WASH Results Programme learning brief #1

Outcome achievements in the WASH Results Programme: data and insights

October 2020

The WASH Results Programme's innovative focus on payment for outcomes prompted close monitoring of outcome achievements. The resulting data provides useful insights for the WASH sector on continued access to sanitation and sustained hygiene behaviour. This learning brief presents comparable data on the WASH Results Programme outcome achievements across 11 countries and explores what the sector can learn from them.

Key insights:

- In the majority of country programmes, high levels of improved sanitation (above 70%) were maintained one to two years after implementation, including in fragile contexts; near-universal coverage was maintained in Ethiopia and Nepal.
- Hygiene outcomes achievements were higher than anticipated by programme stakeholders. Knowledge about critical times of handwashing remained high (above 80%) one to two years after the implementation phase on average, while handwashing facilities were present in 50% of households on average. The absence of soap was often the limiting factor in achieving sustained handwashing with soap at critical times.
- A low baseline is not necessarily a barrier to achieving and maintaining high levels of access to improved sanitation, and it is possible to achieve near-universal access to improved sanitation in a short time frame.
- High variability in outcome achievements between different country programmes highlight that despite impressive results overall, a significant number of people – 'the last mile' – are still without access to improved sanitation.
- Context is the key factor in determining what outcomes achievements are possible. Understanding the extent to which contextual factors enable or limit high achievement will help the WASH sector set more informed targets for future programming.

Introducing the WASH Results Programme

The £112 million WASH Results Programme aimed to support poor people in 11 countries to access improved water and sanitation, and to practise improved hygiene. Three consortia ('suppliers') of non-governmental organisations (NGOs) (see Box 2) were contracted by DFID[1] in 2014 to undertake large-scale delivery of WASH in advance of the conclusion of Millennium Development Goals. This ambitious delivery goal was coupled with payment for outcomes – measured up to two years later – to encourage the continued use of water supply, latrines and handwashing at critical times. A second phase of the programme expanded to reach more people from 2017 to 2021 in 9 of the 11 countries. In total, the WASH Results Programme has enabled over 1.6 million people to gain access to water, 7.4 million to sanitation, and 16.1 million with hygiene promotion. The programme overwhelmingly achieved its outcome targets.

WASH Results operated under a Payment-by-Results modality, where suppliers receive payment upon successful verification of their results. This was intended to incentivise both large-scale delivery and longer-term outcomes. Verification was systems based, meaning that the third-party Monitoring and Verification (MV) agent contracted by DFID independently appraised the suppliers' monitoring systems and verified that the data they produced were accurate and realistic.

What outcomes were measured and how?

A key emphasis of the WASH Results Programme was on sustaining access to water and sanitation and maintaining hygiene behaviour after services were provided. This ambition was translated into practice through payments for people continuing to access latrines and clean drinking water and to practise hygiene behaviour for one to two years after the implementation phase. The tender gave suppliers the freedom to suggest how they would be held accountable, which meant that each of the three contracted suppliers negotiated their individual outcome targets and measurements with DFID. Table 1 specifies the outcome definitions for water, sanitation and hygiene that applied across the programme and how these were typically measured.

Table 1. WASH Results Programme outcomes

Programme outcome	Specific outcomes	Typical measure
People use improved water, sanitation and practice improved hygiene.	**Hygiene** Number of people handwashing with soap and other hygienic practices at critical times	The percentage of survey respondents in the programme area who are confirmed to have adopted promoted handwashing behaviours – measured through combinations of knowledge, observed presence of a handwashing facility with water and soap/ash and demonstrations of handwashing practice.
	Sanitation Number of people using an improved[2] sanitation facility	The percentage of survey respondents in the programme area who are observed to be using an improved sanitation facility.
	Water Number of people using clean drinking water sources	The percentage of people who gained access to an improved water source through the programme, still able to use it at the time of survey.

[1] The Department for International Development (DFID) was replaced by the Foreign, Commonwealth & Development Office (FCDO) In September 2020. As the majority of WASH Results Programme implementation and learning was undertaken prior to this date, this publication refers to DFID throughout.

