

WASH Results Programme learning brief #2

Setting and monitoring outcome targets in WASH programmes

October 2020

The WASH Results Programme was a large-scale, Payment by Results (PbR) programme in which some payments to implementers were dependent on the achievement of WASH outcomes. This prompted considerable investment in the process of setting outcome targets and identifying approaches to measuring outcomes. Consequently, the experience of the WASH Results Programme has generated insights for potential funders and implementers in the design of large-scale WASH programmes, both in using PbR mechanisms and promoting sustained WASH outcomes.

Key insights

1. A challenge to establishing appropriate outcome-level targets for a PbR programme is the lack of sector-wide data about expected success rates on outcomes and the extent to which contextual factors will impact achievement.
2. Outcome targets that reflect area-wide results can incentivise effective programming and improve equity.
3. Results frameworks could usefully include requirements to reach potentially vulnerable groups and encourage monitoring and reporting of disaggregated outcomes.
4. Explicitly addressing delivery risks for suppliers in results frameworks can enhance the cost-effectiveness of the programme.
5. Rigorous outcome measurement may not be possible using a single measure: well-chosen measures may well incorporate several sub-indicators, particularly for proxy measurement.
6. Investment in regular outcome monitoring is valuable both for upward accountability and to enable adaptive 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 (see box 2) were contracted by the UK Department for International Development (DFID)¹ in 2014 to undertake large-scale delivery of WASH in advance of the conclusion of the 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. An extension phase of the programme expanded into new geographical areas to reach more people from 2017–21. In total, the 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 has also overwhelmingly achieved its outcome targets.

The programme operates under a PbR modality, where suppliers receive payment upon successful third-party verification of their results. Results were expressed in terms of reaching individual beneficiaries; a 'price-per-beneficiary-serviced' for outputs and outcomes was negotiated between DFID and programme suppliers at the contractual stage. 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 supplier contracted by DFID independently appraised the monitoring systems and verified that the data they produce are accurate and realistic.

Why focus on outcomes?

As the WASH sector works towards achieving the sustained availability and management of water and sanitation for all, it is no longer enough to simply measure effectiveness of programmes in terms of the number of toilets or boreholes constructed, or whether people have received hygiene promotion.

Understanding outcomes – the number of people *using* improved water and sanitation facilities, or *practising* desired hygiene behaviour – is the first step in understanding whether programming for water, sanitation and hygiene is effective, and whether the WASH sector as a whole is making progress towards achieving the SDGs.

Within the WASH Results Programme, the focus on outcomes had consequences for both suppliers and funders. Some suppliers reported that it shifted the conversation beyond 'hardware', instead focusing on relationships, governance and decision making. For funders, it means accepting that (unlike with measuring simple outputs) attribution is not always clear: there are multiple processes (some beyond the control of any programme) driving outcomes, which means that success should be understood in terms of contribution rather than attribution.

Outcome targets in the WASH Results Programme

In the WASH Results Programme, outcomes were defined as numbers or percentages of unique beneficiaries who **use improved water and sanitation and practise improved hygiene** one and two years after output targets had been achieved. This short-term definition of outcomes was a pragmatic response to the requirements of the PbR modality; results needed to be largely within the control of programme suppliers and measurable to

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.

trigger payment. Suppliers also monitored sustainability against five building blocks set out in the terms of reference (functionality, institutional, financial, environmental and equity) but not all suppliers set payment triggers against sustainability targets.

Table 1 sets out the programme outcome definitions for water, sanitation and hygiene and typical measurements used across the WASH Results Programme. Achievements against specific outcomes were measured at different times using different methodologies across individual suppliers; but more often than not there were at least two rounds of surveys, often area-wide, approximately one and two years after the output targets had been achieved.

