Strengthening the business case for water, sanitation and hygiene

How to measure value for your business

WaterAid/ Eliza Powell

DIAGEO

Gap Inc.

Unilever

In association with PwC and ODI

WaterAid

Preface

Business is part of the solution and has a crucial role in driving the step change needed to meet Sustainable Development Goal 6 on water and sanitation. This guide has been developed to support evidence gathering and strengthen the business case for water, sanitation and hygiene (WASH), which is currently lacking.

"Clean drinking water and sanitation for all is one of the biggest global challenges of the 21st century – and business has an important part to play. We can lead by example by providing these basic services in our direct operations, but what will really drive transformational change is enabling the provision of them across our extensive supply chains. This is how we can leverage our influence and achieve the scale that is desperately needed. This guide is an essential tool to strengthen the business case for investment in clean water and sanitation in our supply chains – so that we can all step up and play our part."

Michael Alexander, Head of Water, Environment and Agriculture Sustainability, Diageo

"The need for clean, safe water is not just an environmental issue, but a human rights issue. We want to help ensure that everyone touched by our business can have this need met. Not only do we rely on water to create our products, but the people who make our clothes must be able to care for themselves and their families, including with access to water, sanitation, and hygiene. We are proud of our work with other private sector leaders to strengthen the business case for WASH investment in the workplace. Through examples, the guide for investing and measuring impact, and our lessons learned, we hope we can mobilize more businesses to help us achieve the vision of SDG 6 – striving towards universal access to water and sanitation by 2030."

Melissa Fifield, Senior Director, Global Sustainability, Gap Inc.

"The social, moral and economic case for investment by business in WASH is clear and compelling. In order to drive transformational change against SDG 6, Unilever is committed to catalyzing action by the business community to help others realize the benefits of investing in WASH. Our support of this guide is just one action we are taking as part of this commitment. We encourage businesses to use this guide and share their learnings so that, together, we can advance the business case – and create another lever to drive action on WASH."

Eric Ostern, Director Global Partnerships & Advocacy, Unilever

Guide endorsed by WASH4Work initiative and partners.

Foreword

"We all have a role to play in making clean water, decent toilets and good hygiene normal for everyone, everywhere by 2030 – Sustainable Development Goal 6. Businesses are crucial in bringing about the step change needed to meet this global challenge.

To scale up action from companies we need to shift from the anecdotal feedback we have on the business benefits of WASH interventions to a more robust evidence base to build a stronger business case. In response, this practical guide, which has been championed by WaterAid's business partners Diageo, Gap Inc. and Unilever, and endorsed by WASH4Work, will help you provide evidence of the benefits and financial value of your WASH interventions, and make the case for greater investment in WASH within your own company and beyond.

I encourage you to apply the guidance to your own operational context – in the workplace, community and supply chain. Test it, learn from it, and share your outcomes with WaterAid, so we can strengthen the business case for WASH and scale up action across the business sector.

Every day the WASH crisis continues to claim lives and hold people back from achieving their potential. We don't have a moment to spare.

Thank you."

Tim Wainwright
CEO WaterAid UK

WaterAid/ Sam James

Contents

Acknowledgements

We would like to thank all the companies and organisations that have taken part in this project and provided useful insights and data. These include Aditya Birla Group, CARE International, The Coca-Cola Company, Diageo, Fung Group, Gap Inc., GSK, H&M, Levi Strauss & Co., LIXIL, Marks & Spencer, Nestlé, Olam, PepsiCo, PVH, Reckitt Benkiser, Sainsbury's, Sofidel, Twinings, UNICEF, and Unilever.

WaterAid gratefully acknowledges the assistance of PwC and ODI in the development of this guide.

WaterAid/ Laura Summerton

Introduction

844 million people have to walk longer than half an hour, with the majority of this burden falling on women.

844 million people in the world – one in nine – do not have **clean water** close to home.

2.3 billion people in the world – almost one in three – do not have a **decent toilet** of their own.[1]

These figures represent 'basic access' – the first step towards the Sustainable Development Goal (SDG) target of 'safely managed services'. The number of people without this higher level of service is even bigger.

Our shared global challenge and the role of business

Business can and should be part of the solution to the global WASH challenge, and no one organisation or sector will be able to tackle this challenge alone. Globalised operations and supply chains mean businesses are often operating where the lack of access to WASH is most serious. Women, who are disproportionately affected by a lack of WASH, in many sectors form the majority of the workforce. Business has the potential to make a significantly positive contribution.

Progressive companies have shifted their perspective from viewing WASH as a philanthropic or corporate social responsibility (CSR) issue to a core business priority. They are also recognising the importance of taking a more holistic approach in working with governments and other stakeholders to drive systemic change, instead of a project-based approach.

Partnerships between governments, non-governmental organisations (NGOs) and civil society will be essential to drive the systemic change needed to achieve sustainable and equitable WASH services for all.

Quantifying business benefits: an opportunity

In addition to the strong social and ethical drivers, there is increasing evidence around the business benefits and opportunities for companies investing in WASH. These include direct benefits such as reduced absenteeism and increased productivity, as well as indirect benefits such as staff and supplier loyalty.[2] Efforts to spur business into action towards achieving SDG 6 are gaining momentum. This is supported and driven by initiatives such as the WBCSD WASH at the Workplace pledge,[3] the ILO WASH@ Work handbook,[4] the Alliance for Water Stewardship[5] and the UN-led WASH4Work[6] initiative.

At a global level, the economic case for WASH is well established. It is estimated that every dollar invested in sanitation returns US$5.5 in benefits and every dollar invested in drinking water supply returns US$2.[7] These economy-wide returns come mainly from health and time savings, so, in theory, businesses can gain a share of the overall economic benefit as a financial return on any investment they make in WASH.

At the company level, good case studies[8] are emerging. However, apart from some pioneering work by Levi Strauss & Co.,[9] the evidence remains largely anecdotal and unquantified. Research by PricewaterhouseCoopers (PwC) and the Overseas Development Institute (ODI), on behalf of WaterAid,

