logistician **C1**
 - Adapt and decide on how to prioritise the project's available resources **C1**
 - Assess the purchasing requirements for goods and services related to the project **C1**
 - Identify suppliers of goods and services necessary to run WASH projects **B1 C1**
 - Write calls for tender with the logistics and administration departments **C1**
 - Study and compare the suppliers' quotes **C1**
 - Draft contract terms and conditions in collaboration with the administrative and financial departments **C1**
- In collaboration with the logistics departments, monitor the reception, storage, transport and distribution of equipment and materials in the intervention area **C1**
- Set up quantity and quality control tools for the equipment and materials for the WASH project **C4**
- Ensure that the organisation's specific instructions, regulations and procedures are followed **C1**
- In collaboration with the organisation's logistics department, check that the logistics rules and procedures implemented comply with local and national regulations (e.g. regarding waste management). **C1**
- In collaboration with the organisation's logistics department, assess the environmental impact of activities implemented. **C3**
- Apply the specific safety instructions, regulations and procedures: **C2**
 - Analyse the security context in collaboration with the manager concerned in the field **C2**
 - Ensure that the team members follow the organisation's instructions, regulations and procedures **C2**
 - Ensure that the team members follow the host country's laws, regulations and customs **C2**

Cross-cutting competencies

12. Be able to use computer software tools for WASH activities

- Use standard word-processing software to enter and format text (reports, job descriptions, meeting minutes, letters etc.) **C1 D1**
- Use standard spreadsheet software to build activity-monitoring tools, manage databases, produce hydraulic calculations or technical data sheets, etc. **B2 C1**
- Use emails, messaging and other general communication tools **C1 D1**
- Use the basic features of GIS software: processing, interactive queries, viewing geographic data **B1 B2**
- Use the basic features of mapping software (Google Earth, GPS Utility etc.) **B1**
- Use the basic features of hydraulic modelling software (for example EPANET) **B2**
- Use data-collection software tools (Kobo, Sphinx, ODK) **B1**
- Implement the IT or telecommunication tools necessary for monetary exchange (Cash-Based Intervention (CBI)) **C1**

13. Communicate with teams, partners, community members and authorities D1.

- Speak and write clearly and unambiguously in French and in English D1
- Speak and write English to, at least, level B2 (Common European Reference Framework for Languages) D1
- In English and French, use the vocabulary specific to the international humanitarian environment and more particularly in the field of WASH D1
- Work with translators to make it easier to access community members D1
- Organise training courses on relevant technical concepts and terms for the translators B4 D1 E1

14. Personal competencies

- Interpersonal competencies
 - Provide leadership D2
 - Build relationships A2
 - Be trustworthy D2
 - Act with team spirit D2
 - Show empathy D2
 - Use active listening skills D1
 - Consider the needs of others D2
 - Negotiate with various partners D1
 - Delegate effectively D2
 - Be assertive as and when appropriate D2
- Communication
 - Adapt language so as to understand and to be understood. B4 D1
 - Write and speak clearly and without ambiguity. D1
 - Adapt technical vocabulary to local vocabulary. D1
 - Adopt a language that is respectful of local culture. D1 B4
 - Build relations with the affected communities. D1
 - Express differences of opinion in a sensitive and measured way. D1
- Flexibility and adaptability D2
 - Adapt to constraints and unforeseen situations D2
 - Demonstrate self-control D2
 - Manage stress and work under considerable pressure D2
 - Adapt behaviour to the cultural environment D2
 - Work in multidisciplinary and multicultural teams D2
 - Be reliable in meeting commitments D2
 - Be rigorous and show a strong sense of responsibility D2
- Discernment
 - Act with self-awareness D2
 - Act with detachment, keeping in mind the bigger picture A2 D2
 - Be pragmatic D2
 - Demonstrate objective analytical skills and keep a sense of proportion B2
- Initiative
 - Be proactive B2
 - Generate ideas B2
 - Suggest improvements and creative solutions A2
 - Work independently as and when necessary
- Organisational competencies

- Clearly define goals in line with the project's strategies **A2 B2**
- Prioritise tasks and redefine priorities based on needs **C1**
- Manage time effectively and meet deadlines **C1**
- Integrity and Ethics **D2** .
 - Understand the concept of confidentiality **D2**
 - Explore the factors, which can influence perceptions (age, sex, culture, education, etc.) including for oneself **C3 D2**
 - Be aware of the specific attitudes and beliefs, which influence stakeholder commitment and participation **C3 B4**
 - Ensure that team members do not abuse their power/ position **C1 D2**
 - Take appropriate measures if the behaviour of any team member breaches ethical standards. **C1 D2**
 - Be sensitive to gender issues and make sure the women are involved and take part in teamwork (if applicable) **C3 B4**
 - Get the local community involved and make use of local expertise **C3**
 - Ensure that the most vulnerable people are included and able to participate **B4** .
 - Ensure compliance with laws, regulations and customs in force **A2 C1**

WASH cluster generic job description: Hygiene Promotion Coordinator

This was developed by the Global WASH Cluster

Reports to: WASH Team Leader

Manages: Hygiene Promoters and Community Mobilisers

Purpose:

As part of the WASH intervention, to safeguard and improve the public health of the affected population by:

- promoting safe WASH practices, including appropriate use and maintenance of WASH facilities and services;
- ensuring appropriate community involvement in the design and delivery of essential WASH services and facilities;
- ensuring effective coordination and integration of Hygiene Promotion activities with the delivery of water and sanitation services and facilities.

Key tasks and responsibilities:

Information management

- In collaboration with other members of the WASH team, design and manage assessments and baseline studies in order to identify WASH-related health risks and priorities. **B1**
- In cooperation with other WASH staff, design and plan activities to reduce these risks, with reference to both physical and behavioural aspects. **B2**
- Design and manage a plan to monitor activities, outputs and impact and adapt the programme as needed. **B3**
- Design and manage periodic studies to measure progress and the health impact of the WASH intervention. **B3**
- Provide regular and reliable narrative and financial reports. **D2**
- Work together with other WASH team members to ensure that the various aspects of the WASH response are integrated, and that they form part of a coherent public health response. **B3**
- Coordinate assessments, plans, and activities with other agencies (governmental and non-governmental), as necessary. Participate in cluster coordination meetings as appropriate. **C1**

Implementation

Ensure and oversee the following activities:

- Identification of key hygiene practices to be addressed and sectors of the population with whom to engage and develop an appropriate communications strategy to promote safe practices. **B2**
- Identification, or facilitation, of community structures through which the WASH activities can be implemented. **B1**
- Mobilisation of the disaster-affected communities as appropriate for participation in planning, construction, operation, and maintenance of WASH facilities and services. **B3**
- Creation of channels for dialogue between the WASH response and the affected population, to ensure appropriate technical interventions and allow the agency to be held to account for the quality of the WASH programme. **B3 D2**
- Design, implementation, and monitoring of WASH activities that are appropriate to specific sectors of the community, e.g. children, youths, women, and men. **B2 B3 C3**

- Identification of any need for the distribution of non-food items related to public health, such as containers, soap, hygiene kits, etc., and participation in the choice of items, targeting strategy, promotion of effective use, and post- distribution monitoring. **B2**

Resources management

- Recruit, train, and manage Hygiene Promoters and Community Mobilisers. **C1 E1**
- Plan and manage the Hygiene Promotion budget, and control/authorise expenditure. **C1**
- Manage day-to-day logistics, administration, and personnel activities (including any local, contracted personnel/ daily labour) in accordance with national law and organisational guidelines. **C1**

Programme approach

- Ensure that Hygiene Promotion activities are in line with relevant standards, codes of conduct, and humanitarian principles. **D2**
- Use participatory approaches as far as possible throughout the programme cycle, in training, and in the use of tool kits and other materials. **B2 D2**
- Ensure that Hygiene Promotion activities and resources are implemented and handed over or ended in a way that promotes local capacities and sustainable operations. **B3 C1**
- Ensure that gender, protection, HIV, the environment, and other important cross-cutting concerns are taken into account in programme design, implementation, and reporting; ensure that activities reflect the needs of specific groups and individuals e.g. elderly people, children, and people with disabilities. **B2 B3 B4 C3**

Person specification:

- Knowledge of public health and one or more other relevant area (e.g. health promotion, community development, education, community water supply). **B3**
- At least two years of practical experience in developing countries in appropriate community health programmes in different contexts. Some of this time should have been in emergency relief programmes.
- Good knowledge and experience of working with local partner agencies with a capacity to provide formal and informal training. **B3**
- Experience and understanding of Hygiene Promotion and community mobilisation in relation to water and sanitation activities. **B3**
- Understanding of international health and development and relief issues. **A1**
- Sensitivity to the needs and priorities of disaster-affected populations. **C3**
- Demonstrated experience of integrating gender and diversity issues into public health promotion. **A2**
- Assessment, analytical, and planning skills. **B1 B2**
- Good oral and written reporting skills. **C1 D1**
- Diplomacy, tact, and negotiating skills. **C1 D2**
- Training/ counterpart development skills. **C1 E1**
- Personnel management skills. **C1**
- Good communication skills and ability to work well in a team. **C1 D2**
- Ability to work well under pressure and in response to changing needs. **C1**
- Ability to travel at short notice and to work in difficult circumstances. **C1**
- Good written and spoken skills in the language of the humanitarian operation. **D2**

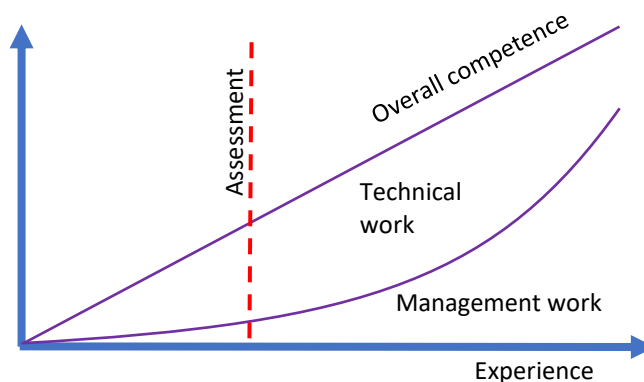
Other information:

Specific job descriptions to be completed with brief background on context, humanitarian response, and organisation's role, reporting lines, terms and conditions etc.

9. On the route to competency - using the WASH framework at different levels

An individual's level of competency will build over time, as they gain more experience and learn more about their area of work. At the start of their career, or when they are transitioning into WASH work in low-resource settings for the first time, they will have a relatively low level of competency. Not all competency areas will develop at the same rate. Experience of managing teams, resources and projects may be gained after having first obtained hands-on practical experience in their technical area of work. The amount of practical work may reduce later in their career, as they carry out more managerial tasks.

To demonstrate the breadth of competency required for this framework, individuals should have some experience of both the practical side and management work. This means that will likely require several years of work experience before they can be formally assessed. This will allow time for them to work on several projects or in different roles, exposing them to a variety of tasks and a range of contexts.