In the WASH Results Programme, individual programme suppliers negotiated different outcome targets with DFID dependent on their implementation context and programme design. Two of the three suppliers set outcome targets in terms of percentages of outputs:

- for **water**, this ranged between **75% and 90% of the output target**;
- for **sanitation**, the outcome ambition was to sustain between **70–75% of output targets**;
- for **hygiene** the bar was set at **12.5–15% of output targets**.²

Targets, particularly for hygiene, were set relatively low in line with knowledge of slippage rates and for reasons explored in this brief (see particularly insights 1 and 4). It is important to note that the programme comfortably overachieved on all outcome targets, though some overachievements mask a more mixed picture within the individual supplier programmes. See Learning brief #1 'Outcome achievements in the WASH Results Programme: data and insights' for more details on sanitation and hygiene outcome achievements.

Table 1. Outcome definition and measures in the WASH Results Programme

Programme outcome	Specific outcomes	Typical measure
People <u>use</u> improved water, sanitation and practice improved hygiene.	Hygiene Number of people hand washing 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, presence of a handwashing facility (and water and soap) and demonstrations.
	Sanitation Number of people using an improved ³ sanitation facility	The percentage of survey respondents in the programme area who are confirmed 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.

² The third supplier aimed to sustain the absolute access and use of improved sanitation target (2,084,000) at the output level throughout the outcome phase of the programme.

³ DFID initially defined 'improved sanitation' differently to the Joint Monitoring Program (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.

Six insights from the WASH Results Programme

1. **A challenge to establishing appropriate outcome-level targets for a PbR programme is the lack of sector-wide data about expected success rates on outcomes and the extent to which contextual factors will impact achievement**

Setting outcome-level targets was challenging and time consuming in the WASH Results Programme. There are few, if any, established benchmarks for the conversion of WASH outputs into outcomes nor understanding about what levels of outcomes might be achieved.

The extensive measurement of outputs and outcomes in the WASH Results Programme has allowed some trends to be identified based on analysis of internal data from across the WASH Results Programme, in spite of the different approaches to measurement taken by each of the three suppliers. These may help inform target setting in other programmes. Trends include:

Sanitation: levels of 70% or above of improved sanitation access were maintained in the majority of implementation areas across a diverse range of countries. In most cases where the programme measured outcomes through continued use of outputs, it has been possible to sustain latrine use at 75% or more in the two years following the construction of the latrine.

Water: Use of water sources did not drop below 90% within the first two years after construction except in areas with extreme context-specific challenges (e.g. Kenya Arid and Semi-Arid Land regions).

Hygiene: High levels of knowledge of appropriate times for handwashing (over 80%) were achieved in almost all locations, regardless of levels of knowledge at baseline. Half of country programmes sustained access to handwashing facilities (HWF) to 50% or greater, with high (over 70%) or very high (90%) results for observed presence of HWF achieved in some contexts. The absence of soap was often the limiting factor in achieving the target of sustained handwashing with soap at critical times.

However, suppliers advise caution in use of generalised expectations of achievement. Internal analysis of outcome results showed that achievements in sustaining latrine use and hygiene behaviour varied across country programmes. Discussions in project-wide learning events suggest that this is largely determined by the programme context, presence of an enabling environment, and the nature and intensity of implementation and post-implementation support. This indicates that understanding context, including sub-national context, is key. Better understanding the factors that enable or limit high achievement will help the WASH sector set more informed targets for future programming and identify when programmes may be underachieving outputs and outcomes. However, the extent to which contextual factors affect future outcome achievements remains difficult to quantify.

Further information: More data and analysis on specific achievements related to sanitation and hygiene can be found in the related learning brief #1 'Outcomes achievements in the WASH Results Programme: data and insights'.