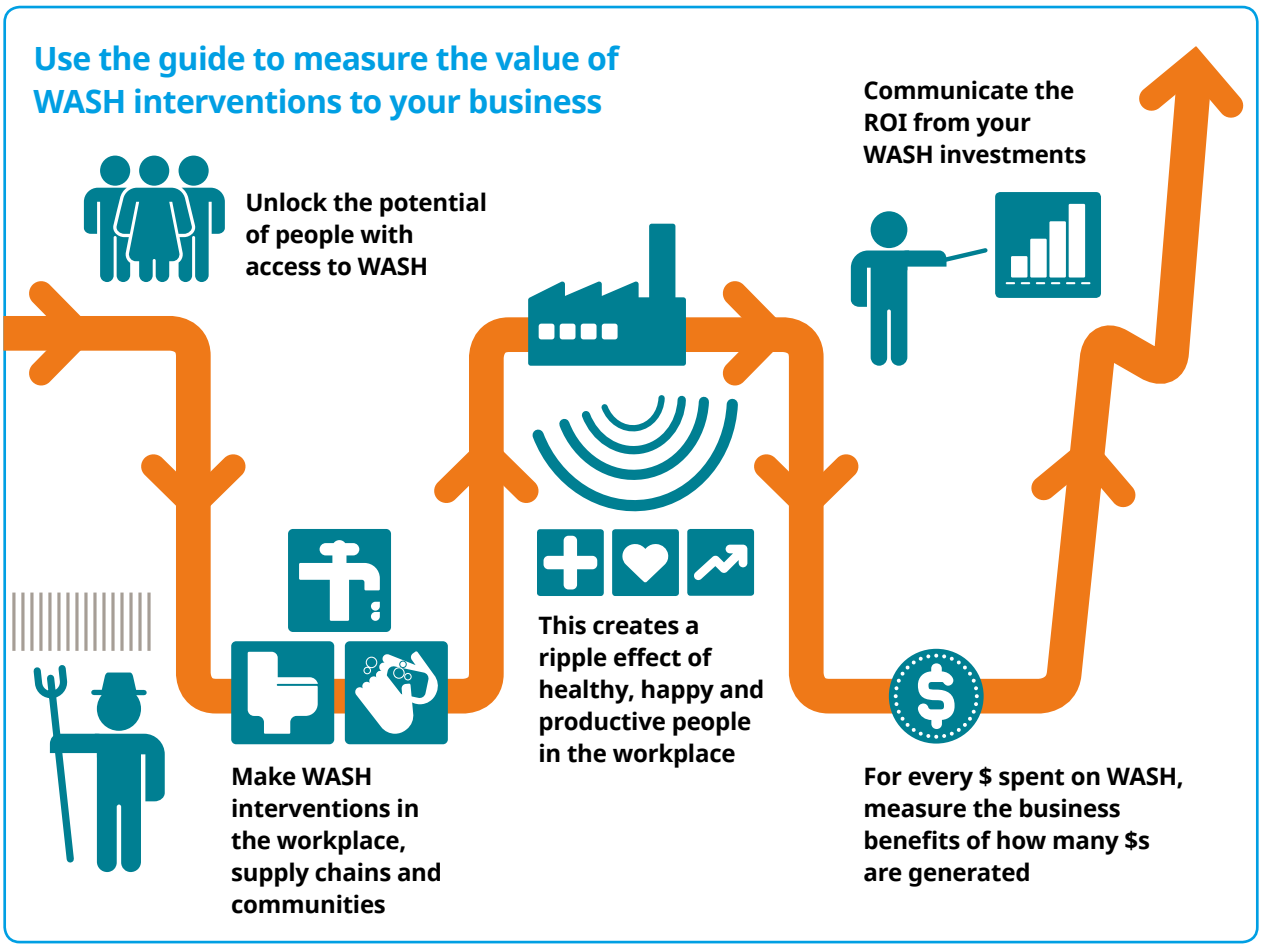
The guide

In response to this very specific challenge of quantifying the business benefits, we developed this step-by-step guide to help companies establish the business value of WASH interventions and calculate their financial return on investment (ROI). Its main focus is therefore on direct business benefits, as they are simpler to measure; however, it does recognise the importance of the indirect business benefits, and includes a list of suggested indicators to monitor.

This guide is aimed at companies who are likely to have an established WASH programme and want to evidence the financial benefits of their WASH interventions to strengthen the internal case for future investment. Critically, it enables businesses to share this data in a consistent format and collectively build a stronger case for investing in WASH and inspire others to act. All partners recognise that this guide is a starting point for strengthening the financial business case for WASH, not the final word. Through trialling and testing the guide, gaps can be identified and addressed and additional resources developed. WaterAid will facilitate opportunities for companies to share the evidence generated, the learnings and feedback on the guide.

Diageo, Gap Inc., and Unilever, showed very few companies were collecting data to quantify the business benefits of WASH, and those that tried faced challenges, especially where WASH was part of a wider social programme. Yet businesses need more evidence to demonstrate how WASH investments in their upstream value chains can be beneficial to the business and to society to sustain and increase investment in WASH. Therefore building the evidence base and quantifying the benefits presents a real opportunity to scale up progress.

Businesses should consider the WASH provisions not only in the workplace but also in the supply chains and in the communities in which workers live.



Using the guide

This guide:

- Gives an overview of the issues along with practical step-by-step guidance to help you establish the business value of your WASH investments.
- Can be adapted for a specific sector, stage of supply chain, geographic location, type and scale of WASH intervention (site-level or corporate top-down).
- Helps you gather evidence that translates into financial value for your company or supply chain companies.

This guide does not:

- Aim to quantify the non-financial benefits for the company (Appendix 3 provides ideas for social indicators).
- Provide guidance on how to design WASH programmes. You should follow important principles when designing and implementing sustainable WASH services/interventions and do a thorough risk assessment. Principles include taking a systems approach, engaging stakeholders and not just paying for

and building infrastructure but ensuring that the appropriate entities are in control of managing these services, including the capability, the financial resources, performance management, customer engagement and so on. For guidance on how to design programmes, see Appendix 5.

The guide assumes that:

- You have identified WASH as a priority issue for your company. This guide doesn't 'make the case' for WASH but does include links to relevant resources. See Appendix 5.
- You have already designed your intervention; the guide may help you refine your intervention as you consider measuring the business benefits.
- Financial business value is only one factor in your company's investment decision-making process. It is assumed that social and ethical drivers are included, and requirements to respect the human rights to water and sanitation are given primacy.
- Individuals using the guide are competent at collecting and processing data to ensure the credibility of results.

Who is it for?

- This guide is for anyone aiming to understand how to measure the business benefits of a company's WASH interventions. You could be in a company management or operational role, or a WASH implementing partner working on behalf of businesses.
- Senior leadership can use the results as part of the decision-making process for company WASH investments.
- It should be comprehensible to suppliers but has not been developed specifically for this audience.

What results will I get?

- The financial business case for WASH, which can include the ROI measuring the efficiency of investments – 'For every $ spent, how many $s are generated/lost?'

Test it, learn from it and share your results with us at corporate@wateraid.org

Business and WASH – the picture today

Research suggests that few companies have a clear idea of how WASH investments might translate into financial benefits – especially investments in supply chains.[2] There is some anecdotal evidence, although this underlines that a financial return on investment is not the only driver.

Non-financial intangible returns are important, including alignment with business values, expectations of customers and business customers, compliance with national and local legislation, and mitigating the risk of disease outbreaks. Companies need support, both to identify good-practice WASH interventions in the wide range of contexts where they operate (particularly where supply chains are long) and to understand standards and costs. This might include guidance on minimum service levels (accessibility, quantity and quality) for different workers (e.g. male and female) in different contexts (e.g. farms, factories and households/communities).

Interviews and a small online survey[10] conducted in developing this guide reinforced these points. We sent the survey to many companies and disseminated it among the World Business Council for Sustainable Development (WBCSD) and UN-CEO Water Mandate networks. We received 17 responses, a small sample, so conclusions from the survey should be treated with caution (see Appendix 1 for details).

The main findings were as follows:

- Most companies – 14 of 17 – had a policy on water, but only six of the 14 included statements on WASH. However, seven had signed the WBCSD WASH at the Workplace pledge.
- All 17 respondent companies provide minimum WASH facilities – drinking water, sanitation and personal hygiene – in their own operations, but only half or fewer had a more comprehensive WASH approach, including feminine care facilities, personal hygiene promotion/training or hydration promotion/training.
- There is far less emphasis on WASH in suppliers' operations: ten companies require suppliers to meet WASH standards, and the same number reported that suppliers provided minimum WASH facilities. Again, only about half of those providing minimum WASH facilities (less than a third of all companies) engaged in a comprehensive approach.

Low-income informal settlements often develop close to workplaces and have poor access to WASH.