Increases in competency over time

Four levels

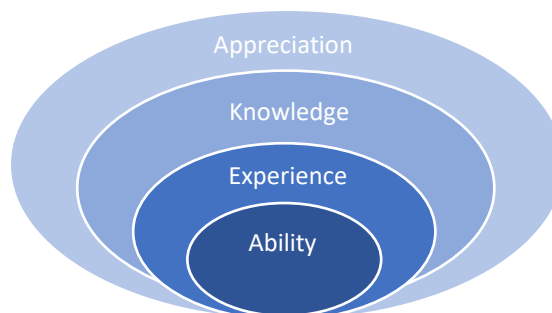
This framework uses four levels of competence:

Appreciation: At this level, individuals have a general appreciation of the competency area. They can explain why the area is important without needing to be prompted, but they may not have any direct experience.

Knowledge: At this level they can demonstrate their understanding of the competency area, without needing the topic to be explained to them. However, they may not have much experience applying this competency area in their work.

Experience: At this level they can demonstrate that they have practical hands-on experience of the competency area. They do not need to be given detailed instructions to demonstrate the competency area. However, they have not yet reached the stage where they can operate without some form of supervision and guidance.

Ability: This is the highest level used in this framework. At this level they can demonstrate that they can perform effectively and independently in the competency area and can advise others. They no longer require close supervision.



Levels of achievement

They do not need to reach the “ability” level for every topic. In some areas, just being aware of the issue is sufficient. For specialist areas such as hydrogeology, protection of women or contracting, WASH professionals will need to know about the topic, but expertise from other professionals is likely to be needed. Examples of how individuals can demonstrate these different levels of competence include:

- **Appreciation** of the value in giving something back to the WASH sector to support its development (E2), but they may not have taken concrete steps towards this.
- **Knowledge** of the potential ethical dilemmas in their area of work (D2) but are lucky enough to not have any direct experience dealing with them.
- They should have **experience** of managing health and safety (C2) and quality assurance (C4) procedures, but these specialist areas are supervised by specialist staff.
- Demonstrating **ability** by providing evidence where they have personally contributed to the anticipation, adaptation and management of changing contexts or different WASH users (B4).

Thresholds

The competency descriptions in this framework define the threshold level of competence considered necessary for a WASH practitioner to operate independently, efficiently and successfully in their area of work. The threshold level defined in this framework is different for different competency areas.

The main areas of responsibility for a WASH practitioner are set at **ability**. These are tasks that the WASH sector traditionally focusses on, mainly around the design, implementation and operation of WASH services – such as competencies B1 through B4.

Other competency areas are equally important, but do not require the same level of competence. As they build knowledge and gain experience in each of these competency areas, they will be able to recognise their current level of competency, and how close they are to meeting the threshold.

A significant benchmark is achieved when individuals can demonstrate they meet the threshold level required for each competence. This is the minimum standard for a professional. Until they can demonstrate they can meet the required level of unsupervised work in that competency area, they still require oversight. For example, they may be able to demonstrate the ability to solve problems by options (B2) but if they have not reached the required level to demonstrate that they communicate effectively (D1), they will still require some supervision.

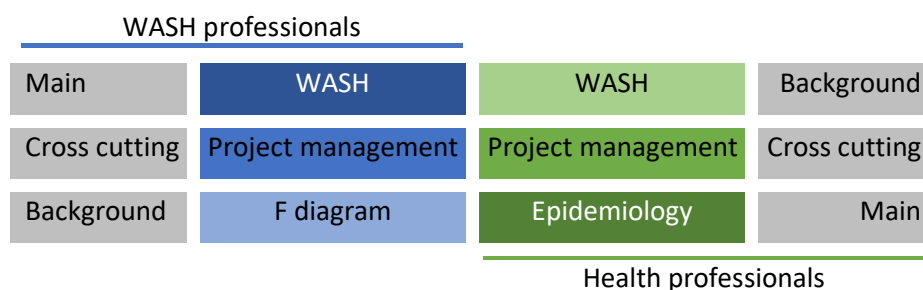
Expertise

Some WASH practitioners will be able to demonstrate a level of competence above the ability level. This framework is not designed to measure competence above this level. Individuals may go on to develop specialist knowledge and experience, forming an expertise in one, or several areas. For instance, some people will have extensive knowledge and experience of WASH indicators. They can identify, select and justify the SPHERE indicators for WASH. These people exceed the ability threshold in this area. Most WASH staff do not need this level of knowledge on the details of selecting indicators – all they need to be able to do is apply the SPHERE guidance.

Expertise is harder to assess as other experts are needed to make the judgements at this level. Some topics may still lie within the WASH sector, but the skill level is beyond what could be expected of most professionals. Hydrogeology, complex water quality testing, environmental assessments and analysing the impacts on WASH on women are all areas that WASH staff need to be able to engage with, but an in-depth investigation would require greater expertise than this broad framework expects.

Working in partnership with other professionals

There are areas of knowledge and expertise that are important to professionals from WASH and other relevant sectors. For example, environmental health is important in the WASH sector, but a WASH professional would not be expected to be an epidemiologist. A health professional must be able to carry out studies on the transmission of disease but a WASH professional only needs to understand concepts such as the F diagram. The health professional does need to know about WASH to carry out their work but does not need the same depth of knowledge as a WASH professional. There are common topics, such as project management, for which matching levels of competency is required.



Recognising one's own competency level is an important professional characteristic. Knowing when you need to call on experts in or outside the WASH sector is an aspect of ethical work. Even competent professionals with a background in water supply will need to consult experts when they must work in vector control or solid waste management.

10. Professionalising the WASH sector

The scope of the current consultancy for the finalisation of a competency framework for the WASH sector culminates in supporting its soft launch. The WASH Road Map [WRM] team recognise that having a finished framework that has gone through testing and review, represents an important milestone. Nonetheless, it is recognised that for the framework to support the professionalisation of the sector, as laid out under initiative 5 of the WRM, it needs to become a tool that is recognised and used widespread across the WASH sector. This is a common asset for the sector that requires ongoing resourcing.

The WASH Roadmap is a time limited project. It is not set up to run activities directly. The scoping study¹ for this project noted the need for a sustainable, institutional “home” for the framework. Having a generally accepted set of professional competencies is an important milestone but is not sufficient by itself. There are various actions that will need to be taken to ensure that the framework is used and has an impact. The long-term goal is to have a **professional workforce**.

This review of the steps towards professionalisation is a series of observations resulting from discussions on this project, as it was not part of the Terms of Reference. This section provides some reflection on issues that have arisen during this consultancy and identifies some future activities. Many of the ideas and recommendations are drawn from existing reports on the professionalisation of humanitarian action.

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¹ EVANS, A., MCDONALD, C, OGUNSOLA-RIBEIRO, N, REED, BRIAN J., SMOKCUM, H, and WEBBE, V., 2023. *Capacity Development: A scoping and feasibility study for the WASH Road Map*. London, UK: RedR UK.
<https://www.washroadmap.org/professionalisation--scale-expertise.html>

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Professionalising the humanitarian sector

Increased accountability

Staff are one of the major inputs to any WASH project, alongside money, machines, materials and methods. Commenting on relief operations, Jan Egeland said:

“There were instances where the response was untested, chaotic, amateurish, doubled-up, overlapping, done by ‘Mom and Pop’ operations... if you’re not a professional in this game, you have no right to descend on someone in their moment of crisis and do on-the-job training. Saving human lives is no place for amateurs. Why is that? Because the poor, dispossessed and disaster-prone should have at least one basic right left to them: to be protected from incompetence.”²

A professional approach is a major element of accountability.

“In a [2009] survey, 84.7% of [humanitarian] respondents thought that enhancing ‘respect for the victim/ beneficiary and their community’ was the prime reason to pursue professionalisation.”³

Who benefits from professionalisation and how?

Beneficiaries of aid programmes: *Professionalisation* should increase the competence with which aid programmes are designed and implemented. It should increase commitment to and implementation of accountability mechanisms. It should ultimately create a relationship where humanitarian professionals expect to be held to account by the clients they serve.

Donors to humanitarian programmes: For donors, *professionalisation* will increase the assurance that their funds will be spent competently, ethically and to good effect. With ... professional standards set ..., it should allow them to make better choices between various agencies vying for their funding and enable them to consider funding more on the basis of proven competence than

² Action by Churches Together (ACT) International (2009) *Jan Egeland: Saving Human Lives is No Place for Amateurs*. <http://reliefweb.int/report/indonesia/jan-egeland-saving-human-lives-no-place-amateurs>.

³ WALKER, P. and RUSS, C., 2010. *Professionalising the Humanitarian Sector. A Scoping Study*. Cardiff, UK: ELHRA. https://www.elrha.org/docs/document/professionalising_the_humanitarian_sector.pdf?file_url=document/j5du283dbt1tna3nk78t8kbc4b/0r6l7eplwizsinusdzf2shj7w38/original?content-type=application%2fpdf&name=professionalising_the_humanitarian_sector.pdf

that of nationality and past record. By funding professionally approved capacity building programmes, it will reduce the duplication of funding for similar training initiatives.

Humanitarian workers: *Professionalisation* is overwhelmingly aimed at improving the competence, credibility and effectiveness of humanitarian workers. Shifting to a truer professional basis will allow humanitarians to better defend their independence and commitment to the values of humanitarian service and impartiality. Having common standards ... will encourage equity of opportunity across national boundaries and provide humanitarian professionals with a sound basis upon which to negotiate contracts and compensation packages with their employers. ...

Employers of humanitarian workers: For employing agencies, a more professional ... system will allow the employer to have a better grasp of the competencies being engaged. It will allow them to move away from agency-specific training to rely more on internationally recognised training. It will enable them to expect (and indeed demand) professional standards of behaviour and competence. In short, employers will have a more skilled and competent workforce. Collectively, employers will be able to spend less on capacity building and training initiatives as employees trained by other agencies with recognised standards will more readily be recognised. It will make it easier for employers to gauge the ... competence of their staff and ... plot their development.

National Governments: For those national governments responding to humanitarian crisis, a robust certified international capacity building system can support transferability of skills between their own national workers and those of incoming international humanitarian workers thereby enhancing the quality of the response. The benefits will also extend to smaller and local NGOs.

Adapted from WALKER, P. and RUSS, C., 2010.

Who can call themselves a professional?

Whilst other project resources can be objectively measured, the quantity and quality of 'manpower' is harder to establish. Whilst rejecting incompetent staff would seem to be obvious, trying to define what a WASH professional is, is not so easy.

"Schön describes how professionals are required to do more than simply apply their specialist knowledge unthinkingly to their practice. The true professional has to "think like a professional". Schön refers to the "reflective practitioner" as somebody capable of thinking on his or her feet, essentially developing a new understanding in response to every professional situation. It is a concept of professionalism that seems very compatible with humanitarian work, where in the midst of an emergency the clear-headed humanitarian is expected to respond calmly and intuitively in a situation that may be totally new and unexpected."