2. Outcome targets that reflect area-wide results can incentivise effective programming and improve equity

Stakeholders in the WASH Results Programme agreed that it is important to set area-wide results based on reaching agreed levels of coverage within government administration or health outreach areas. This involves reaching the entire population within those areas, co-ordinating with other WASH actors active in the area to do so. This approach enables programmes to align their objectives with those of local governments, and so is conducive to a systems strengthening approach. The approach aligns with the SDG ambition of achieving universal access and incentivises reaching all segments of the population, including the vulnerable and with recent guidance for rural sanitation programming.^{4,5}

Setting area-wide targets has implications for the total number of beneficiaries that can be reached. For example, in choosing the number of districts to work in, the key consideration should be reaching appropriate levels of coverage and establishing in how many districts it is possible to do this given the resources. This is in contrast to setting targets and designing programmes based primarily on reaching numbers of beneficiaries, delinked from levels of coverage. Agreements that allow results in terms of numbers of beneficiaries to be achieved in any location – for example allowing suppliers to compensate underachievement in one area (be that a district or country) with overachievement in another (which was possible under the PbR modality of the WASH Results Programme) risk targets being met unequally. This could happen if implementers ‘cherry pick’ early adopters and easy-to-reach beneficiaries across wide areas rather than working to reach all groups in a particular area. However, under a PbR programme, committing to coverage increase in certain districts is higher risk for suppliers (see insight 4).

Area-wide targets are also prudent in light of a growing body of evidence around the conditions necessary to achieve health impacts through WASH interventions. Emerging evidence from three recent WASH and nutrition studies⁶ suggests that targets for levels of coverage within a district need to be set high, particularly for sanitation and hygiene, in order to reduce diarrhoea and stunting. Exactly how high is a matter of debate not resolved between the WASH Results Programme suppliers.

3. Results frameworks could usefully include requirements to reach potentially vulnerable groups and encourage monitoring and reporting of disaggregated outcomes

Area-wide coverage targets⁷ set at less than 100% could usefully be complemented by requirements to reach potentially vulnerable groups such as people with disabilities, or poor households, in order to achieve equitable access. This could be a contractual condition that progress is shown against lowest wealth quintiles and potentially vulnerable groups, or setting disaggregated targets. This is to encourage implementing agencies to work on, measure and report on reaching these groups effectively. In a PbR context, different

⁴ WaterAid (n.d) Briefing Note: Guidance on Programming for Rural Sanitation
<https://washmatters.wateraid.org/sites/g/files/jkxooof256/files/guidance-on-programming-for-rural-sanitation---briefing-note-pdf>

⁵ USAID (2020) USAID Water and Development Technical Series: WASH and its Links to Nutrition
<https://www.usaid.gov/global-health/health-areas/nutrition/technical-areas/water-and-development-strategy-and-multi-sectoral-nutrition>

⁶ WHO/UNICEF (2019): Position Paper: Implications of recent WASH and nutrition studies.
https://www.who.int/water_sanitation_health/news-events/who-unicef-position-paper-on-wash-and-nutrition-studies-20191125.pdf?ua=1

⁷ This applies to both output and outcome targets.

payment terms could be negotiated for reaching these groups such as a higher price per beneficiary (if reaching these groups or monitoring progress incurred additional costs) or other upside incentives.

All suppliers in the WASH Results Programme are committed to equitable programming and agree with disaggregated results in principle. However, there were concerns about the risks associated with payment-linked results based on equity and the practical challenges involved. One challenge would be that targets could only realistically be set after signing contracts, as they need to be based on baseline data on vulnerable groups, this is challenging in a contract rather than grant-based funding modality and would require flexibility on the part of funders. Including contractual conditions to show progress towards reaching potentially vulnerable groups, rather than setting payment-linked disaggregated results, may mitigate these concerns.

There are also challenges in generating accurate monitoring data in practice. Lessons around monitoring disaggregated outcomes from the experience of the WASH Results Programme are as follows:

- Monitoring disaggregated outcomes is complex and needs to be factored and costed in at the beginning of the programme; M&E systems need to be designed to measure these disaggregated outcomes from the start (e.g. in baselines).
- Time is required at the start to identify who the potentially vulnerable groups are – this will vary in each context and may change over time, particularly in fragile contexts with high levels of population movement. One challenge concerns different definitions of vulnerability. For example, in Bangladesh the government definition of disability did not include all of those who experienced challenges in accessing sanitation, for example due to difficulties squatting.
- There is additional complexity and cost involved when collecting data for vulnerable groups. Disaggregation related to specific vulnerable segments of the population requires an increase in sample size in programme surveys to provide results which are statistically significant to use as a basis for payment decisions. Qualitative approaches such as focus group discussions with specific vulnerability-based sub-groups were used by one supplier as an alternative to capture their perspectives. The caveat here is that such qualitative approaches are complex to realise at scale and is time consuming for participants (and carers).