- Only about a third of companies provided WASH facilities in the communities where their workers live, or the wider communities they support, despite the fact that WASH provision in communities complements workplace provision (e.g. improved worker health status from workplace WASH may be undermined by the absence of WASH in their homes).
- Responses highlighted a range of motivations for WASH investments, whether in companies' own or suppliers' operations, or in communities. The most important was basic human rights, but direct business value (e.g. improved productivity) and managing reputational risk were also highlighted.
- Five companies reported that they had collected data (or would be doing so) on the impact of WASH investments on their business performance, enabling them to evaluate their return on investment.

As previous studies have noted, and our research confirms, **the evidence to support the business case for increased WASH action is insufficient**. There is appetite among companies to generate that evidence base, but knowledge of how to do so is lacking.

This guide supports companies by providing an overview of the issues and practical step-by-step guidance to establish the business value of WASH investments. Tools to support analysis of the financial return from WASH investments, like this guide, will need to be complemented by detailed norms and standards[2] on WASH for workers across different contexts to support better measurement of non-financial benefits.

Selected companies' WASH policies and commitments

Diageo's 'Water Blueprint'[11]

- Enable communities through the provision of safe water and sanitation by developing Water of Life projects in the water-stressed watersheds where our production sites are located.
- Ensure appropriate access to safe water, sanitation and hygiene for all employees in all premises under Diageo's control.

H&M's 'Sustainability Commitment' for business partners[12]

- Access to clean drinking water and toilet facilities in the workplace is a fundamental part of expected safe and hygienic working environment for employees.
- Business partners are expected to apply the requirements and approach outlined in this Commitment in their supply chains.

Nestlé's 'Guidelines on Respecting the Human Right to Water and Sanitation'[13]

- Nestlé factories and suppliers are encouraged to fill identified gaps in the areas of water, sanitation and hygiene for employees and communities.
- All Nestlé factories have committed to provide WASH services to employees. Nestlé factories in high-risk areas are additionally encouraged to support access to WASH among factory-surrounding communities.

Unilever's 'Sustainable Living Plan and related standards'[14]

- Fully integrating WASH within own workplace and manufacturing sites, through safety, health and environment standards.
- Ensuring good access to WASH for external suppliers through independent certification; Unilever's Sustainable Agriculture Code; or, for those suppliers assessed as high risk, as part of the audit for Unilever's Responsible Sourcing Policy.

WaterAid and local partners worked on this tea estate in Sylhet to install boreholes and latrines and promote hygiene to the tea-pickers who live and work there, with funding from HSBC and the estate itself. Here women use clean water from a tube well to wash their clothes.

How to measure the value of WASH for your business

WASH interventions will have benefits for people, communities and the environment, and, as a result, the businesses that operate in these contexts. This guide provides direction specifically on measuring the **business benefits** of WASH interventions, focusing on upstream value chains in the manufacturing and agriculture sectors.

Within business benefits, we have identified two categories: **direct business benefits** that relate to core value[15] and **indirect business benefits** that relate to wider purpose. Currently, there is a lack of robust evidence in both categories. This guide is aimed at generating more evidence on the direct business benefits, on the basis that these are typically more straightforward to quantify so companies are more likely be able to tackle this issue first.

We provide general guidance that can then be adapted to a specific sector, stage of supply chain, geographic location, type of WASH intervention and scale of intervention (site-level or corporate top-down), among other factors. While each case will be different, we believe there is value in having a consistent approach to measuring the value of an intervention within sectors and companies, to enable comparisons and better learning. We use one case study throughout the stages of the guide to demonstrate each of the steps. This is a hypothetical example that draws on some of the actual experiences of companies. We also include real company data where possible, and further guidance in the appendices.


WaterAid/ Mustafah Abdulaziz

Measuring the social benefits

WASH interventions aim to deliver social benefits. Although this guide focuses on quantifying and valuing the business benefits from investments in WASH, you may also wish to quantify and value the societal benefits. An understanding of these impacts can help you design WASH interventions with maximum benefits to society and communicate about your contributions to the SDGs. Furthermore, these societal benefits can also contribute to a thriving economy, which is in turn beneficial for business.

Societal benefits may include:

- Improved health and wellbeing of individuals
- Greater sense of safety and dignity
- Lower healthcare expenditure for governments

(For key resources on measuring the social return on investment, see Appendix 5.)

Having access to appropriate WASH facilities can bring numerous benefits to businesses by improving the health and wellbeing of employees and their families.

Designing WASH interventions

There is no 'one-size-fits-all' with WASH interventions – they are context specific. Businesses operate within a set of communities with independent governance and service delivery mechanisms.

While it is appropriate for businesses to deliver WASH services in the workplace, the method of interventions within surrounding communities and through supply chains should ideally be designed to strengthen local governance and service delivery systems.

Where appropriate, businesses should partner with wider stakeholders, for example local governments and the mandated service providers and/or support agencies (including non-governmental organisations and international organisations such as the UN agencies), for the delivery of services beyond the business.

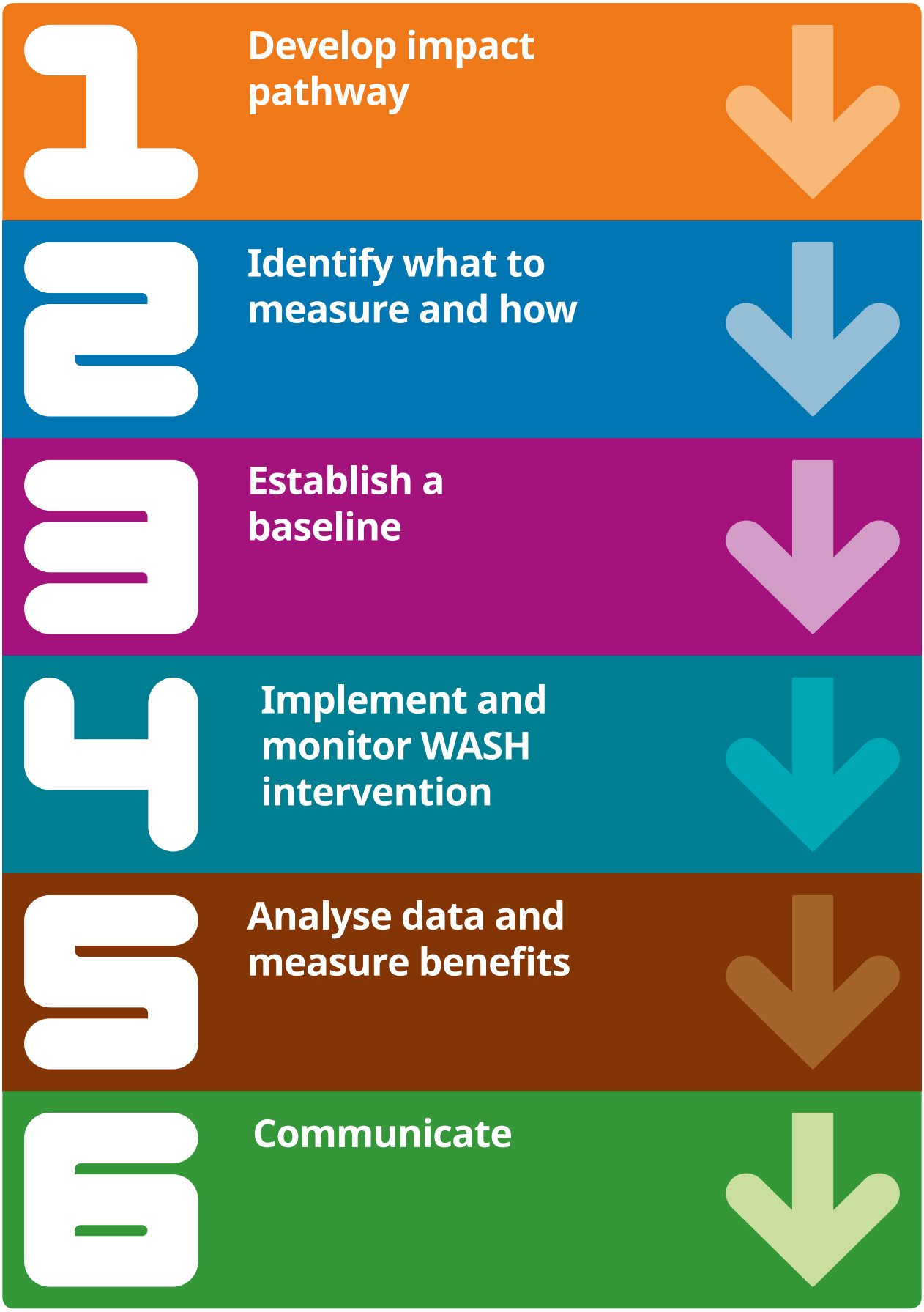
This systems approach potentially provides much wider benefits and may also generate improved legitimacy to operate with the authorities. However, this does imply less direct control of the results, and may require greater attention to measurement techniques and longer lead times to realise impacts.