[2] DFID initially defined 'improved sanitation' differently to the Joint Monitoring Programme (JMP) whose definition is widely accepted and used in the sector. Under the initial DFID definition, 'improved sanitation' referred to any facilities that eliminate open defecation but did not need to meet all criteria of the JMP definition of 'improved' (namely facilities that 'hygienically separate excreta from human contact'). In the JMP terminology, the term 'improved' was replaced with 'basic' sanitation in 2017 when a new sanitation ladder was introduced.

There are minor differences between the supplier datasets in how outcomes were defined and measured that are not captured in Table 1. For example, measures were aligned with country standards. This meant that in some contexts, ash was accepted as a substitute for soap for handwashing when assessing hygiene outcomes, and limited sharing of latrines between households was accepted, while in other contexts this was not the case.

Because suppliers could propose their targets and define their own results measurement frameworks, some results are not directly comparable across the programme. This was typically the case when suppliers chose to measure the continuation of outputs, for example the percentage of latrines constructed under the programme through community-led total sanitation activities, which continued to be used.[3] This was the case for some sanitation and hygiene results, and all water results. This is why – despite the WASH Results Programme providing over 1.6 million people with access to clean water – there are no results for water included in this brief.

The focus in this paper is on the sanitation and hygiene outcomes in rural areas which lend themselves more easily to a comparison across the three suppliers. The data includes two separate sets of results for most countries:

- one dataset for the first phase of the programme encompassing the period 2014–17 (outputs were mostly achieved in 2015, and outcomes were measured in 2016 and 2017); and
- a second dataset for the second phase of the programme which was implemented in the same country but different geographic areas[4], encompassing the period 2017–20 (outputs were mostly achieved in 2018, and outcomes were measured in 2019 and 2020).

Outcomes were measured through representative sample surveys conducted across the programme area – this could be across entire districts, or in specific communities which were targeted by suppliers to assess the proportion of households with access to an improved sanitation facility and practicing handwashing at critical times. The surveys were conducted at multiple points (as a minimum at baseline, midline and endline, with one supplier undertaking additional intermediate surveys).

What did the WASH Results Programme achieve?

Individually, all three suppliers overwhelmingly achieved their outcome targets across water, sanitation and hygiene. Here we draw out the outcome results that are comparable across programmes to contribute the sector's understanding what ranges of outcomes can be possible in the WASH sector.

The results presented below show the baseline and endline coverage for improved sanitation and hygiene measured two years after the end of the output phase. For example, in Ethiopia, access to improved sanitation at baseline 2014 was 12% of the population in the surveyed area. At the endline in 2017, 93% of the population in the same area continued to access latrines, two years after the output deadline. All comparable results are included for both phases of the programme. This includes nine sanitation programmes in the first phase and eight in the second

[3] When outcomes were measured based on programme beneficiaries only, the data cannot be used to make comparisons across the programme because it is not possible to understand the levels of access across a population.

[4] Programming did not continue in Pakistan and Ghana, and only one supplier continued to implement in Kenya.

phase[5] and 12 hygiene programmes in the first phase[6] and eight in the second phase. The results are presented in Figures 1–3 and full data tables are included in the annex to this brief (Tables 2–4).