"Cruess [et al], ... describe the core elements of a profession as "possession of a specialised body of knowledge and commitment to service"... They explain that "because knowledge is used in serving others, professions are identified as being altruistic and value laden"."

(Walker and Russ 2010, quoting Schön (1983) and Cruess, Cruess and Johnston (2000))

So, whilst professionals have specialised knowledge, professions go beyond just having a set of skills. They are self-regulated as *"professional members are best qualified to judge the work of others within the profession"* (Walker and Russ, 2010). Walker and Russ note that Wilensky (1964) observed that the process of professionalisation includes:

"Creation of a full-time occupation and potential for life-long learning over a lifespan or whole career, not just a chapter in one's career"

Establishment of training – through both new and existing institutions

*Creation of a professional association – sometimes accompanied by a change in the name of the occupation, efforts to remove incompetent practitioners, **definition of core competencies** and competition with similar occupations”*

Herein lies a challenge for the humanitarian sector. In Walker and Russ’s survey, only 40% of respondents worked as humanitarians for more than five years.

Putting the competency framework into use

Professionalising humanitarian WASH is a step towards increasing accountability and effectiveness. Competency frameworks are one aspect of this process. They will not change the quality of staff by themselves, but are one element of moving towards a workforce who can demonstrate they have the skills and experience needed for this lifesaving role. There are various other activities that have been identified as contributing to this goal that were outside the scope of this project.

Matters arising beyond project scope

Informing development of standard job descriptions

The use of the competency as a job description or as a tool for new entrants to the profession was raised by some informants. A briefing note on the use of the framework as an HR tool has been written to help managers understand the differing roles of job descriptions and competency frameworks.

There are some existing job descriptions (for WASH managers, hygiene promoters and some specific tasks such as water quality technicians and WASH trainers) but little on the technical aspects of WASH, such as water supply or environmental sanitation. Comparing this draft competency framework with the two existing job descriptions (WASH managers and hygiene promotion) show these job descriptions do provide more detail on the “B” areas of the framework (project design and implementation) and less on the professional, ethical and attitude issues. Some of the individuals involved with phase 1 of this project have expressed an interest in developing generic WASH job descriptions, as there does seem to be an appetite for such models. This should be encouraged as this would be a useful addition and would aid the writing of job descriptions.

More effective training

Training courses are very variable in level, topic, length and quality. Exploring ways of improving training provision would help make this more effective and efficient.

Development of specialist frameworks

The competency framework that has been developed is generic. It may not be as appropriate for people working in specialist areas (such as gender and hydrogeology). The specific competency frameworks that exist for WASH trainers, community mobilisers and water quality technicians could be expanded upon to cover other expert roles. The experience from this project could be used to influence this work.

Uptake of the framework

Individual appreciation

A set of competencies will only have an impact if it is used. This framework is for individuals and so requires individual take up. However this will not happen unless individuals see the benefit of using the competencies. When asked to describe the benefits of using the competency framework pilot participants indicated that:

The competency framework has been an eye opener for me. It highlighted several areas I had previously overlooked in my career as a WASH professional. Participating in this competency framework initiative has been highly beneficial, as it has increased my awareness of available learning resources and strengthened my knowledge in key areas that I had not given sufficient attention to before.

Reed and Russell 2026 WASH competency framework for low-resource contexts. WASH RoadMap

Using the competency framework helps me understand what good WASH practice really looks like in low-resource settings and where my own skills sit within that. It gives me a clear way to identify strengths and gaps, so I can focus my learning and experience on what matters in practice. It also helps me work more confidently and accountably, make better decisions in complex contexts, and explain my competence clearly to employers, partners, or donors. Overall, it improves the quality, consistency, and impact of my work while supporting my professional development.

Whilst there is a level of personal achievement in being competent unless this is recognised by employers and the wider sector, incentive to maintain these standards will be limited. This can be reflected in the framework being used in recruitment and promotion. For example, the framework can be used to guide individuals as they prepare examples to demonstrate their experience during interviews and discussions on promotion. However, this does involve it being recognised by employers and donors.

Employer recognition

Recognition from employers and donors could include:

- Employers stating in job descriptions and adverts that candidates who can demonstrate their competency against a framework, such as this one, is a desirable or even essential attribute.
- Employers supporting staff in meeting the minimum threshold, through mentoring, training (even when the course is not directly required for current work) and allowing time for the preparation of reports and assessments.
- Employers using the framework for annual or career appraisals.
- Employers considering promoting or increasing the wages of competent staff.
- Employers reporting how many of their staff are deemed competent.
- Donors requiring competent staff on WASH projects.

Accountability

One of the strongest drivers for the sector to use the competency framework will be accountability to donors and users of WASH services. The effectiveness, impact and quality of a WASH project will depend upon the quality of its inputs. Using an objective method to measure the quality of project resources such as machinery, “manpower”, materials and methods, is a key component of assuring project success. Furthermore, there is an ethical obligation to identify and use the most appropriate resources to deliver services in low-resource settings, which includes meeting the immediate needs of those facing shocks such as displacement, disease outbreaks and/ or natural hazards.

WASH practitioners need to be held accountable for the quality of resources that are used, including personnel. Using the framework will help safeguard the quality of WASH services provided to populations in low-resource settings, increasing the level of accountability between end-user and service provider.

The use of a generally agreed standard for WASH professionals is a way of demonstrating that staff are competent. This may need to be led by donors to incentivise various agencies and organisations to in turn encourage staff to be able to demonstrate their abilities.

Practical next steps

There are several options that could be taken up now that the competency framework has been finalised. These include:

1. posting it online,
2. disseminating it (with an online “home”),
3. actively managing it, with future updates (requiring a “manager”),
4. using it as part of a drive towards professionalisation of the sector.

The first two options will have little long-term impact. The final option has the largest potential impact, but with a commensurate increase in effort required. Even within the drive towards professionalisation, there are different levels of professionalism that could be pursued, from a voluntary community of practice to mandatory registration of practice. The third option of the establishment a form of management could help contribute towards the framework being used to drive professionalisation but still requires resourcing.

Promoting the framework

Regardless of which option is chosen, for the framework to be used or considered a “go-to” tool, donors, employers and individuals will need to be aware of the framework. It will need to be continually promoted as there is a significant amount of turnover in the humanitarian WASH sector. This can be through social media posts, conference presentations, a presence on websites and word of mouth. There are various audiences for this promotion, such as WASH professionals, employers (both technical and HR roles), training providers and donors.

Promotional activities could include:

- Organisations and networks such as the Global WASH Cluster (GWC), the Rural Water Supply Network (RWSN), and the WASH Road Map (WRM) can endorse or recommend the framework through their websites, communications and newsletters. These endorsements can be added to the framework document.
- Individuals who have had their competencies independently assessed can add this to their email signatures, LinkedIn profiles and CVs.
- The finalised framework could be presented at sector forums, conferences and events, such as the Emergency Environmental Health Forum (EEHF) which is normally scheduled in June.
- Individuals who engaged in the pilot testing and/ or who have expressed an interest in this initiative could be provided mentor support to use and promote the framework in their local and regional contexts. Interested parties could be given the name “champions” so that their contributions are recognised.
- Learning organisations and researchers could use the framework to study what the most pressing knowledge and skill gaps in the sector are. This could include supporting individuals through the self-assessment process to identify common knowledge and skill gaps, before studying the availability, accessibility and quality of learning on these topics.
- Organisations (INGOs, NGOs, CBOs) could be approached to internally promote the use of the framework, incorporating its use into their recruitment and professional development practices. Ways that employers can recognise the framework is previously listed in this note.

Suggestions

Capacity building actors and employers should continue work on job descriptions, improving training and developing specialist competencies.

Employers should encourage and support their staff to work towards being assessed as competent.

The Road Map should support the dissemination of the framework

Drive towards professionalisation of the WASH sector

Assuming that the framework should have transformational impact, this briefing note explores the professionalisation route. The need for having a professional approach to humanitarian work cannot be disputed. Even volunteers must have the required knowledge and skills if they are going to carry out lifesaving work. Competency in WASH staff should be expected by employers, donors and WASH service users. A competency framework is one element of a profession, but there are other aspects.

*“In any given domain, a professional sector includes, amongst other things, specific and recognised professions, professional organisations, commonly accepted competency frameworks used for the recruitment and development of personnel, certifications required for the performance of duties, and accessible training programmes that are adapted to existing needs”.*⁴

Professionalising humanitarian action

A 2010 report⁵ on professionalising the humanitarian sector had various recommendations.

- *“Creating professional pathways and progression routes into the humanitarian sector*
- *Adopting core humanitarian competencies for professional development*
- *Ensuring coherence of core content within humanitarian master’s degree programmes*
- *Addressing the lack of entry and mid-level qualifications*
- *Addressing inequity of access to qualifications in Southern countries*
- *Formalising occupational standards for humanitarian work*
- *Quality marking of learning and development providers*
- *Developing a system of certification for humanitarian qualifications*
- *Creating international relationships for the promotion of global standards”*

Since that report, there have been various initiatives, with the development of generic humanitarian competencies and some sector specific frameworks. Ten years later, another review⁶ by Dalrymple and Den Ouden (2020) assessed progress.

“... very few humanitarian profession areas had developed agreed competency frameworks or certification mechanisms for individuals. None has a formally recognised professional association, although coordination bodies, membership networks and active communities of practice are numerous.

Individual profession areas vary significantly in terms of professionalisation. Some profession areas do not recognise themselves as a profession, whereas others have taken significant steps to professionalise. Some profession areas, where there is a long-established profession beyond the humanitarian sector (such as Finance Management), may see less incentive for humanitarian-specific professionalisation. Others seem to have significant opportunity to advance professionalisation because they have clear knowledge and skill requirements (Donor Relations and Grant Management) or because they can adopt professionalisation infrastructure from outside the sector (Project Management).”

⁴ DOWNHAM, R., 2021. The professionalisation of humanitarian action: a work still in progress. *Humanitarian Alternatives*. (16), pp. 112–127. https://alternatives-humanitaires.org/en/2021/03/25/the-professionalisation-of-humanitarian-action-a-work-still-in-progress/ah_n16_4_transitions_downham_ven/.

⁵ WALKER, P. and RUSS, C., 2010. *Professionalising the Humanitarian Sector. A Scoping Study*. Cardiff, UK: ELHRA. https://www.elrha.org/docs/document/professionalising_the_humanitarian_sector.pdf?file_url=document/5du283dbt1tna3nk78t8kbc4b/0r6l7eplwizjnsudzf2shj7w38/original?content-type=application%2fpdf&name=professionalising_the_humanitarian_sector.pdf.

⁶ DALRYMPLE, C. and DEN OUDEN, M., 2020. *The State of Humanitarian Professions*. Bioforce. https://www.bioforce.org/wp-content/uploads/2020/12/SOHP2020_FullReport.pdf.