Before presenting our six-step framework, it is also important to outline what this guide does not do and what assumptions we have made:

- It does not provide guidance on measuring the social benefits.
- It does not provide guidance on WASH design. We assume that you have already designed your WASH intervention. As part of this, you should have conducted a needs assessment to identify whether a WASH intervention is needed and, if it is, how it should be designed to strengthen existing systems. For resources and guidance on this please see Appendix 5.

You can use the guide throughout the design and implementation of your WASH programme. It will be important to refer to it during the design phase so that the right set up, resource allocation and monitoring requirements can be put in place to capture the business benefits.

Steps for measuring business value



Shutterstock/ silentwings

1 Develop the impact pathway for your WASH intervention

Once you and your wider network/team have designed your WASH intervention, based on the need, the first step is to map the potential changes it may create.

These can be mapped out using an 'impact pathway', which identifies the inputs, outputs, and expected outcomes and impacts on people, communities and businesses. WaterAid defines 'outcomes' as the short- and medium-term changes resulting from the delivery of a programme, and 'impacts' as the long-term, lasting changes in people's lives. For simplicity, in this guide we will refer to outcomes and impacts as 'benefits' (see diagram overleaf), although you may wish to distinguish between outcomes and impacts in your own impact pathways. We recognise that not all changes from a WASH intervention will be positive. These should be carefully considered and managed as part of designing and implementing your WASH programme, but are not the focus of this guide.

INPUTS	OUTPUTS	OUTCOMES	IMPACTS
The time/ resources/ costs that go into the project	The direct deliverables generated through the implementation of a project	The short- and medium-term changes resulting from the delivery of a programme	The long-term, lasting changes in people's lives

BENEFITS

The direct and indirect changes for people and business as a result of the project

EXAMPLE INPUTS	EXAMPLE OUTPUTS	EXAMPLE BENEFITS
• Construction costs of latrines • Maintenance costs over time • Staff time costs • Advocacy costs	• 100 toilets are built in communities and the workplace • WASH champions within workplace • 200 people trained on handwashing practices	• Improved health for workers and others in the community • Improved safety and dignity • Reduced staff absence due to sickness • Improved staff productivity at work

Definitions of inputs, outputs, outcomes and impacts are based on WaterAid's definitions in the indicator guide.

There isn't a single prescribed format for impact pathways. To help guide you, we have developed a generalised impact pathway that highlights the common inputs, outputs and benefits, which can be tailored to different WASH interventions (see on proceeding pages and in Appendix 4).

We can categorise benefits by the people or group impacted on:

- Benefits to **people** (including employees and people in the community). These may include physical, emotional and wellbeing changes, such as improved sense of dignity, lower incidence of waterborne diseases, decrease in school absence rates, improved knowledge of hygiene practices, and less time taken to fetch water.
- Benefits to **supplier**. These may include direct cost reductions, reduced staff absence, reduced staff turnover, improved staff productivity, lower workplace clinic costs, and improved reputation.
- Benefits in **supply chain**. This includes benefits that are shared by both the supplier and the company, and may include better relations, increased efficiency, and greater resilience to sudden changes (e.g. disease outbreak, flooding).
- Benefits to the **company**. These may include better reputation, improved stakeholder relations, and reduced input costs. Some of these are less tangible wider benefits, which nonetheless can translate into improved bottom line.

Finally, the impact pathway identifies the **financial** benefits to business, which are a consequence of the supplier, supply chain and company benefits. It is these financial benefits that generate a financial ROI.

Benefits are not distinct and may flow into each other. For example, benefits to people and communities, such as improved health, will likely result in benefits to supplier companies operating in the area, such as reduced staff absence.

To create your impact pathway, consult within your business and with partner organisations, experts in the field, and those 'on the ground'. This will enable you to better understand the cause and effect relationships between inputs, outputs and expected benefits, and may also help you get stakeholder buy-in.

The importance of engaging with stakeholders

Throughout this process it is important to engage with stakeholders – companies can drive greater change faster by working collaboratively.