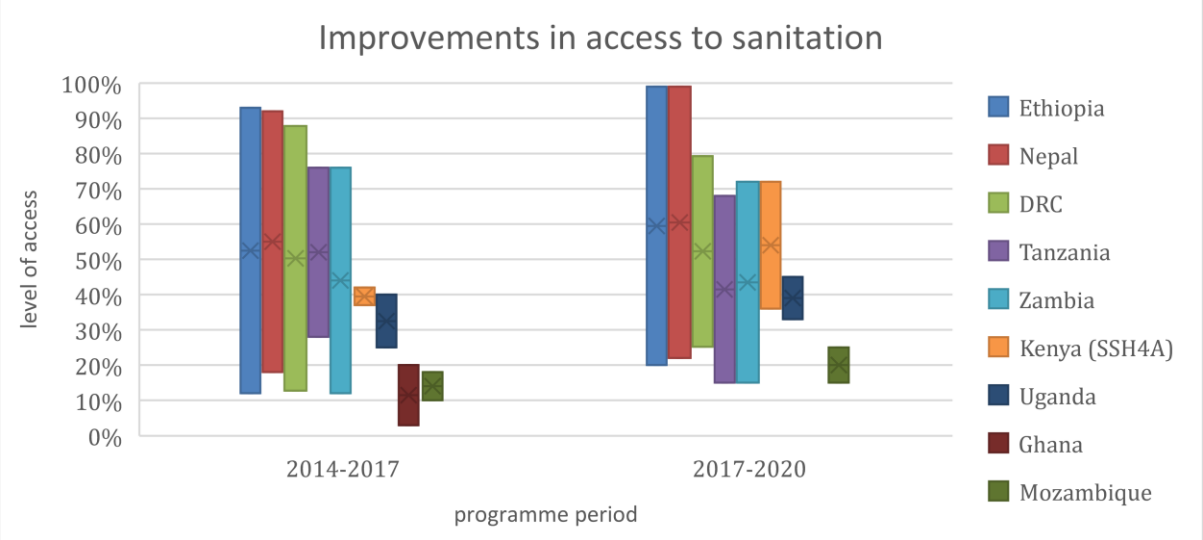
Sanitation outcomes

The improved sanitation outcome data depicted in Figure 1 highlight some impressive results in achieving and maintaining high levels of improved sanitation access in some programme contexts, but also reveal a high level of diversity in these achievements across all programmes. In particular:

- In the majority of country programmes, high levels of improved sanitation (above 70%) were maintained after the output phase, namely five out of nine programmes in the first phase, and six out of eight programmes in the second phase of the WASH Results Programme.
- There are some impressive positive outliers: Ethiopia and Nepal country programmes maintained levels of access to improved sanitation above 90% or greater in both phases, reaching near-universal access (99%) in the second phase.[7]
- Maintaining high levels of improved sanitation access is possible even in fragile contexts: for example, access continued at relatively high levels in the Democratic Republic of Congo (DRC), at 88% in the first phase and 79% in the second phase, despite an Ebola outbreak in 2018 and continued conflict in the programming area (Eastern DRC).
- There are also surprising negative outliers: several programmes achieved and maintained much lower coverage percentages, namely four out of nine in the first phase and two out of eight in the second phase. It is notable that both Ghana and Mozambique struggled to achieve and maintain levels of improved sanitation access beyond 25% in their programme areas.
- Despite low levels of initial access, it is feasible to achieve and maintain very high levels of improved sanitation access, while it is also possible to not be able to capitalise on relatively high access levels at baseline, for example in the first phase of the Kenya SSH4A programme.

[5] We have considered that the results from 2014–17, and 2017–20 are separate programmes. This means that some countries have multiple programmes (e.g. Kenya has three hygiene programmes – two suppliers from 2014–17, and one supplier from 2017–20 – providing three distinct sets of data).
[6] Of the 12 hygiene programmes, two were in the same country, Kenya.
[7] Further information on results achieved in Ethiopia and Nepal, see the Endline Practice Briefs for each project produced by SNV (2019) https://interactive.snv.org/snv-rural-sanitation-publications#251003

Figure 1. Area-wide improvements in access to improved sanitation by country (baseline and endline results)



Source: MV verification reports (endline outcome levels, with the exception of DRC 2017–20 based on 2019 midline)

Hygiene outcomes

In this programme, hygiene outcome achievements were measured through handwashing at critical times using composite indicators for handwashing with soap – often combining knowledge of critical times for handwashing with the presence of a handwashing facility and soap.[8] There are slight differences in how specific indicators were defined, meaning caution needs to be applied when making detailed comparisons between the results presented below.