Types of humanitarian professions

This 2020 report notes that the direction set out in the 2010 report has diversified. A single 'humanitarian profession' has evolved into different routes for different sectors and professions. The 2020 report noted two types of profession.

- A 'function' such as project management, that cuts across various sectors, and
- a 'theme', such as health or WASH.

An individual may identify with both – e.g. a WASH project manager or WASH information manager. The survey noted:

"... that people were more likely to be recruited from other profession areas within the humanitarian sector, than from similar profession areas outside the humanitarian sector [but] this tendency is felt more by those working in functional profession areas than in those in thematic profession areas." [emphasis added]

Thus a professional in a functional profession (such as MEAL) may stay working in humanitarian contexts (but perhaps in different sectors) more often than professionals working in a thematic area (such as health or education). Thematic professionals (such as WASH staff) had less tendency to stay working in the same context. However, in the survey, when asked what was most important for employers when recruiting individuals. "Number of years of experience in the humanitarian profession area" was deemed more important than "Direct demonstration of professional skills". However, the report queried this.

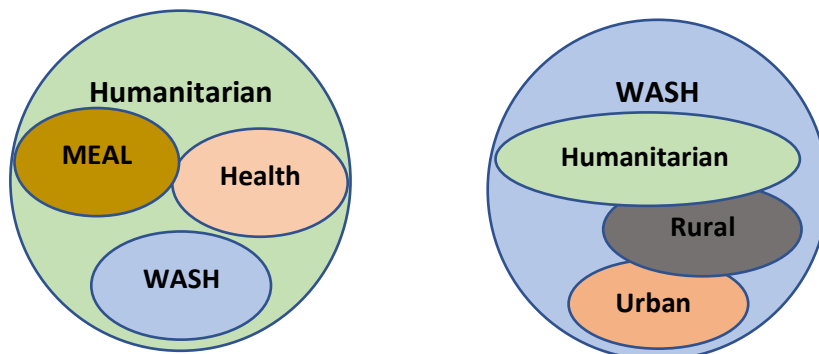
An emphasis on humanitarian experience is not surprising, but it might lead to reflective questions:

- *Is the emphasis on humanitarian experience justified? Or, is the humanitarian sector missing out on talented individuals from other sectors?*
- *How quickly can skilled professionals from other sectors adopt the competencies required to operate effectively in humanitarian work?*

This leads to a key question in the professionalisation of WASH; which is more important:

- number of years of experience in the humanitarian profession area or
- direct demonstration of professional skills?

For some professions (health, law, finance), the professional skills does seem to be paramount. For the thematic areas (MEAL, protection) without a strong 'external' profession, humanitarian experience does seem to be important. Education and logistics seem to require a balance – a clear demonstration of professional skills but also some humanitarian characteristics.



Is WASH a subset of humanitarian action or is humanitarian action a context for WASH?

Before trying to answer this question for WASH, it should be clear to whom the question is being asked. This is about **individuals**, not employers or sector leaders. It is about how they see their

Reed and Russell 2026 WASH competency framework for low-resource contexts. WASH RoadMap

career and how their employment will progress over their lifetime. This is an area of possible bias, as many senior staff members will have had a career in ‘humanitarian WASH’ rather than seeing humanitarian experience as just a part of a longer career.

“Interviewees and survey respondents felt that WASH work in the humanitarian sector was distinctly different to that in commercial and public sectors. Professionals working in private and public sectors are more likely to specialise in one or two work areas, whereas humanitarian professionals often work across several of the elements included in WASH. Engineering elements of the profession are consistent across sectors, but there are significant differences in terms of knowledge and skills in ‘softer’ elements of the work, such as community engagement. Survey respondents also emphasised the need to be adaptable yet professional when working within the urgency of a rapid response, and to work in high-risk locations with limited resources.”

As this report interviewed five international humanitarian WASH staff and had only 4% of respondents to the survey identifying as WASH staff, it would be interesting to see the views of WASH staff working in other (non-humanitarian) contexts to see if they agreed with the stance. Many of the distinctive elements (soft skills, limited resources) are probably more pronounced in ‘development’ WASH than in humanitarian WASH. Even in higher resourced contexts, softer skills are becoming more prominent.

From this 2020 report, it does appear that WASH is a ‘thematic’ role and has links to professions outside of the humanitarian context.

Routes to professionalisation

The 2020 report identified a range of paths to professionalisation. In some thematic profession areas there is a long-established profession beyond the humanitarian sector (such as health, finance management, human resource management, legal aid). In these cases, the professional area is well developed outside the humanitarian context, for example:

“Finance Management is based on accountancy standards and qualifications that are not specific to humanitarian work and applicable in any sector. For this reason, there is little need to develop a humanitarian-specific profession. “

At most, there might be a case for a ‘branch’ of the profession but not a separate profession. Education and logistics also have strong “external” profession but also some distinctive humanitarian elements. Other topics, such as camp management, shelter, nutrition and protection, were seen as being specific to humanitarian contexts. These tended to be quite specialist and had informal (but perhaps small) communities of practice. At the far end of the range, some areas, such as coordination, were not seen as stand-alone professional areas.

Professional associations

A professional association does appear to be an important element in the professionalisation process. Walker and Russ (2010) observe the role of professional associations:

“[Crues et al (2000)] suggest that professional associations are vital to professionalism. Associations have a dual role: to ensure standards within the profession as well as to “discipline unprofessional and incompetent behaviour”. Merton [(1958)] also describes the setting and enforcement of “rigorous standards” as the foremost obligation of a professional association. He describes the roles of the professional association as a “clearing house of professional knowledge” and as a voice for the profession, “able to speak authentically and authoritatively on behalf of the profession”.

In order to identify suitable professionalisation infrastructure, Walker and Russ (2010) quoted Hall (1968) who identified structural attributes (education and entrance requirements) and attitudinal attributes of professions:

Reed and Russell 2026 WASH competency framework for low-resource contexts. WASH RoadMap

- “1. A belief in service to the public – including the idea that the work benefits both the public (‘beneficiaries’ in the case of humanitarian work) and the practitioner*
- 2. Belief in self-regulation – professional members are best qualified to judge the work of others within the profession*
- 3. A sense of calling to the field – the dedication of the professional to his or her work rather than monetary rewards*
- 4. Autonomy – the professional is free to make decisions without external pressures”*

This regards professionalisation as a collective process for **individuals** who have a strong sense of public service. These groupings of professionals are self-regulated, ‘owned’ by the members and autonomous from other bodies.

Professional institutions do need resourcing. Dalrymple and Den Ouden (2020) noted.

“Professional associations need not be large, expensive or complex organisations. Significant progress in professionalisation could be achieved with simple organisations who manage a body of specific knowledge and a set of certifications. (Participants cited PM4NGOs and the PMD certification of examples of this).”

They also recommended:

“3. Build on existing infrastructure

Well established professions, such as health, law, education and finance, benefit from strong professionalisation infrastructure outside the humanitarian sector. Humanitarian equivalents of these professions can (and in some cases do) connect to existing professional development schemes and certifications. If necessary, additional qualifications could be established around competencies that are unique, or particularly important, in humanitarian work. This would also assist professionals to move between humanitarian and non-humanitarian professions.”

If there is an existing ‘professionalisation infrastructure’ for WASH, then this may be the best route to follow. Dalrymple and Den Ouden (2020) noted for the WASH sector,

“The Global WASH Cluster (GWC) is certainly the best-known reference organisation for this profession. There is no established global professional body for this area but some regional and national WASH associations and technical working groups. In many countries, humanitarian WASH practitioners have strong links with engineering institutions. “

The WASH Cluster already has a defined remit and does not fulfil the requirement of being “owned” by individual members of the profession. Whilst there are no institutions with the required infrastructure and mandate within *humanitarian WASH*, there may be some within the wider WASH sector.

Engineering is a wide topic, with sub divisions for civil, mechanical and electrical engineers. Some national associations do not have specific civil engineering associations, but just division within a wider engineering institution. Even civil engineering encompasses hydraulics, structures, roads, bridges and other public infrastructure. There has been a pattern of specialist groups forming as new technologies emerged⁷. WASH however is not a single profession. Whilst there is a strong engineering element, it requires an interdisciplinary approach, with strong elements of environmental management, social inclusion and health protection. There are roles for geologists

⁷ REED, B. and FEREDAY, E., 2016. Developing professional competencies for humanitarian engineers. *Proceedings of the Institution of Civil Engineers - Civil Engineering* 169 (5), pp. 49–56.
https://repository.lboro.ac.uk/articles/journal_contribution/Developing_professional_competencies_for_humanitarian_engineers/9453335

and scientists. Allying too closely with engineering associations may not be acceptable to the range of other people working in the sector.

WASH institutions

The term “WASH” is mainly used in the development and humanitarian contexts, as hygiene promotion is a significant element. Other descriptors are WatSan, Environmental Health Engineering, Public Health Engineering or a focus on one element – sanitary works or water quality.

A rapid review identified some potential WASH organisations.

In the UK, the Institution of Public Health Engineers was formed in 1895 (as the Institute of Sanitary Engineers). This merged with the Institution of Water Engineers and Scientists (founded 1896 as British Association of Waterworks Engineers) and the Institute of Water Pollution Control in 1987 to form the Institution of Water and Environmental Management – now **the Chartered Institution of Water and Environmental Management (CIWEM)**. In India, the **Institution of Public Health Engineers (IPHE)**, was established in 1972, based in Kolkata. This is an engineering body, that does not encompass the wider remit of WASH. Other professional engineering bodies were found, but most worked across several branches of engineering.

The **Rural Water Supply Network (RWSN)** describes its work as networking, providing knowledge and co-developing training, guidelines and standards. It does not cover the full range of WASH topics.

Trade and sector bodies

The **International Water Association** (founded as the International Water Supply Association 1947) is a slightly different organisation, as it focuses on conferences and publications, with corporate and individual members. **World Water Council** was founded in 1996 in Marseille as a grouping of organisations rather than individuals. It is a think tank and hosts conferences. The **Water Environment Federation (WEF)** is an international profit technical and educational organization, formerly known as the Federation of Sewage Works Associations and later as the Water Pollution Control Federation, and originated in 1928. The **American Water Works Association** is another international scientific and educational association founded to improve water quality and supply, established in 1881. It sets some standards. The New Zealand Sewage and Industrial Wastes Association was founded in 1958, merging with other organisations 1992, to form the New Zealand Water and Wastes Association (branded as **Water New Zealand**). The **Water Supply and Sanitation Collaborative Council** ran from 1996 to 2020, as a coordination body for water supply and sanitation based in Geneva.

These trade and sector bodies do not meet the requirements of professional independence set out by Walker and Russ (2010).