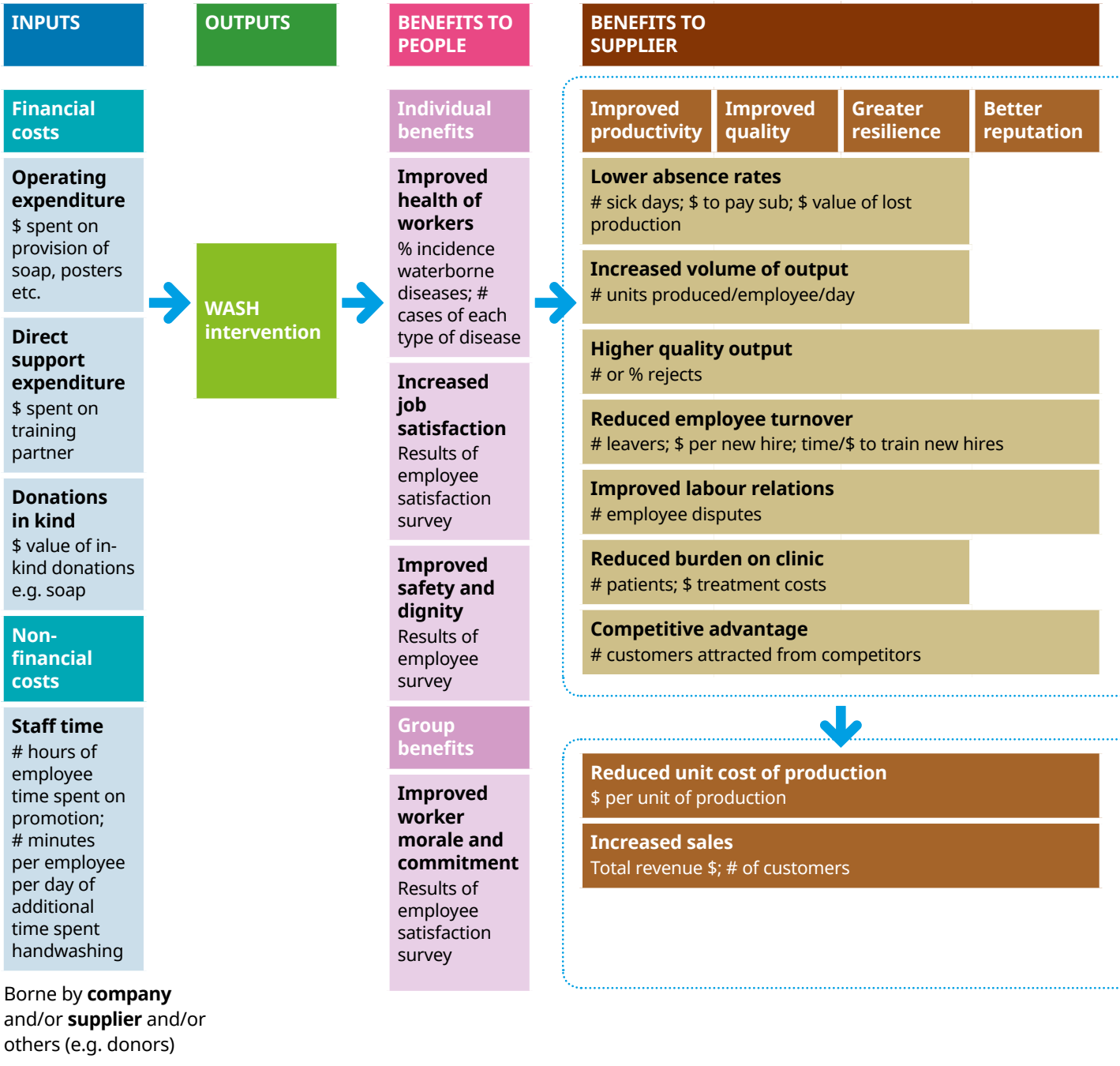
Draw up a stakeholder engagement plan to list all the stakeholders (e.g. co-workers, leadership teams, other businesses, partner organisations, governments) and how you plan to engage with them. This should be considered alongside your communication plan, which is explored in Step 6).

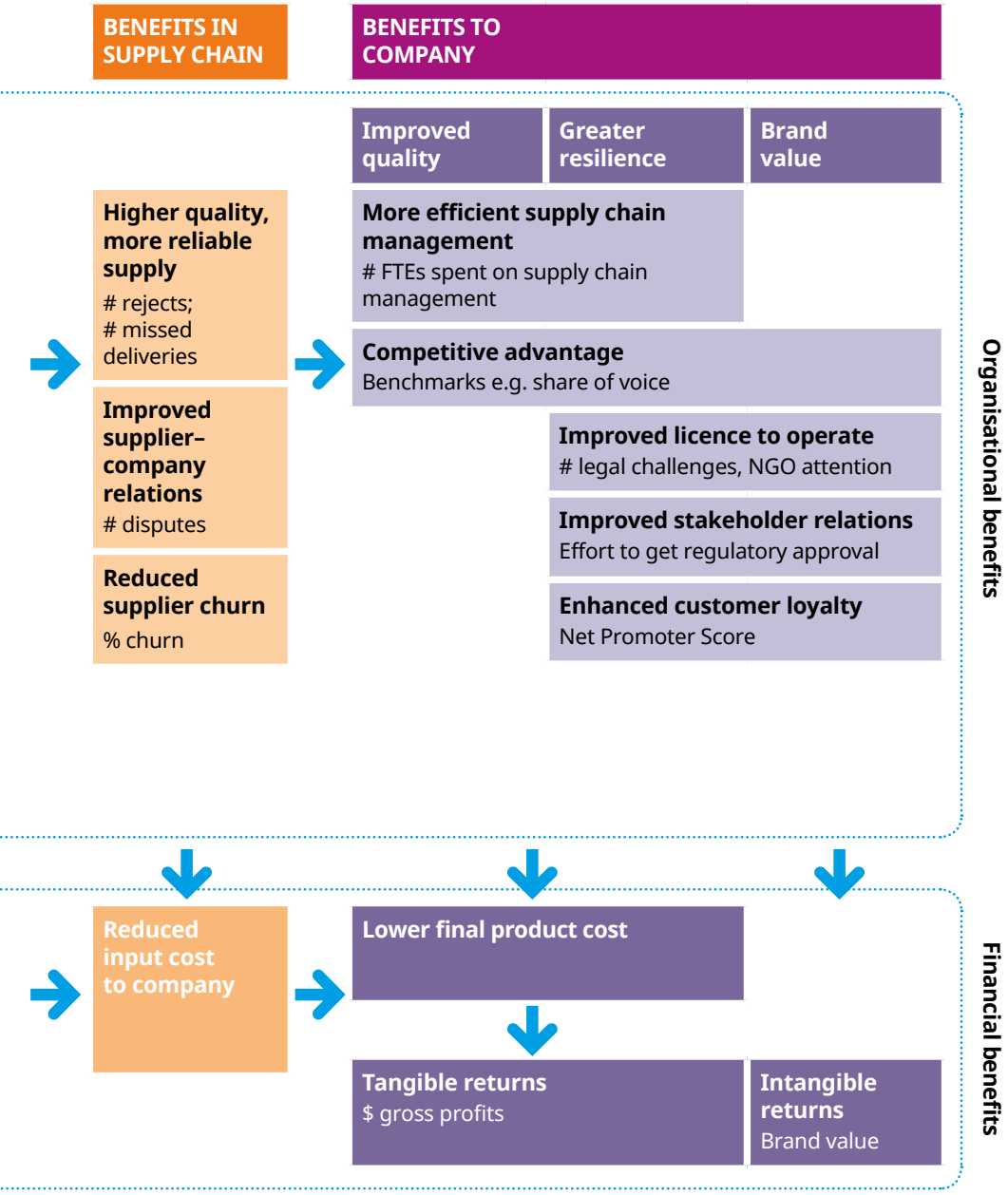
When designing your WASH intervention consider the inputs and outputs so that you can monitor and analyse the data to understand the benefits.

WaterAid/ Nyani Quarmyne

Below is a generalised impact pathway we have developed to illustrate the potential benefits of WASH investments. We have also included worked examples for specific WASH interventions in the simplified form used in the rest of the guide. See Appendix 3 for a more detailed list of possible indicators. Note that in this pathway 'benefits' refer to either outcomes or impacts.