Further information: the learning brief #3 'Reaching the vulnerable and those in fragile contexts with WASH services' explores strategies used in the WASH Results Programme.

4. Explicitly addressing delivery risks for suppliers in results frameworks can enhance the cost-effectiveness of the programme

The design of the WASH Results Programme transferred onto suppliers the financial risk of failure to deliver on pre-agreed targets. For all suppliers, this was the first 100% PbR project at scale and the pressure to manage risk well was high. This incentivised suppliers to manage their exposure to the risk of not being paid for work in a range of ways, including in negotiations on outcome targets.

Strategies used to manage risk included:

- Setting low targets for programme outcomes;
- Negotiating targets that could be achieved across different countries or areas to spread the risk of underachievement in riskier programmatic areas; and

- Attaching lower payments to riskier results such as sustaining handwashing

Consequently, within the WASH Results Programme there were potential trade-offs between risk-management on behalf of suppliers and cost-effectiveness for the donor in terms of price-per-beneficiary serviced.

In practice, suppliers *did* have to manage lower performance related to a number of risks that materialised in some programming contexts, including: a rapid deterioration in the security situation, weaker institutional and political support, and flooding and drought incidences. However, suppliers generally overachieved on risk-managed results so the potential trade-offs did not materialise. This may not always be the case in all contracts.

There are several ways in which future payment and results frameworks can create incentives for cost-effectiveness. This includes use of hybrid models combining grant and PbR elements, use of upside incentives for overachievement, greater clarity about risk-sharing agreements in high-risk areas – for example through a risk transfer matrix, disaggregated targets (e.g. different targets for harder to reach or vulnerable populations) – and measures to limit linking larger payments to easier to achieve targets.

Further information: Options for risk sharing are discussed in more detail in the programme’s evaluation synthesis⁸ and in the related blog.⁹

5. Rigorous outcome measurement may not be possible using a single measure: well-chosen measures may well incorporate several sub-indicators, particularly for proxy measurement

The payment-linked outcomes targets in the WASH Results Programme required suppliers, verifiers and DFID to agree rigorous measurement of outcomes that relate to behaviours such as handwashing with soap at critical times and latrine usage that are notoriously difficult to quantify.

In the WASH Results Programme, suppliers and DFID negotiated a composite indicator as a practical and reliable measure of handwashing practice. Although the specific definitions differed between suppliers, all included a combination of:

- knowledge of critical times for handwashing;
- reported or observed behaviour; and
- observation of presence of handwashing facility with water and soap/ash.

The experience of the WASH Results Programme has found that composite indicators are a better outcome measure of handwashing practice than separate indicators for knowledge, reported behaviour and presence of facility. Outcome surveys undertaken during the WASH Results Programme confirmed that relying only on a knowledge indicator as proxy for behaviour would substantially over-report levels of handwashing: surveys found that while 85% of households reported knowledge of two critical times for handwashing, only 21% of households reported knowledge of critical times **and** were observed to have a handwashing facility with water and soap.

Further information: The brief ‘Verification in Practice #3: What makes a good indicator for a Payment by Results programme?’ explores setting handwashing indicators in more

⁸ E-Pact (2020): WASH Results Programme Evaluation: Synthesis Report. <https://www.gov.uk/dfid-research-outputs/wash-results-programme-evaluation-synthesis-report>

⁹ <https://washresultsmve.wordpress.com/2020/04/14/lessons-from-implementing-the-wash-results-programme-3-implications-for-funders/>

depth;¹⁰ and the learning brief #1 'Outcomes achievements in the WASH Results Programme: data and insights' discusses reported outcomes for this composite indicator.