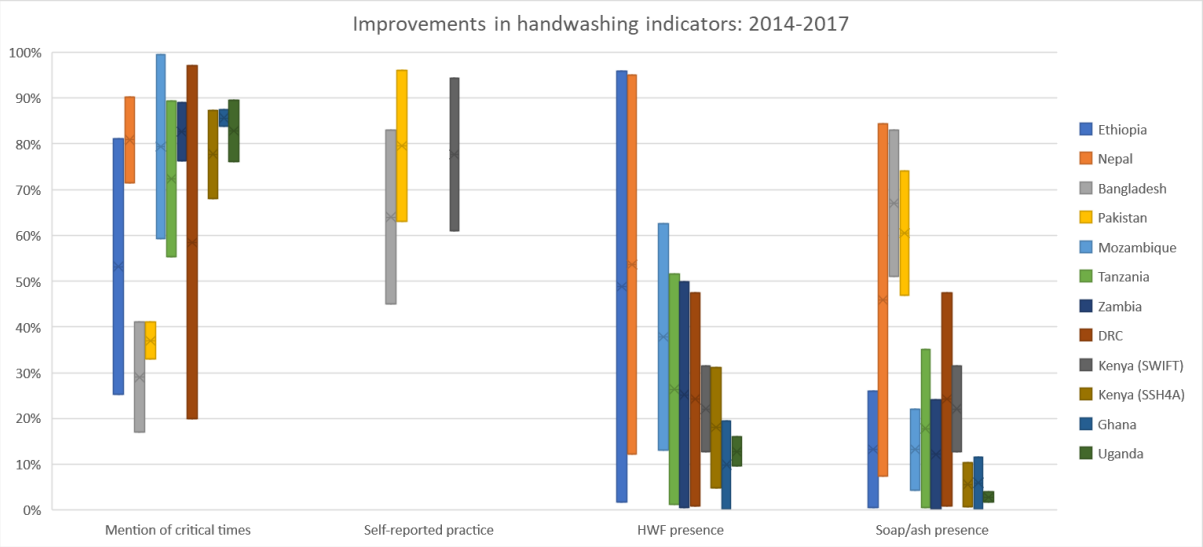
Overall, the hygiene outcomes were higher than anticipated by programme stakeholders,[9] resulting in comfortable rates of overachievement. The more detailed data reveals that knowledge about critical times of handwashing remained high (above 80%) one to two years after the implementation phase, while handwashing facilities were present on average in 50% of households, with average levels of continued presence of soap above 30%. In particular:

- Overwhelmingly, programme beneficiaries retained very high levels of knowledge about handwashing with soap after the implementation phase, regardless of levels of knowledge at baseline. Nine out of 11 country programmes in the first phase and all eight country programmes in the second phase reported high (>80%) levels of knowledge of appropriate handwashing times. In the two lower results, Pakistan and Bangladesh, the knowledge indicator was different requiring recall of a greater number of key times for handwashing with soap.
- More households continued to have a handwashing facility and soap (or ash in DRC and Kenya) than anticipated by programme stakeholders: on average, 50% of households had a handwashing facility compared to 6% at baseline in the first phase; and 54% compared to 14% in the second phase. Continued presence of soap at the handwashing facility was observed in 38% of households in the first phase and 32% of households in the second.

[8] For Bangladesh, DRC, Kenya (SSH4A) and Pakistan the sub-indicator for handwashing facility includes the presence of soap whereas in all other countries this is a separate indicator. Ash was considered an acceptable substitute in two programmes, in DRC and Kenya.
[9] Targets for continued handwashing with soap were agreed at 12–15% increase from baseline. This reflected high slippage rates observed in other sector programmes and the need for suppliers to manage the risks posed by the Payment by Results modality. For more information on target setting, see our learning brief #2 on 'Setting and monitoring outcome targets' in WASH.