Generalised impact pathway




BENEFITS IN SUPPLY CHAIN
BENEFITS TO COMPANY
Improved quality
Greater resilience
Brand value
Higher quality, more reliable supply
rejects; # missed deliveries
More efficient supply chain management
FTEs spent on supply chain management
Competitive advantage
Benchmarks e.g. share of voice
Improved supplier–company relations
disputes
Improved licence to operate
legal challenges, NGO attention
Improved stakeholder relations
Effort to get regulatory approval
Reduced supplier churn
% churn
Enhanced customer loyalty
Net Promoter Score
Organisational benefits
Reduced input cost to company
Lower final product cost
Tangible returns
$ gross profits
Intangible returns
Brand value
Financial benefits

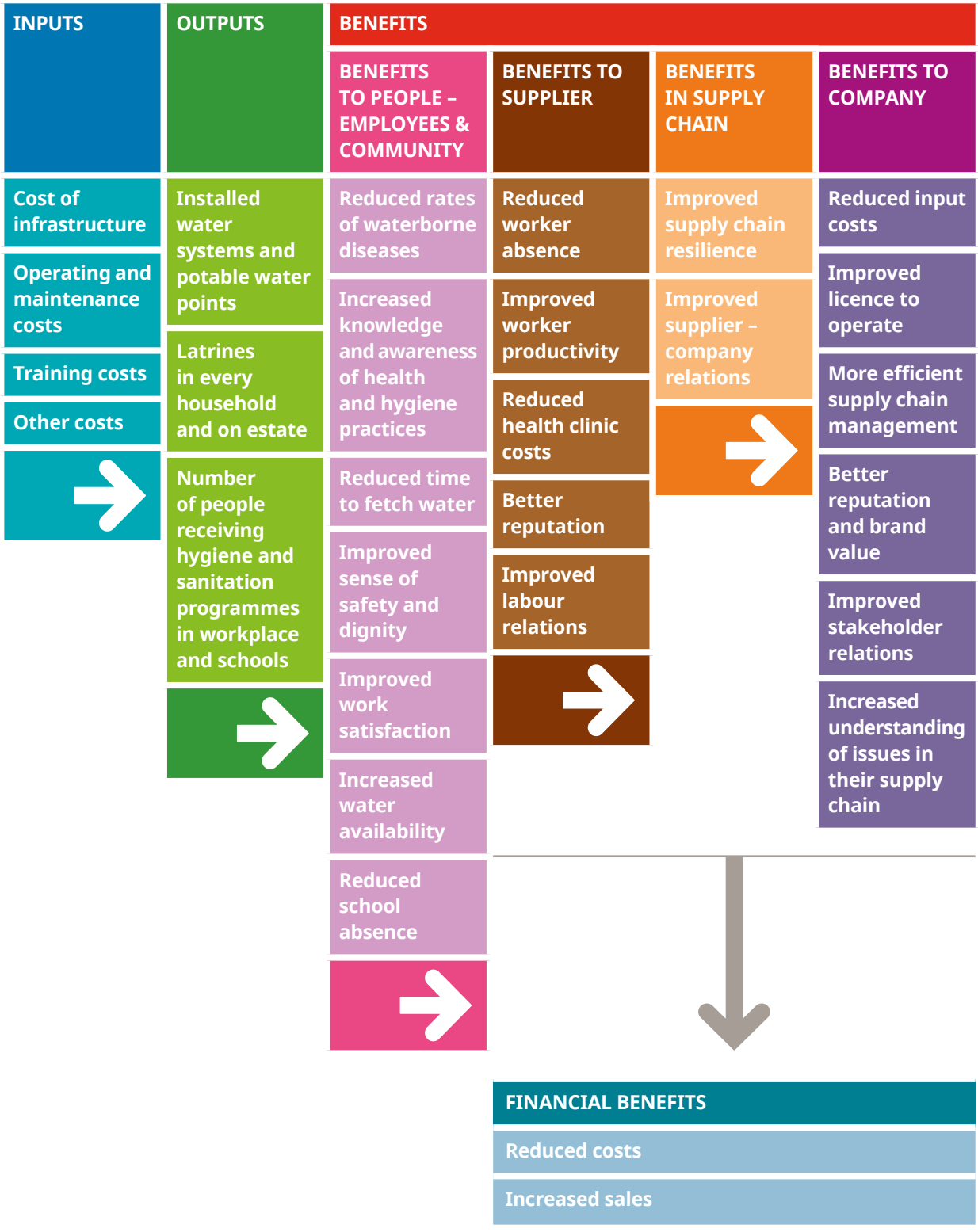
Our hypothetical case study is modelled around a company and a supplier, with shared benefits in the supply chain. Your situation may differ, for example the company may own the production site (in which case, the 'supplier' and the 'company' are the same entity) or other companies may source from the same production site (in which case, the benefits to the 'company' would be shared – see Step 5 for further discussion of this).

Case study

Through a needs assessment, company Universal Beverages, in collaboration with a local NGO, decided to fund and implement WASH interventions in one of its tea suppliers in India. The company sourced tea from a water-scarce region where waterborne diseases were common and frequently affected people's livelihoods and their ability to work. Many households where workers lived lacked sanitation facilities, access to clean potable water and proper hygiene practices. Staff absence on the estate was high and this impacted productivity. Furthermore, worker morale was low and female workers felt particularly vulnerable and undignified without access to secure and appropriate sanitation facilities.

In collaboration with the NGO, the tea supplier and local authorities, Universal Beverages designed a WASH intervention to try to combat these problems. This involved the installation of clean water systems, potable water points, and latrines in both the tea estate and the surrounding villages from where the tea estate draws labour, as well as hygiene and sanitation programmes in the tea estate and local school.

The programme was funded in part by the company and by the tea supplier. Universal Beverages developed the following impact pathway to outline the expected benefits to the workers, the supplier and itself:


INPUTS
OUTPUTS
BENEFITS
BENEFITS TO PEOPLE – EMPLOYEES & COMMUNITY
BENEFITS TO SUPPLIER
BENEFITS IN SUPPLY CHAIN
BENEFITS TO COMPANY
Cost of infrastructure
Operating and maintenance costs
Training costs
Other costs
Installed water systems and potable water points
Latrines in every household and on estate
Number of people receiving hygiene and sanitation programmes in workplace and schools
Reduced rates of waterborne diseases
Increased knowledge and awareness of health and hygiene practices
Reduced time to fetch water
Improved sense of safety and dignity
Improved work satisfaction
Increased water availability
Reduced school absence
Reduced worker absence
Improved worker productivity
Reduced health clinic costs
Better reputation
Improved labour relations
Improved supply chain resilience
Improved supplier – company relations
Reduced input costs
Improved licence to operate
More efficient supply chain management
Better reputation and brand value
Improved stakeholder relations
Increased understanding of issues in their supply chain
FINANCIAL BENEFITS
Reduced costs
Increased sales

Shutterstock/ Lukasz Janyst

Identify what to measure and how

Once you have mapped out the expected benefits from the intervention, the next step is to understand what benefits to measure and how to measure them. This will ultimately enable you to assess whether, and to what degree, there has been a change because of the WASH intervention. It is unlikely to be possible or desirable to measure all benefits, so prioritising which ones to focus on is important.

As mentioned before, we provide guidance on business benefits specifically, but some principles also apply to choosing what wider benefits you may wish to measure. **As well as benefits, it is important to keep track of inputs and outputs, both for general monitoring and evaluation (M&E) purposes and to enable you to measure your core business value**.

In our impact pathway, we present the inputs, outputs and benefits in a linear sequence and in clearly defined boxes. However, benefits are not always independent of each other and one activity can lead to more than one change. **You should take care to clearly define how you measure your benefits to avoid double counting, especially when you come to aggregate them (see Step 5)**.

For example, if you measure both absence and productivity, and define 'productivity' without considering the number of workers present, you may double count the impact of absence.

When deciding which business benefits to assess, consider the following factors:

- **Business priorities:** Consider what the main aims of the WASH programme are. For example, if workers' sense of safety and dignity is the main driver, then select benefits that reflect this, such as 'improved sense of safety and dignity'. If workers are constantly absent from work due to sickness, then select benefits such as 'reduced incidence of

waterborne diseases' and 'reduced absence'. Consider benefits where, if there is a change, it will have a significant effect on business.