Chartered Institution of Water and Environmental Management

Although research has been limited (as this is not part of the current contract), the most ‘global’ individual member-based WASH organisation at the moment does appear to be CIWEM. Their role is set out as:

““Water and environmental management” means the application of works and services designed to further the beneficial management, conservation, knowledge and improvement of the environment, in particular in relation to:

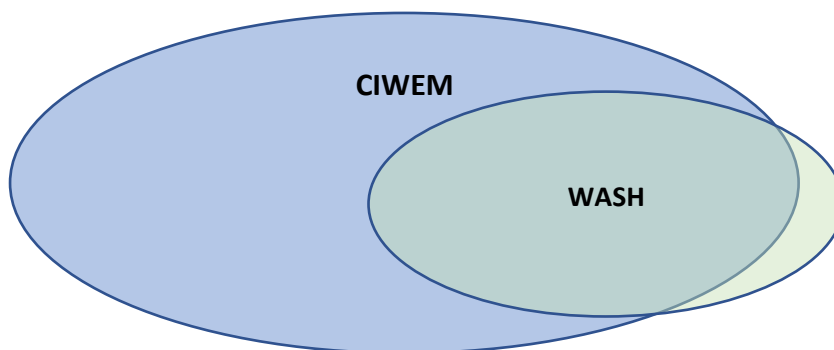
- (a) sustainable development and integrated environmental management;*
- (b) resource protection, development, use, sustainability and conservation;*
- (c) integrated pollution control;*
- (d) public health, water and sanitation services;*
- (e) flood and coastal risk management; and*
- (f) associated recreation, amenity, conservation and ecology activities,*

for the purposes of the foregoing “sustainable development” means development which meets the needs of the present without compromising the ability of future generations to meet their own needs and “sustainability” means having all the qualities of sustainable development.

The objects of the Institution shall be:

- *To advance the science and practice of water and environmental management for the public benefit.*
- *To promote education, training, study and research in the said science and practice for the public benefit and to publish the useful results of such research.*
- *To establish and maintain for the public benefit appropriate standards of competence and conduct on the part of members of the Institution “⁸*

The CIWEM subject matter is wider than WASH, as it encompasses water resources and ecology as well as water supply and sanitation. It does not have the same emphasis on health, having a greater focus on sustainability, though public health is included.



CIWEM has a slightly different remit than WASH

There are very few global bodies for any profession, but there are some mutual recognition agreements, such as the Washington Accord⁹. In some federal nations, professional accreditation is not even at national level, but at the federal state level.

Whilst CIWEM is based in the UK, it has branches in New Zealand, Hong Kong, Singapore and the Republic of Ireland, and members in over 90 countries. It does offer reduced membership fees to individuals in low-income countries. It does have some history of engagement in low resource settings¹⁰.

Resourcing an institution

There are a range activities required for running an institution. Even a simple community of practice will need a (part-time) secretariat to provide a focus and coordinate communications and activities. Additional activities will increase the resources required. This is not just financial, but expertise in running a professional institution and managing a competency framework.

As an independent, member-based organisation, funds normally come from membership fees and fees for accreditation or registration. This may be a problem for individuals working for low wages, and those with inconsistent employment. Fees can be paid for by employers but it is important that

⁸ Anon., 2021. Royal Charter and Bye Laws. https://www.ciwem.org/assets/uploads/Royal_Charter_and_Bye_Laws_26.10.21_1.pdf

⁹ <https://www.internationalengineeringalliance.org/accords/washington-accord>

¹⁰ E.g. DANGERFIELD, B.J., 1983. *Water Supply and Sanitation in Developing Countries*. London, UK: The Institution of Water Engineers and Scientists. and BAILEY, R., 1997. *Water and Environmental Management in Developing Countries*. London: Chartered Institution of Water & Environmental Management.

this is on behalf of individuals not as an employer contribution. Additional income may be generated from publications, conferences or training, but these need to be proportionate, not to deflect the independence of the organisation away from representing the profession.

Some subsidies may be appropriate to reduce costs for people working with low or inconsistent income. CIWEM already offers reduced rates for people in low-income countries, partly due to the reduced level of service they are able to access and partly due to the current low level of membership. Accreditation is more expensive however, even with assessors offering their time for free.

Hosting the framework

Dalrymple and Den Ouden (2020) identify two options for an institutional host.

- a specific organisation for a humanitarian profession, or
- engaging with a 'global' body to provide the required institutional infrastructure.

This decision will be partly determined by the resources available. The state of finances in the humanitarian sector is not good. Individuals may not be willing to pay membership fees unless they have clear benefits. The number of individuals working long term in the humanitarian WASH sector is not known but it is not likely to be significant. The number of potential members can be increased by widening the scope from a narrow focus on humanitarian WASH to the wider remit of 'low-resource' WASH. This would also allow individuals to move between different WASH contexts and retain membership.

Summarizing this discussion, ideally the host should:

- be **experienced** in managing **competency** frameworks,
- have a **global** presence,
- have **resources** to carry out basic office functions,
- have a presence in the **global WASH sector** (note, institutions allied to WASH may be acceptable, but WASH goes beyond a focus on infrastructure, water quality, environmental health or inclusion, so caution needs to be taken if hosts have a narrower focus),
- be **independent or membership** based, rather than donor or employer based. Professional conduct and ethical practice require individuals to sometimes disagree with employers, so having an organisation that acts on the behalf of professionals is important.

Other institutional requirements

A role of the host organisation is to periodically review the framework, with the assistance of an **expert committee**. The framework is still a draft. Whilst it has been through three rounds of feedback, it will probably need adjusting, clarifying and updating once experience in its use has been gained.

Suggestions of who should be on any committee will need to be sought. It needs to be member based but made of up of experienced professionals with a reasonable amount to experience. They should all be able to demonstrate the competences themselves.

Becoming a member

Assuming an institution can be identified, there are then several options for the way in which individuals become a member, and different routes to professional recognition. These have increasing impacts on the professionalization of the sector but also increasing cost and complexity.

Examples are:

- Sign up to a community of practice,
- Sign up, but with a membership fee,
- Complete an application form,
- Use a registration process, or

Reed and Russell 2026 WASH competency framework for low-resource contexts. WASH RoadMap

- Have an accreditation process.

The first couple of options may create a body of interested people, but there is no quality control. Walker and Russ noted the need for both qualifications and experience. Some professions require an extended period of academic study, albeit with some periods of practice. In the UK medicine and architecture follow this route. Others require a period of apprenticeship. Law and engineering in the UK have a hybrid model, with an academic qualification followed by a period of structured experience, followed by a professional review. With emerging professions, such as 'environmentalist', academic routes were not available early in the development of the sector, so experience played a larger part.

Accreditation

A common use of competency frameworks is to accredit individuals. This involves independent professionals assessing individual's experience (using a mixture of reports, extended CVs, presentations and an interview) to ensure it meets the minimum threshold.

There are some lighter touch approaches to accreditation, with a shorter appraisal of experience and less restrictive educational requirements. **Registers** of professionally recognised individuals provide a simpler approach to providing independent assessments than a more formal (and expensive) chartered route.

This framework has been designed so it can be used for accreditation, but the viability of setting up an independent assessment process has not been examined. The assessment process does cost money to organise. If it is to be accessible to professionals in low-resource settings, then these costs have to be set at an affordable level or some subsidies will be needed.

"Grandfathering" (or "legacied" approaches)

Any assessment process will require assessors, mentors and champions. Assessors need to demonstrate competency before they assess other people. This creates a "chicken and egg" situation. People need to be assessed before they can become assessors, but then there are no qualified assessors to carry this out. One method of doing this is to carry out a rapid assessment of very experienced professionals with a long period of work in the sector, using a much simpler form of assessment. This process of "grandfathering" or "legacied" approaches provides a light touch assessment process for very experienced professionals to fast track the assessment process and be registered. This creates a cohort of professionals who can provide support to future professionals.

Training accreditors

If an accreditation route is going to be used, then assessors will need training on how to carry out assessments. Assessors do have to be competent in the area (i.e. they have to be experienced WASH professionals), but this does not mean they will have had any experience of assessment in the past.

Challenges

The process of professionalisation takes time. It is a generational activity, requiring years of support. Momentum can be lost as this is a long-term activity.

Professionalisation is not innovative, but it will be seen as new to some people. This applies both to people working in the humanitarian sector and to people working in locations where professional recognition for WASH staff is not common. Promotion will require education, explanation and behaviour change.

There may be some reluctance on the part of longer serving members of the profession, who may not want to have their competencies reviewed, but emerging professions can manage this with 'grandfather' or legacy arrangements, where people with significant experience can be exempt or subject to a different (and faster) appraisal.

There may also be a desire to be inclusive. Localising and diversifying the workforce are important considerations. However, this should be carried out by supporting individuals through training, mentoring and structured employment opportunities, rather than reducing standards.

There may be a desire to restrict the framework to a narrow definition of “humanitarian”. This may seem to be more focused but may create only a small pool of potential individuals. It would exclude people who are employed locally under the Grand Bargain who come from a development engineering background and intend to return to that career after any emergency response. Engaging with the wider ‘low-resource’ context will provide some stability.

Investment will be necessary. Whilst some financial support to any host organisation may be needed, the majority of the investment will be in staff support and development. Employers will need to ensure that their recruitment, promotion and training activities are aligned with this professional standard.

The primary action however is with individuals. Being recognised as a professional takes time and effort. The sector as a whole needs to be supportive and encouraging.

Ways forward

The exact way forward is outside the scope of this consultancy, but the WASH Road Map does need to consider various issues if the framework is to have any impact on the WASH sector. The following are pragmatic suggestions, rather than concrete recommendations.

Suggestions

For pragmatic reasons, it is suggested an existing WASH institution be approached to act as a host for the competency framework and any accreditation process. This will provide the expertise and institutional infrastructure. Currently, there are no suitable humanitarian WASH organisations. Drawing on the wider WASH sector is probably a viable option. CIWEM is the nearest institution that has been identified at this stage. CIWEM should be approached to host the framework for a period of several years. This will need to be reviewed after (say) five years.

An existing WASH institution will require the support of an expert panel made of individuals working in the sector. These need to be drawn from across the WASH sector. These should not be “representatives” of organisations although some senior staff may be useful candidates for this.

In order to balance a wide pool of potential members but still retain a focus on WASH, the remit should be on ‘low-resource’ settings rather than just humanitarian contexts.

The framework should be hosted on the CIWEM website, with links from other sites (e.g. GWC, RWSN) to ensure quality control.

The framework should be promoted online and at sector and coordination forums.

11. Measuring WASH capacity

It is widely recognised that having good staff is an important part of the mix that goes into successful projects. One of the challenges for managers is how to measure that they have the right workforce for the job.

Project inputs

There are various factors that go into making a project successful, such as:

- Money,
- Machines,
- Methods,
- Materials, and
- **Manpower (male and female staff),**

or

- Plans,
- Processes,
- **People,**
- Possessions, and
- Profits.