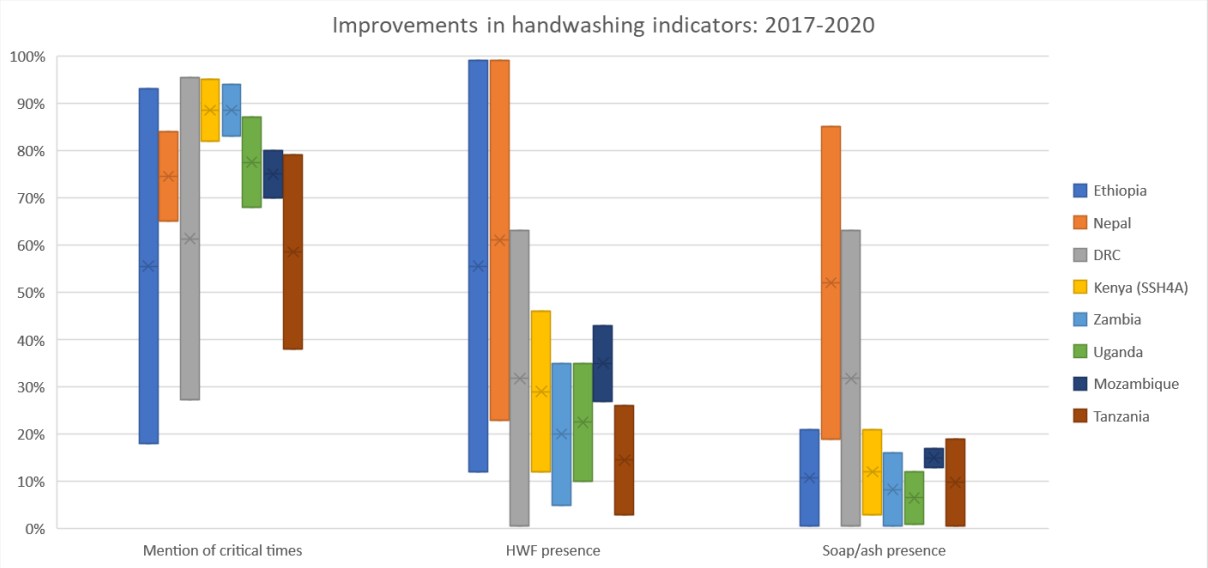
- There are some surprising positive outliers across a wide range of contexts: the Ethiopia and Nepal country programmes reported continued presence of handwashing facilities at levels above 90% across both phases; and Bangladesh and Pakistan reported levels of handwashing facilities with soap above 70% in the first phase.[10]
- The absence of soap was often the limiting factor in achieving the target of sustained handwashing with soap at critical times. The presence of soap (or ash in DRC and Kenya) at the end of the outcome phase was typically considerably lower than any other measure of handwashing with soap. Increases in the availability of soap did not follow improvements in other hygiene indicators.

Figure 2. Area-wide improvements in hygiene sub-indicators by country, 2014–17



Source: MV verification reports (endline outcome levels).

Figure 3. Area-wide improvements in hygiene sub-indicators by country, 2017–20



Source: MV verification reports (endline outcome levels,[11] with the exception of DRC, which is based on the 2019 midline)

[10] Results from the second phase were not presented because they were not sufficiently comparable.

[11] *Mozambique results for HWF presence for 2017–20 depict a decline in presence of HWF from 43% at baseline to 27% at endline, but as this was in the same areas as the 2014–17, overall there was an increase in coverage from 2014–20.*

What can we take from the data?

The data from the WASH Results Programme offers interesting insights for anyone interested in setting and measuring outcome targets in the WASH sector.

A low baseline is not necessarily a barrier to achieving and maintaining high levels of access to improved sanitation. One may base expectations for programmes on achieving a certain increase in access to improved sanitation over and above the level at baseline. But the data from the WASH Results Programme suggests that a low baseline is not necessarily a barrier to achieving and maintaining very high levels of access. All the country programmes that achieved high (>70%) levels of access, started with a baseline of less than 30% access to improved sanitation – with many less than 20%.

It is possible to achieve near-universal access to improved sanitation in a short time frame. As the WASH sector works towards achieving the SDG targets of universal access to basic sanitation,[12] and use of adequate and equitable sanitation and hygiene for all, it is important to consider how 100% access can be achieved, and set ambitious goals for rural sanitation and hygiene programming. The results presented here indicate that large-scale NGO-led programmes can achieve very impressive results in a compressed time frame and maintain them for at least one to two years after the implementation phase.

It is possible to sustain handwashing behaviour change for longer than previously thought. There is very little reference data in the sector to estimate rates sustained handwashing with soap. This is why suppliers in the WASH Results Programme were cautious when negotiating their hygiene outcome targets (at 12–15% of output targets). The outcome data on handwashing with soap at critical times presented above indicates that higher levels of sustained behaviour change can be achieved.

Despite impressive results in many areas a significant number of people – 'the last mile' – are still without access to improved sanitation. The data presented here shows that only two programmes – Ethiopia and Nepal – achieved and maintained near-universal access to sanitation in a given programme area. When it comes to handwashing with soap at critical times, achieving and sustaining high levels of behaviour change is even more challenging. The outcome data from the WASH Results Programme confirms the importance of setting area-wide targets (see also learning brief #2 on setting and measuring outcome targets) to achieve and sustain universal access.