- **Feasibility:** Consider what resources you have available to measure and monitor these benefits. Some are direct business benefits that you may already monitor for management purposes. These may therefore be easier to quantify and potentially monetise. Others are indirect benefits that are more challenging to quantify, but may be important to consider. Divide your benefits into two groups, using the table below as guidance.

The focus of the rest of this guidance is on the left column in the table below – direct business benefits that are typically easier to translate into financial value. Less tangible benefits are more difficult to measure but can nonetheless have a significant financial impact on a company. For example, loss of reputation/social licence to operate can be severely harmful and may be a significant cost of inaction. Conversely, WASH interventions that support local governments can improve the underlying economic climate – and therefore support businesses that operate in the region.

For these benefits, it may be important to understand them at least from a qualitative perspective, through interviews and/or surveys with stakeholders. For example, if one of the main drivers for the WASH

Direct business benefits that relate to core business value *	Indirect business benefits that relate to wider purpose
Typically easier to translate into financial value	Typically more challenging to translate into financial value
Examples:	**Examples:**
• Absence	• Employee loyalty and satisfaction
• Productivity/efficiency	• Brand value
• Quality (such as reduced error rates)	• Reputation
• Staff turnover	• Social licence to operate
• Operational costs	• Labour relations
• Healthcare/clinic costs	• Supplier loyalty
	• Supply chain resilience
	• Improved economic climate

*This guide focuses on the left column – direct business benefits.

intervention was to improve social licence to operate in the region, then it would be important to assess this, perhaps through interviews with local residents or local government on their perceptions and attitudes towards the company before and after the intervention.

The next part of this step is to decide how to measure your chosen benefits. There are common indicators that can be used to measure each benefit (see Appendix 3 for examples of these), but the exact data needs and calculations will depend on your unique business context. For example, some companies may already measure productivity per worker per day (e.g. for piece-rated work) whereas others will measure total production per week at a site level. Some may capture information on quality (e.g. number of rejects) whereas for others this information may be absorbed by overall production data.

If the company is designing the M&E, it is important for it to get a good understanding of how the supplier operates and what or how indicators are currently monitored.

As well as establishing the indicators themselves, you will need to understand how changes in these indicators affect finances. For example, what is the financial impact on the company of a change in productivity per worker per day, or fewer days of absence? This may be something the business already knows, but, if not, it will be important to engage with the business to come up with a reasonable and robust estimation. **When measuring these changes, it's important to note that we are trying to measure the changes resulting from the WASH intervention, and not from other factors** (see Step 3 about establishing a baseline).

Business benefits from a circular economy approach

One area that is currently evolving on WASH is circular economy thinking to replace traditional waste management. This entails rethinking waste as a potentially valuable resource that can provide materials, energy and water. There are obvious potential business benefits to using waste as a resource, such as lower energy costs if waste is used for energy, cost savings from not buying waste disposal services and reputational gains from reduced waste (especially plastic) and water use – and all of these could contribute to a greater ROI. Evidence is building of the economic as well as social benefits of this approach, but there is still a need for hard evidence to support the business case. For more information, there are several resources available from the Toilet Board Coalition.[16]

Case study

Universal Beverages used their impact pathway from Step 1 as a starting point to decide which benefits they would select for analysis. They conducted workshops with the tea supplier's management, worker representatives, partners and experts to understand the expected benefits from WASH on the workers, communities and the businesses, and how these benefits could be measured. As a result, they chose to focus on the following business benefits: absence, productivity, and health clinic costs. This is because these are:

- **Priorities for the business**

  Engagement in the business and with the supplier showed that these were areas of need for the business, and the WASH programme was expected to produce significant change in these areas.

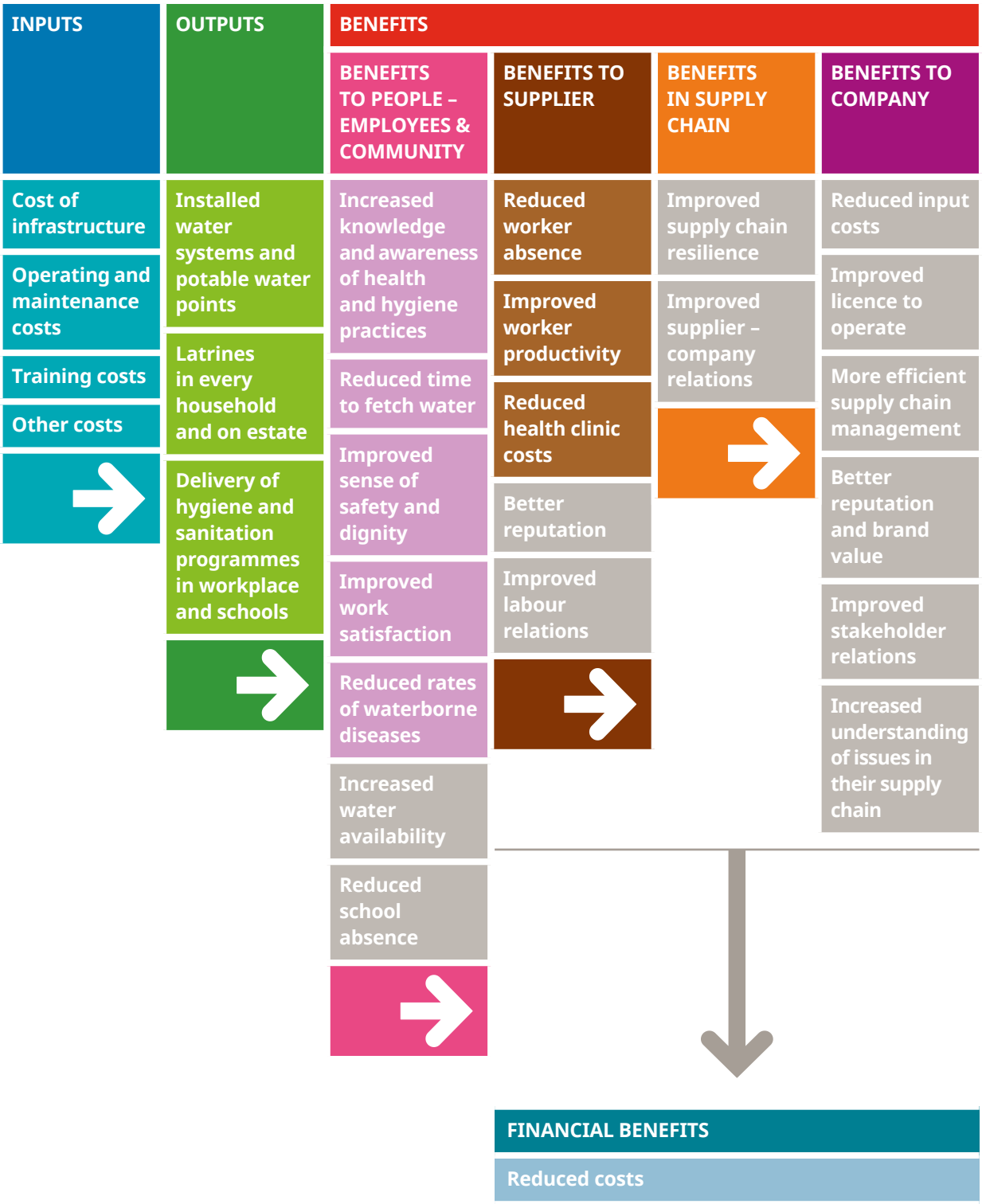
- **Quantifiable and can be translated into financial impact**

  Health clinic costs were included since there is a clinic on the estate that provides healthcare to full-time workers. They also decided to measure some of the social benefits of their interventions on incidence of waterborne diseases, knowledge and attitudes to hygiene, time taken to fetch water, and workers' sense of safety and dignity.