All these factors are needed in the right quantity and with an adequate quality. The success of a project will be determined by the weakest resource. The most appropriate approaches may not work if there are not the staff to implement them. Money may be wasted if the human resource is not sufficient to use it wisely. Normally increasing other factors will not compensate for the missing critical elements. Once a resource is above the minimum threshold needed, then any further increases will not have an impact¹.

There may be some scope for different methods/ processes, to work around limitations, such as using labour-based construction rather than using machinery, or lower cost methods as an alternative to more costly methods, but at some point, the success of the project will be dependent on sufficient inputs in all these areas.

Quantities of these resources can usually be counted easily enough, but measuring **quality** can be more difficult. Money can be the easiest element to assess. Materials and machines need specifying and testing to check the quality. Procedures and plans can describe the processes and methods to be used. Deciding the quality of staff however can be challenging.

The number of staff needs to be qualified by their skills, abilities, attitudes, knowledge and experience. In many WASH projects, people work in a team, so the overall skill set may be reviewed

¹ ABRAMS, L., 1996. The Threshold Concept. Capacity Building for water supply and sanitation development at local level. In: *2nd UNDP Symposium on Water Sector Capacity Building*. Delft, The Netherlands. pp. 1–8.
<https://www.ircwash.org/sites/default/files/Abrams-1996-Capacity.htm>.

at a team level², rather than just as a disparate group of individuals. However, even within a team, individual contributions need to be assessed.

Accountability

There are strong economic and ethical reasons for employing competent staff. Donors and the users of WASH services should be able to expect that WASH services have been adequately designed and built. In such a lifesaving situation, major learning on the job is not acceptable.

“There were instances where the response was untested, chaotic, amateurish, doubled-up, overlapping, done by ‘Mom and Pop’ operations... if you’re not a professional in this game, you have no right to descend on someone in their moment of crisis and do on-the-job training. Saving human lives is no place for amateurs. Why is that? Because the poor, dispossessed and disaster-prone should have at least one basic right left to them: to be protected from incompetence. “

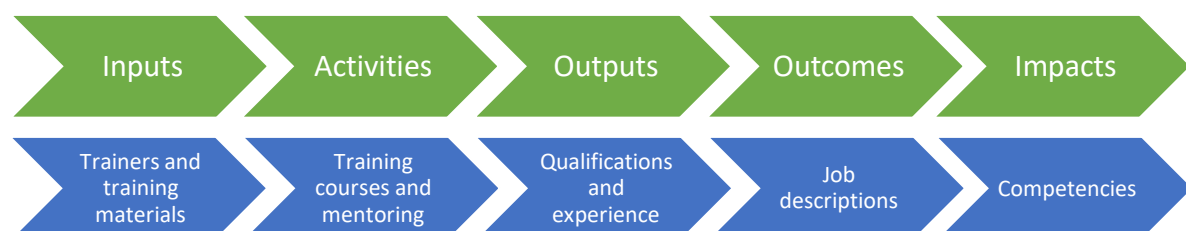
Jan Egeland, 2009

Capacity

The term “WASH capacity” may include all of the project inputs, but often it is used for human resource capacity, rather than the more general ability of an organisation to deliver a project. The rest of this note will focus on human resources, but remember that it is no good training people to use computer programs if they do not have computers, electricity, or that the program is not needed for their role.

WASH is a wide-ranging sector in terms of skills and knowledge. It goes from very scientific topics such as groundwater assessment to very social issues such as equity and inclusion. Having a good understanding of both water quality testing and behaviour change is a challenge. Experts in these areas can be very useful, but these issues need to be integrated as they interact, so only focusing on a narrow area may have wider unforeseen consequences.

Assessing the staffing on a project can be carried out at different levels. This note uses a common framework of a results chain. These topics do not map on to this exactly, but the model provides some idea of how the topics are linked and interact. There is a trend of short-term issues at the input and activity level, moving to long term issues at the impact stage. The trend also goes from measurable, objective issues at the input level to much broader, subjective assessments at the other. Many inputs are needed for a single activity and many activities are needed to get an output, so this can be seen as a pyramid with competence resting on a foundation of teaching, learning and experience.



Hierarchies of capacity

² <https://www.teamimpactkit.com>

Impact level - Competencies

A common measure of the general quality of staff is to use **competencies**. This is a set of criteria that are needed to carry out a role. They can be broad or narrow, but relate to the tasks that the staff are expected to carry out. Some of these competencies are found in many roles, such as project management, communication, teamwork or ethics. These are **cross-cutting** topics, **transferable** skills or **functional** competencies.

Whilst cross-cutting competencies (e.g. ethics or communication) can be seen as transferable, some professions and sectors may need these to be adjusted towards certain circumstances. Medical ethics can be seen as distinctive characteristics (such as informed consent of patients), compared with infrastructure development, where procurement and employment rights are critical ethical issues. Infrastructure is mainly delivered by teams of people, so teamwork and internal communication are vital, whilst teachers will be working mainly by themselves in the classroom, with a different set of communication requirements.

Competencies are focused on the **level** of the staff member concerned. There will be different sets of competencies for engineers, technicians and operatives. A technician is not a lower or simpler role than an engineer (although some people may use it as a route towards becoming an engineer), but a distinct role. Medical doctors and nurses have distinct jobs and a doctor, although they may have more qualifications, may not be able to carry out a nurse's job. A radiographer (taking X-rays) has a set of skills that are different and not necessarily higher or lower than a nurse giving injections.

Competencies are a high-level assessment of an individual's quality in relation to the tasks they have to undertake. They are developed over time through a mixture of (on-going) learning and experience. They are often assessed through a series of reports, interviews and reviews of training people have undertaken over several years. The reviews are taken by colleagues in the sector, drawn from a range of backgrounds.

Competencies can be used to identify career development needs. This may be training, but can include getting specific experience in a different role or spending time in other professional development activities.

Outcome level – Job descriptions

Competencies are broad, sector or professional level assessments. A more specific set of requirements may be to check if the staff member can carry out more specific tasks. **Job descriptions** are a useful way of communicating between an employee and employer about what activities they are expected to carry out. They might be part of a job advertisement; they may form part of an employment contract and be the basis for promotion. Some of the wider elements of a competency framework, such as ethical approaches or commitment to continuing professional development may not be included, as these may not be part of the particular job. Job descriptions may distinguish between essential elements and topics that are desirable.

A tight job description can be good to ensure work is done, but having a description that is too tight may reduce flexibility. Something that is too vague is difficult to manage and does not create a good relationship between employer and employee.

Job descriptions are useful for analysing specific training needs, as an individual or group of people's capacity can be assessed against the benchmark and a training programme developed³. Job descriptions may be assessed in annual work appraisals or by setting work targets. These are carried out internally by line managers and / or human resource managers.

³ WHO, 1983. *Job descriptions prove their worth. How a training package was developed during an Organization-Management-Training Project for 11 Indonesian cities and is now being applied nationwide*. Geneva, Switzerland: World Health Organization. https://iris.who.int/bitstream/handle/10665/60000/WHO_CWS_89.1.pdf?sequence=1&isAllowed=y.

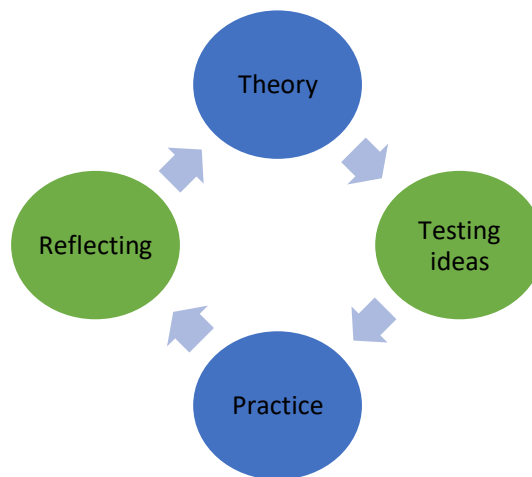
Differences between job descriptions and competencies.

Job descriptions are developed by employers, whilst competencies are a professional or sector wide set of standards. Job descriptions will vary between employers, and be focused on a context, whilst competencies are much broader. An individual may have many job descriptions over their career, as they progress and jobs change over time as technology and processes develop. Competencies are much more stable, so an individual may only be assessed against one or two competency frameworks over their career. Job descriptions are often precise, whilst competencies are less defined. A job description may require someone to work to a code of conduct, whilst a competency may call for ethical behaviour without closely specifying it. As well as being more specific, job descriptions can be longer than competency frameworks, as they provide more detail.

Output level

Developing skills and knowledge is the result of various elements. One major element is the development of theory and the acquisition of knowledge. This is often through **training** activities. Another element is putting this knowledge into action, through practical **experience**. These two elements are connected by time spent considering the application of theory and also reflecting on experience.

The time spent reflecting on learning and experience is not easy to measure, but the learning of theory can be assessed and time spent on practical experience can be recorded.



A learning cycle⁴

1. Measuring learning

An indicator of learning used by trainers are **learning outcomes**. These are a series of statements setting out what a trainee should be able to do after they have completed the course. A trainer sees these as the outcomes of a training exercise, but they occur earlier in the results chain when considering overall capacity development.

In order to assess the content and level of a course, it should have **learning outcomes**⁵. These set out the topic that is being learnt in a very measurable way. They also indicate the level of learning. Whilst a series of levels such as “be aware”, “know”, “understand”, “have expertise in” give an idea of the level of skill or knowledge, they are not easy to measure. “List”, “describe”, “decide”, and “judge” are each more advanced than the previous activity and can be tested.

Learning outcomes can be confirmed by an assessment at the end of the course. Attendance on a course is an input to someone’s development but cannot be used as a definitive indicator unless the course is assessed.

Capacity is such a mixture of learning and experience, direct measurement of the contribution from a training course can be difficult or delayed. Assigning a causal relationship from any single capacity building project is problematic, as people who had the same exposure to capacity building will have

⁴ Based on KOLB, D.A., 1984. *Experimental learning: experience as the source of learning and development*. Englewood Cliffs, N.J.: Prentice-Hall.

https://www.researchgate.net/publication/235701029_Experiential_Learning_Experience_As_The_Source_Of_Learning_And_Development.

⁵ CAWST, 2019. *Trainer essentials: Learning Outcomes*. Calgary, Canada: CAWST. https://resources.cawst.org/trainer_essential/2762e253/learning-outcomes.

had different opportunities and experiences, resulting in different outcomes. Two people attending the same course on a computer program may have the same skill level at the end of the course, but this may diverge after several months, depending on the opportunities for practical application they may have had. One may have forgotten the training, whilst another has put what they learnt into action and improved their skill level.

However, training is an important element of capacity building, despite the challenges of attributing impacts over time. It is very good at developing awareness, knowledge and understanding. These provide good foundations for later application of the knowledge gained.

When carrying out a human resource capacity development activity such as training, you can normally only measure as far as an output level, seeing what individuals have learnt during the course.