Implications for programming towards sustaining sanitation and hygiene achievements

The outcome data presented in this paper points to potential issues related to sustaining access hygiene practices that are useful for the design and implementation of future WASH programmes.

Supplier post-implementation support has likely contributed to the reported outcome achievements. As suppliers were paid for outcomes, they all had an incentive to continue providing support past the implementation phase to sustain sanitation and hygiene levels past the implementation phase. The nature and intensity of any post-implementation activities was

[12] The JMP term 'basic' sanitation (based on the revised terminology in 2017) is equivalent to the term 'improved' sanitation in the WASH Results Programme. It refers to facilities that 'hygienically separate excreta from human contact'.

not consistently assessed across the programme but will have contributed to the verified outcome achievements.

Context is the key factor in determining what outcomes achievements are possible. Overall, the high variability of outcomes across the country programmes with comparable data suggests that sustaining latrine use and hygiene behaviour is largely determined by the programme context and enabling environment. Understanding the extent to which contextual factors enable or limit high achievement will help the WASH sector set more informed targets for future programming, and better understand when programmes may be under-achieving. While the broad factors supporting success are increasingly well understood within the WASH sector, for example, strong institutions and support from government, good monitoring of outcomes and progress, what this means for any given programme will depend heavily on local factors. This does not only apply to differences between countries – within countries there are likely to be considerable differences in context across different areas, communities and populations. Therefore, understanding context at a sub-national level and actively working to overcome barriers is vital.

Progress in sanitation and hygiene is not linear and adaptive programming is key to sustain change. The data here only shows baseline and endline results, but the suppliers typically measured outcomes at points throughout the programme. Looking at year-on-year changes (which were not sufficiently comparable to present here) highlights that progress is not linear: one supplier noted that when baseline coverage is low, there is initially rapid improvement, which gradually stagnates. Further focus on the factors limiting progress and sustainability, and adapted approaches in response to these factors, are needed before coverage starts to increase again. This pattern may repeat several times before full coverage is achieved. Regular outcome data on levels of improved sanitation and hygiene is key to identify patterns and respond.

The shift to measuring outcomes can help to change the dialogue between suppliers and funders. A repeated observation from suppliers in the WASH Results Programme is that it has changed the conversation to working beyond ‘hardware’ and spend targets, focusing minds on aspects of systems strengthening such as relationships, governance and decision making. This is helpful for WASH programming towards achieving the SDGs.

Conclusion

This learning brief has drawn out and discussed key comparable outcome data from the WASH Results Programme to share insights for future programmes that aim to sustain access and behaviour change in sanitation and hygiene. The results presented here focus on short-term outcomes, namely continued use of improved sanitation facilities and handwashing with soap at critical times for one to two years after programme implementation. Comparable data shows that 70% or higher levels of improved sanitation was maintained in the majority of programmes, including in fragile contexts. Handwashing with soap at critical times was more difficult to sustain with the presence of soap often being the limiting factor. Still, suppliers overachieved on their 12–15% targets of sustained handwashing with soap at critical times, reaching average levels of 38% in the first phase and 32% in the second phase of the programme. Nonetheless, these achievements mask high variations in achievements below the programme level, with implications for equity. In most contexts, ‘the last mile’ was not reached.

To better understand what outcome ambitions can realistically be achieved in practice, one needs to dive into contextual factors at national and programming level. Other factors in setting outcome targets will be risk-sharing agreements between funders and suppliers and ambitions in targeting potentially vulnerable groups and ensuring equity.

Background to this brief

This brief is based on data from the WASH Results Programme verification reports. It draws on discussions at the WASH Results Learning event held virtually in May 2020 attended by programme suppliers, DFID and the Monitoring and Verification supplier. The brief was written by Ben Harris and Katharina Welle with input from Catherine Fisher. Thanks to Joanna Trevor and Rachel Stevens (SWIFT), Katrice Knight (SAWRP), Antoinette Kome (SNV) and Leonard Tedd (DFID) for reviewing and commenting on drafts.