6. Investment in regular outcome monitoring is valuable both for upward accountability and to enable adaptive programming

The evaluation of the WASH Results Programme examined the link between outcome-level monitoring and the programme's performance and found that regular outcome monitoring had a positive effect on the strength of evidence and on the interventions' effectiveness. The highest benefits were observed where suppliers introduced periodic outcome monitoring surveys at the very beginning of the programme.¹¹

When outcomes are monitored regularly and data is reliable, implementers can use it to understand what approaches are (not) working and where so enabling adaptive management. Regular monitoring in the WASH Results Programme enabled course-correction and adaptation that is key to good programme delivery.

It also revealed important lessons that would not have been captured otherwise. For example, surveys conducted by two programme suppliers found that use of HWF would often drop after 1–2 years. Both suppliers learned that households in some communities did not find tippy taps to be durable and easy to use. Based on this information, they were able to re-examine what handwashing solutions they promoted in those contexts.

From tracking outcome data year by year, one supplier has seen that when sanitation coverage is low to start, there is great improvement, then progress stagnates, with more inputs, it goes up again and can stagnate. These trends were not previously documented.

Further information: The link between outcomes monitoring and effectiveness is explored in the programme evaluation.¹² The performance monitoring framework used to track outcomes in the SSHVA programme is publicly available on the SNV website.¹³

Conclusion

Explicitly linking payments to outcomes in the WASH Results Programme prompted intensive focus on outcome targets and their measurement. This both adding to the evidence base around possible outcome achievements, and generated insights into the complexities of incentivising implementers to work towards sustainable WASH outcomes. The programme confirmed the value of regularly monitoring progress towards outcomes, including who is being reached and who is being left behind. As the WASH sector works towards achieving the sustained availability and management of water and sanitation for all, much can be learned from the WASH Results Programme experience.

¹⁰ E-Pact (2020) What makes a good indicator for a Payment by Results programme? Lessons learned from verifying the DFID WASH Results Programme May 2020 https://assets.publishing.service.gov.uk/media/5eda625b86650c4abe1efd20/ViP_3_Good_indicators_for_PbR_May2020.pdf

¹¹ One of the suppliers conducted five sets of surveys throughout the duration of the programme.

¹² E-Pact (2020): WASH Results Programme Evaluation: Synthesis Report. <https://www.gov.uk/dfid-research-outputs/wash-results-programme-evaluation-synthesis-report>

¹³ SNV (2019) Sustainable Sanitation and Hygiene for All (SSH4A) Performance Monitoring Framework Part 2. Outcome indicators <https://snv.org/cms/sites/default/files/explore/download/2019-2-outcome-indicators-ssh4a-performance-monitoring-review.pdf>

Box 1: Background to this brief

Insights shared in this document were identified through an iterative reflective process: they were generated by the Monitoring and Verification team, discussed by programme suppliers' senior project management and M&E staff at a virtual learning meeting, then subsequently revised and reviewed. This brief was produced by the Monitoring and Verification team and has been approved by suppliers. Thanks to all participants and Joanna Trevor and Rachel Stevens (SWIFT), Katrice Knight (SAWRP), Antoinette Kome (SNV) and Leonard Tedd (DFID/FCDO) 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 Programme 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 (2017–21) 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.

Box 3: Links and References

E-Pact (2020): What makes a good indicator for a Payment by Results programme? Lessons learned from verifying the DFID WASH Results Programme May 2020

https://assets.publishing.service.gov.uk/media/5eda625b86650c4abe1efd20/ViP_3_Good_indicators_for_PbR_May2020.pdf

E-Pact (2020): WASH Results Programme Evaluation: Synthesis Report. <https://www.gov.uk/dfid-research-outputs/wash-results-programme-evaluation-synthesis-report>

SNV (2019) Sustainable Sanitation and Hygiene for All (SSH4A) Performance Monitoring Framework Part 2. Outcome indicators <https://snv.org/cms/sites/default/files/explore/download/2019-2-outcome-indicators-ssh4a-performance-monitoring-review.pdf>

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