Relevance of courses

Academic qualifications are rigorous tests of students' abilities. These are distinguished by **level** and **topic**. A university degree in maths differs in both level and topic from an exam on English literature for 16-year-olds.

How well a course topic matches WASH needs can be subjective. Whilst there is a lot of engineering in WASH facility provision, a degree in Chemical or Structural Engineering may be at the right level but not cover any of the relevant technical topics. Even Civil Engineering degrees may not cover core WASH issues of water quality or sanitation. Environmental health courses are good on health issues, but may not be as strong on issues of inclusion or providing physical facilities. Social science courses may provide good knowledge of methods of community consultation, though they may not cover any technical aspects at all.

Higher levels do not always mean "better". A PhD (doctorate) is a very high academic qualification, but it focuses in a narrow area and is designed to develop research skills. A PhD in one specific aspect of Water Quality Modelling may not be as good as a more general MSc in Water Quality Management, depending on the tasks required. A lower-level college course in chemistry may be even better if the job is focused on practical water quality testing.

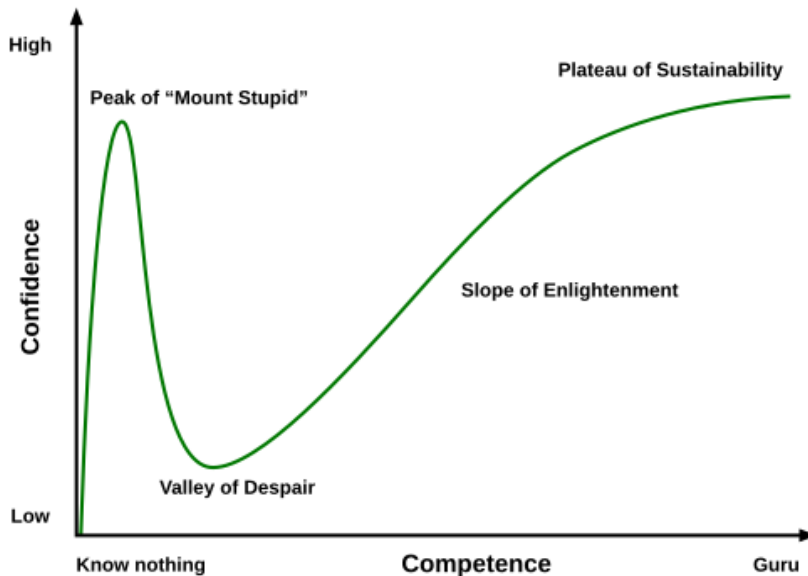
There are very few courses specifically on WASH, so staff may have a range of academic backgrounds. When recruiting staff locally in a humanitarian context, there may not be sufficient potential staff with the desired level or type of qualification, as they may not have had the opportunities to study at higher grades. Here work experience may have provided some further development, but not necessarily in a structured way. There may be gaps in knowledge and it is not tested.

2. Measuring experience

Experience is an indicator of working to a job description. Its value will depend on the length and type of work undertaken. This is an objective measure, but should be used with caution. Length of service may indicate that somebody has worked in a role for a long time, but not necessarily how well they have performed. The value of the experience may also depend on variety. A range of roles may provide people with a good range of experience, whilst a long time in one role can indicate a specialist. Changing jobs very often however may not be a good sign depending on the reason for moving employer. Being stuck in the same role may not be ideal. Experience is not such a useful measure if the role is new or innovative. Advancing or changing careers requires individuals to take on new roles that they may not have been experienced before.

Experience is normally described in someone's **curriculum vitae** (or CV). Whereas job descriptions are produced by employers, CVs are written by employees. They may overestimate their abilities, either deliberately or because they have no benchmark to compare with.

One phenomenon known in learning is the Dunning Kruger Effect⁶. This is the tendency of people who do not know much about a topic to overestimate their knowledge (“A little knowledge is a dangerous thing”). At the other end of the scale, experts tend to underestimate their skills (“The more I know, the more I know I don’t know”).



An interpretation of the Dunning Kruger Effect.

Source: https://en.wikipedia.org/wiki/File:Dunning-Kruger_Effect_01.svg

Ways of checking CVs include references from previous employers and interviewing the candidates for a job. Asking for samples of their work may be relevant.

Activity – training and capacity building

Instead of measuring the output of someone’s learning or experience, you can see the input. If they have attended a training course, completed an on-line exercise or read various books and reports, then the likelihood of them having knowledge and skills in that area is higher than if they have not had that opportunity. Just attending a course gives no guarantee they have learnt anything, but it is an indication that they may have improved their skills. A quiz, writing a course summary or putting the skills into practice are all ways of embedding the learning.

The quality of a training exercise can be measured⁷. These quality indicators look at the process of developing and delivering the course, specifically topics like carrying out Training Needs Assessments or giving individual feedback. Academic qualifications often have good quality control procedures, including some external audits⁸. Other indicators of quality may be the length of the course, the number of times it is run, the reputation or recommendation of people taking the course and the staff/ student ratio. Independent accreditation of courses can provide confidence in the quality of the course, provided it is a relevant area of study.

Mentoring⁹

Training provides one good method of transferring knowledge. “On the job” capacity development complements this approach. Rather than just working on a task, a **mentor** can provide support

⁶ https://en.wikipedia.org/wiki/Dunning-Kruger_effect

⁷ HPASS, 2019. *Standards for the Assessment of Humanitarian Competencies. Handbook for the provision of quality assessment of competencies for humanitarian action*. HPass. www.hpass.org.

⁸ <https://www.ciwem.org/accreditation/>

⁹ Some mentoring schemes are:

whilst an individual gets experience. Having a more experienced person to guide you, to discuss topics and to suggest things to do or think about can make on the job capacity development more effective. This may be someone within your organisation or somebody external. Internal mentors will know your role well and may be able to task you with jobs that provide additional experience or stretch your knowledge. They may have to balance this with getting projects finished on time and within budget. An external mentor may not have those same insights, but may have more specialist skills, especially if you work for a small organisation with not many WASH staff. Line managers may be able to be mentors as well but this can blur responsibilities and mentees may not want to discuss career options or difficult work challenges with their boss.

Continuing (professional) development

A college course does not provide you with all the skills and knowledge you need. They are often strong on theory but do not necessarily develop practical skills. Subjects also change over time, with new knowledge and approaches. A professional is expected to keep their skills and knowledge up to date. This may be through formal courses, attending presentations, conferences and webinars and reading reports and journals.

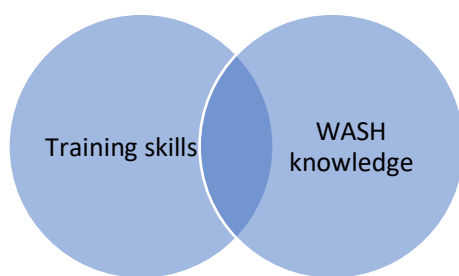
Continuing Professional Development (CPD) or lifelong learning is broader than just training for specific tasks. Whilst job specific training contributes to CPD, there should be a wide range of activities, as developing professional competencies should go beyond the narrower job descriptions.

Inputs - teaching

Trainers and mentors

An important part of any capacity activity will be who delivers any training or mentorship? Do they have the right skills or experience? A balance of skills are needed. To deliver WASH training, training skills are needed. Trainers need to understand the process of learning and teaching methods. These cannot be delivered in much depth in a short “training of trainers” event, so quality training depends on good trainer competencies¹⁰.

Trainers, teachers and lecturers also need to know about the content of what they are teaching. They need to understand WASH, both in theory and practice, depending on what courses they are delivering.



WASH training competencies

There is an area of overlapping skills. Good WASH trainers should be aware of subject specific training techniques and issues. Knowing how some WASH topics can be taught, with models, examples and case studies is part of this overlapping area. They may have skills for teaching practical activities such as water quality testing or mixing concrete.

With some very specialised technical areas, there may not be many people with the two sets of competencies. Ideally, they would have some basic training in teaching or be able to work in a team with more proficient trainers. Hopefully the participants should already have the basic knowledge in the area and be motivated enough to cope with less-than-ideal teaching skills.

<https://www.rural-water-supply.net/en/rwsn-mentoring>

<https://www.ciwem.org/membership/mentoring>

¹⁰ CAWST, 2019. *Trainer Competency Framework*. Calgary, Alberta, Canada: CAWST.

<https://washresources.cawst.org/en/resources/ec141a98/competency-framework-guide-for-trainers>.

Training materials

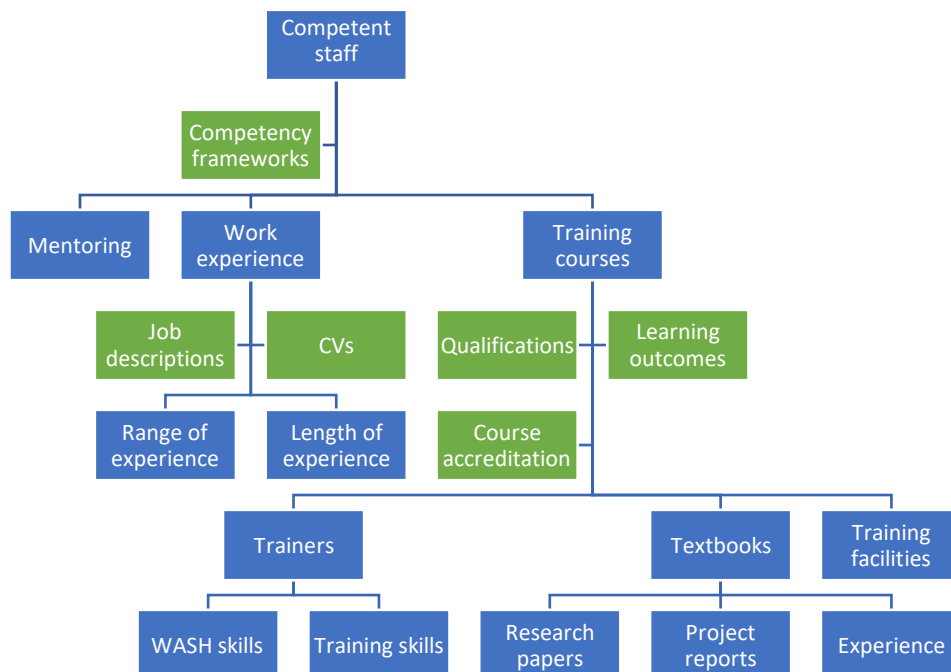
A trainer's work involves a lot of preparation. This might take ten times longer than the contact time on a course. This can be reduced if there is a **textbook** to guide the course preparation, providing a list of topics, background information and a good narrative flow to the material. If a trainer has to do a lot of research to develop a curriculum, work out the order of material and understand the topic, this adds considerably to the development time. Textbooks are different from reference books or practical manuals. Reference books are written for an audience who (should) already know the topic. They do not necessarily provide a good introduction, explanation or theoretical background.