This is one in a short series of WASH Results Programme learning briefs, comprising:
#1 Outcome achievements in the WASH Results Programme: data and insights
#2 Setting and monitoring outcome targets in WASH programmes
#3 Reaching the vulnerable and those in fragile contexts with WASH services
#4 Experiences in WASH systems strengthening

Box 2: About the WASH Results Suppliers

The **Sustainable WASH in Fragile Contexts** (SWIFT) Consortium led by Oxfam GB; worked in DRC and Kenya contributing to all three areas of WASH.

The **South Asia WASH Results Programme** (SAWRP) a consortium led by Plan UK; worked in Bangladesh and Pakistan across all three areas of WASH. SAWRP II (2017-2021) works only in Bangladesh.

The **Sustainable Sanitation and Hygiene for All** (SSH4A) Results Programme implemented by the SNV Netherlands Development Organisation; worked in Ghana, Ethiopia, Kenya, Mozambique, Nepal, South Sudan, Tanzania, Uganda, Zambia and focusing on sanitation and hygiene only.

The e-Pact consortium, led by Itad, joined by OPM, IWEL and Ecorys was the **Monitoring, Verification & Evaluation** (MVE) services provider.

Table 2. Data on sanitation outcomes, 2014–17 and 2017–20

Country project	Original programme: access to sanitation		Extension programme: access to sanitation	
	Baseline	Endline	Baseline	Endline
	2014–17	2014–17	2017–20	2017–20
Ethiopia	12%	93%	20%	99%
Nepal	18%	92%	22%	99%
DRC	13%	88%	25%	79%
Tanzania	28%	76%	15%	68%
Zambia	12%	76%	15%	72%
Kenya (SSH4A)	37%	42%	36%	72%
Uganda	25%	40%	33%	45%
Ghana	3%	20%		
Mozambique	10%	18%	15%	25%
Bangladesh				
Kenya (SWIFT)				
Pakistan				
Average	**18%**	**61%**	**23%**	**70%**

Table 3. Data on handwashing with soap outcomes, 2014–17

Country project	2014–17: handwashing with soap at critical times							
	Baseline				Endline			
	Mention of critical times	Self-reported practice	HWF presence[13]	Soap/ash presence	Mention of critical times	Self-reported practice	HWF presence	Soap/ash presence
Ethiopia	25%		2%	1%	81%		96%	26%
Nepal	72%		12%	8%	90%		95%	84%
Bangladesh	17%	45%		51%	41%	83%		83%
Pakistan	33%	63%		47%	41%	96%		74%
Mozambique	59%		13%	4%	100%		63%	22%
Tanzania	55%		1%	1%	89%		52%	35%
Zambia	76%		1%	0%	89%		50%	24%
DRC	20%		1%	1%	97%		48%	48%
Kenya (SWIFT)		61%	13%	13%		94%	32%	32%
Kenya (SSH4A)	68%		5%	1%	87%		31%	10%
Ghana	84%		0%	0%	87%		20%	12%
Uganda	76%		10%	2%	90%		16%	4%
Average	**53%**		**6%**	**11%**	**81%**		**50%**	**38%**

[13] For DRC and Kenya (SWIFT) the HWF presence indicator included the presence of soap and ash.

Table 4: Data on handwashing with soap outcomes, 2017–20

Country project	2017–20: handwashing with soap at critical times					
	Baseline			Endline		
	Mention of critical times	HWF presence	Soap/ash presence	Mention of critical times	HWF presence	Soap/ash presence
Ethiopia	18%	12%	0.60%	93%	99%	21%
Nepal	65%	23%	19%	84%	99%	85%
DRC	27%	1%	1%	95%	63%	63%
Kenya (SSH4A)	82%	12%	3%	95%	46%	21%
Zambia	83%	5%	0.60%	94%	35%	16%
Uganda	68%	10%	1%	87%	35%	12%
Mozambique	70%	43%	13%	80%	27%	17%
Tanzania	38%	3%	0.60%	79%	26%	19%
Ghana						
Kenya (SWIFT)						
Bangladesh						
Pakistan						
Average	**56%**	**14%**	**5%**	**88%**	**54%**	**32%**