Sometimes other training materials are prepared such as visual aids or lesson plans. These can help in some cases but do reduce flexibility and are not favoured by more competent trainers. They may be cost effective if lots of training is going to be carried out in a short space of time. What may be more useful is a set of **learning objects** such as case studies, briefing notes, short videos, exercises, games etc that can be used as part of a wider course, depending on the skills of both the trainer and the trainees.

Labs and classrooms, data projectors and stationery, transport for field trips and equipment for practical exercises are other inputs that may be needed.

Knowledge

To develop a textbook or any teaching materials, the knowledge has to be there. This may be in reports, manuals, research journal papers and from experience. A wider variety of sources is needed to ensure a balance. Experience allows research theory to be tested in practice. This is one reason why universities have libraries – there is a readily curated set of materials for teachers to draw on.



A schematic of competency building from inputs to impacts. Indicators are in green

Overview

Capacity of staff is an important input for WASH services but it is hard to measure. It goes beyond simple counting of years of experience or academic qualifications, though these are useful indicators. A range of issues from inputs to training courses to assessment of competencies can be used to measure the quality of staff.

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12. Development of the WASH competencies

This short note sets out how the proposed draft framework was developed. The need for competent WASH staff has been recognised for decades, but an indicator for the quality of staff in humanitarian WASH has been lacking. This note sets out the process of developing such an indicator, but it is recognised that this is a draft and will need to be adjusted and adapted over time. In 2023 the WASH Roadmap commissioned a scoping study on the wider topic of staff capacity. The urgent need for a benchmark for the quality of staff was a prime recommendation, as so many other factors (such as assessing training needs) depended on agreed definitions.

Phased approach

In 2024, a task force began to develop a humanitarian WASH competency framework. Four phases were identified.

1. Drafting a framework
2. Getting feedback
3. Revising the framework (to produce a final version)
4. Providing supporting materials.

The first phase developed a framework based on the five sections of the WASH chapter of the SPHERE handbook at the same time incorporating cross-cutting themes building on the Core Humanitarian Competency Framework. This also relied on additional, external frameworks to add detail. Various levels were provided to track staff development. Due to changes in funding, this taskforce stopped working towards the end of phase 1 and phase 2 was carried out by a member of the working group. The feedback noted how complex the draft framework was, and also, despite its length, was missing some areas whilst some other topics overlapped.

Strategic approach

The consultants for phase 3 reviewed these comments and rather than carry out a detailed edit on the phase 1 framework, decided to take a step back and review the framework as a whole. Various other existing frameworks were studied, either in other professional humanitarian areas (e.g. logistics, health) or in WASH related topics (e.g. water and environmental management, environmental health).

Defining WASH

The WASH competency framework had to define what “WASH” is. Compared to other sectors (e.g. education or shelter) it encompasses a wide variety of professions such as engineering, science, social science, environmental health and the environment. Staff have a range of educational backgrounds. Whilst the outputs of WASH projects are WASH facilities and services, the outcomes

include health benefits, economic development, environmental improvement and social equity and inclusion. A major element of WASH is its **interdisciplinarity**.

The context

The phase 1 framework listed many WASH tasks. Most of these were not specific to humanitarian contexts, and some (such as considering the stages of relief to development) went beyond narrow humanitarian situations. Discussions with employers identified that staff would be expected to work in both development and humanitarian contexts. Looking at discussions on localising employment and the issue of churn in staff, the justification for a very narrow definition of humanitarian action was weak. Individuals are unlikely to spend the whole of their career in humanitarian contexts but move between various contexts. The context was expanded to cover all low-resource WASH settings. This will increase the number of people who can use this framework.

This adjustment to a wider set of contexts required a review of what makes the low resource context (humanitarian and development) different from similar work in high resource contexts (e.g. industrialised, stable countries). Some of these are differences in technology (e.g. more pit toilets and fewer sewers) but also in working conditions (e.g. smaller teams, less guidance and support, time and resource constraints). There are some competency frameworks that acknowledge these two contexts, notably Structural Engineering, UK Med and Logistics.

Levels

Phase 1 followed some other competency frameworks in that it used the idea of “levels” as people progressed through their career. This was an added level of complexity at this stage and so it was dropped focus just on professionals with reasonable amounts of experience. It was felt that people would progress at various rates across all the competencies, so reaching intermediate stages was not a level of detail warranted at this stage. A review of other water sector frameworks showed that increasingly technicians (or similar) had a different set of competencies compared with engineers (or similar) rather than a diluted set of the higher-level competencies. Another development that has been observed is the use of specific competency frameworks for specific operator roles, rather than a more general approach. Different levels of achievement for different competencies (e.g., knowledge or ability) were used.

Drafting the framework

As WASH staff work in both low- and high-resource contexts, a generic competency framework already developed for Water and Environmental Managers was used as the foundation. Whilst in theory this should cover all contexts, the approach adopted by the Institution of Structural Engineers was used as inspiration. Here the standard global framework has a commentary on how each competency can be interpreted in the light of humanitarian and development experience.

The generic framework did have a focus on environmental outcomes, so this was widened to include the other pillars of sustainability, namely economic development and social equity. Apart from that, the competencies themselves were not altered much. Most of the contextual adaptations were illustrated in either the additional commentary or the set of prompts for mentors, interviewers or assessors. Example written submissions from a range of WASH roles have also been provided, to help illustrate how meeting the competencies can be demonstrated.

The decision was made to develop the revised framework and guiding materials simultaneously, combining phases 3 and 4. This would allow both the framework and the instructions developed to be testing during the pilot period. This approach was considered more efficient and effective given the time available to conclude this work.

Second round of feedback

Feedback on this new draft was obtained in two ways:

- Calls were held with those who had provided feedback on the previous draft during phase 2.
- New participants from a wide range of WASH backgrounds and locations tested out using the framework to assess their competencies.

The feedback received focused on the navigability of the framework and the clarity of instructions provided in the supporting materials. Little feedback was received to suggest that competency areas had been overlooked, indicating a consensus that the framework covered the required competencies for WASH professionals had been reached. There were questions on how appropriate it would be to use an existing global framework as a foundation. However, many participants valued this approach, given that it meant that the new revision was being built on a model that had already gone through review and testing.

Feedback suggested that the new version had some complexity in its navigation, understanding and use, including the use of overly technical language.

One general observation was that people working in the humanitarian were unfamiliar with competency frameworks. This is not surprising, as there are very few that are relevant to the WASH sector. There is also an expectation that competencies are the same as technical job descriptions. Competencies are wider frameworks that job descriptions can sit within.

Revising the framework

In response to the feedback received, the overall structure and approach seemed to be more straightforward than the phase 1 version. There were areas that did need improving. The use of levels was simplified, as this was not seen as essential to the framework. More examples were added, to illustrate how people working in different technical areas could interpret the competencies. The order of the “B” competencies were adjusted to follow the project cycle more clearly, moving the competency on changing contexts to B4. Overall some of the language was simplified. Some of the terminology was explained in the competency descriptors and a glossary added to aid translation of specific terms.

The main lesson learnt from the feedback is that people underestimated the time needed to engage with the framework. This is a time-consuming exercise, but it needs to be if people’s ability to deliver WASH services professionally is to be assessed. Many professionals will take several months to prepare a submission for independent accreditation.

The framework was revised in the light of this feedback and the supporting documents reviewed and edited. The supporting documents were re-ordered to align with different audiences.

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14. Glossary of terms

This glossary explains some of technical terminology used. It may help with translation into other languages.

Assessment

A structured process used to evaluate an individual's level of competence against defined standards or indicators.

Career Pathway

A structured route through which individuals can progress professionally within the WASH sector based on experience, learning, and demonstrated competence.

Competence

The ability to apply knowledge, skills, and professional behaviours effectively to perform work to a required standard.

Competency

A defined area of professional capability that combines knowledge, skills, behaviours, and attitudes required to perform effectively in a specific role or function.

Competency Framework

An organised structure that defines the competencies required for effective performance within a professional field or sector.

Competency Level

A description of the degree of proficiency or autonomy demonstrated by an individual in applying a particular competency.

Continuing Professional Development (CPD)

The ongoing process of maintaining and improving professional knowledge, skills, and performance throughout a career. Also known as lifelong learning or capacity strengthening.

Development Need

An identified gap between current capability and the required level of competence that can be addressed through learning or experience.

Evidence

Verifiable information or examples that demonstrate how an individual meets a competency or performance indicator.

Evaluation

A process for reviewing performance, learning, or outcomes to determine effectiveness and identify areas for improvement.

Framework User

Any individual or organisation applying the competency framework for learning, assessment, recruitment, or organisational development.

Indicator of Achievement

A measurable or observable statement describing what effective performance of a competency looks like.

Job description

A formal list of the duties, responsibilities, requirements and expectations and reporting structure for a specific role in an organisation. It may include essential and desirable qualifications and experience.

Knowledge

The theoretical understanding or information required to perform effectively in a given area of work.

Learning Record

A personal record used to track learning activities, achievements, and reflections over time.

Mentoring

A professional relationship in which an experienced individual supports another's learning, development, and career growth.

Peer

A colleague or person working in a similar role.

Performance

The observable results or behaviours that show how effectively an individual applies their competencies in practice.

Personal Development Plan

A structured outline of actions an individual will take to develop competencies and meet professional goals.

Professionalisation

The process of establishing recognised standards, qualifications, and career structures that strengthen identity and quality in the WASH workforce.

Professional Behaviour

The conduct and attitudes expected of individuals working in the WASH sector, including integrity, respect, and accountability.

Self-Assessment

An individual's evaluation of their own competence against defined standards to identify strengths and development needs.

Skill

The ability to perform tasks or apply techniques effectively through practice and experience.

Supervision

Supportive oversight that ensures quality work, encourages professional development, and promotes accountability.

Threshold

An agreed benchmark or expectation that defines acceptable performance or quality within a professional field.

WHAT IS THE WASH ROAD MAP?

In 2019, humanitarian assistance reached a global peak, with the water, sanitation, and hygiene (WASH) sector playing a central role in emergency response efforts. However, despite its critical importance, **WASH responses have often fallen short of established humanitarian or sectoral standards due to capacity, preparedness, and funding limitations.** This has led to services and assistance that are **not fully accountable and fail to address the priority needs of affected populations.**

Now is the time to take decisive action to **strengthen the capacity of the WASH sector.** By prioritizing preparedness and resilience across the humanitarian-development continuum, we can **ensure high-quality, accountable responses to emergencies.** Adopting a risk-informed approach allows us to build resilience and mitigate the impacts of emergencies, while also addressing broader challenges such as climate change and environmental protection.

Innovative, predictable, and flexible multi-year funding mechanisms are essential to maximizing gains and achieving the ambitious targets set by the Sustainable Development Goals (SDGs) in the WASH sector.

Through collective commitments and strategic engagement, we can implement the WASH Road Map, which offers innovative approaches to saving lives, improving public and environmental health outcomes, and fostering synergies between acute emergencies and long-term development.