  These were important drivers for the programme, and could be used to help build the case for attribution of the results to WASH.

The impact pathway below highlights the benefits they chose to measure (indicated by the coloured boxes – grey boxes show benefits that won't be measured), including the cost inputs and outputs.

Impact pathway



Consider how the business related benefits of your WASH intervention can be measured.

WaterAid/ Joey Lawrence

To design methods to quantify (and monetise) these benefits, an in-depth understanding of the business was needed. This was developed by engaging with the tea estates and understanding current M&E procedures. The following business benefits and associated indicators were established:

Benefit	Indicators
Absence	Number of absent days per worker per year Total number of workers Cost per day of an absent worker
Productivity	Weight of tea picked per worker per day in peak season Weight of tea picked per worker per day in off-peak season Sale value per kg of tea Average price paid per worker per kg of tea picked
Clinic costs	Total health clinic costs for treating vomiting, diarrhoea and associated dehydration
Social benefits (non-monetised)	Biannual surveys to assess: • Knowledge and awareness of sanitation and hygiene • Sense of safety and dignity • Time taken to fetch water • Levels of worker satisfaction

Shutterstock/ Pierre-Yves Babelon

Establish a baseline and experimental approach

At this stage, you have decided which business benefits you are interested in, and therefore which indicators you need to gather data for. **To assess how much the WASH intervention has led to a change in these indicators, you need to establish a point of comparison or baseline**.

There are several ways to get to this point of comparison. Deciding which approach to take is context-specific and will depend on several practical and ethical considerations. The method you implement will have implications for how robustly you will be able to establish attribution, i.e. the extent to which changes observed are due to the WASH intervention (and not other factors, such as those listed in the box overleaf).

We recommend consulting internally to help develop the approach that is best for your situation, as there is no 'one-size-fits-all' solution. The 'gold standard' approach is a randomised controlled trial, in which individuals are randomly assigned to a 'treatment' group that receives the WASH intervention and a 'control' group that doesn't receive the intervention, and with all variables except the WASH intervention kept the same. However, these are expensive and require sophisticated research capacity. Therefore, they may not be practical or desirable.

Common approaches are:

1. Using a similar site or sites as controls

Identify a control group that is as similar as possible to the treatment group, and use statistical techniques to adjust for any remaining differences. For example, you could compare the performance of a factory where the WASH intervention has taken place with a similar factory where no intervention has taken place. This may be particularly suitable where the intervention is rolled out in phases across similar areas of operation or across different surrounding communities. From an ethical perspective, the control communities should eventually also receive the WASH services as the research concludes.

2. Before and after

Look at the same population before and after the intervention takes place (so the treatment and control group are the same). This approach has the advantages of using only one site, requiring fewer resources and lower costs. However, attribution is a challenge, since factors other than the WASH intervention could have influenced the results.

3. Retrofitting data

You may be in a situation where you are interested in understanding the business value of a WASH intervention after the intervention has already taken place, so there is no baseline available. Under these circumstances you may use historic data records to try to build a baseline and fill in the blanks with reasonable assumptions (e.g. data on disease incidence from public data). You may strengthen this approach by using a survey to complement the data. Alternatively, you may find another group to serve as a baseline, as in the first approach.

External factors to consider when doing a baseline

For all three approaches it will be important to monitor external factors beyond the WASH intervention that could affect results. Consider the following factors that could influence the results:

- Other NGOs or organisations working in the areas
- Other programmes running concurrently (e.g. other health or social programmes)
- External changes such as strikes, weather changes or disease outbreaks
- Policy changes within the supplier or company
- Operational changes in the supplier or company
- Policy changes at local or national government level
- Financial fluctuations such as commodity prices, inflation or currency valuations

How to design a baseline and measurement approach

Designing a measurement approach will depend on the context, the nature of the WASH intervention and the timescales for expected benefits. It is not necessary and may not be desirable to monitor business value-related indicators indefinitely. For shorter-term projects, you may want to use more frequent monitoring for a shorter period to capture the benefits, whereas for longer-term projects, you may want to use less frequent monitoring over a longer period. **Think about the expected timeframe of benefits and what you want to measure and communicate**.

There is no set period for an ideal baseline. It will depend on the type of experimental set up. However, if there are seasonal changes (e.g. a peak and off-peak season), it is recommended to do at least a full year as a baseline to mitigate against any seasonal bias.

Case study

Universal Beverages established a **'before and after' baseline** as there wasn't a different tea estate that was directly comparable and could be used as a control. For the baseline, one year of data was collected and analysed. The worker survey was conducted just before the WASH programme began, and then annually. During this time, the tea company management also monitored wider influences, including other interventions, strikes, weather changes and disease outbreaks that might affect the results. The programme plan was to be rolled out over three years, with annual measuring and monitoring of business benefit indicators over this time.

WaterAid/ Abir Abdullah

Shutterstock/ Kiera Crawford

4 Implement your WASH intervention and monitor the benefits

Once you have conducted a baseline, the next step is to implement your WASH intervention, check that it has been implemented effectively based on expected outputs, and measure and monitor the subsequent benefits. You need to draw up a detailed plan that includes the following:

• Means of measurement

Consider how the data will be collected. If you plan to use surveys, consider how will they be distributed (e.g. consider whether the survey group is literate), when, and to whom. Conducting a robust survey is a complex exercise – you will need to carefully consider the questions to ask, how to ask them, and how to sample the workforce. If you plan to measure employee attendance establish whether there are existing records or if new systems need to be put in place.

• Roles and responsibilities

Establish who is responsible for measuring and collating the results. If you are rolling the programme out to multiple sites, you might consider having a dedicated WASH M&E champion to gather the data.

• Frequency of monitoring

This will depend on the indicators you will measure, as discussed in Step 3. Consider whether to take a sampling approach, or do continuous monitoring.

• Resource allocation

Establish the budget and time allocated for monitoring the indicators.

You should also monitor the external factors, similar to the ones on page 37 – this data will be important when considering attribution.

Case study

Universal Beverages drew up an M&E plan (below) to measure the intervention's outputs and benefits, giving examples for each benefit. As part of the WASH implementation, the company appointed a specific WASH M&E champion who was responsible for collecting and analysing data, managing the surveys and interviewing company management.

It was this individual's job to liaise with the tea supplier management to ensure that the right data was being collected and there were robust systems for collecting data, and to collate and aggregate the data on a quarterly basis. They worked with a local NGO in the region, which had 'on-the-ground' expertise.

INDICATOR	MEANS OF MEASUREMENT	RESOURCE ALLOCATION	RESPONSIBILITY
Number of absent days per worker per year	Use of existing employee attendance records by tea estate	A WASH M&E champion was appointed with experience in M&E for social programmes	WASH M&E champion
Weight of tea picked per worker per day in peak and off-peak seasons	Use of existing records by tea estate for measuring weight of tea picked	As above	As above
Total on-site clinic costs for treating waterborne diseases per month; total reported incidences of waterborne diseases	Total clinic costs and waterborne diseases incidences were already recorded by the on-site health clinic. However, the systems were adapted to distinguish between those associated with waterborne diseases and non-waterborne diseases.	Resource was allocated to the health clinic to develop their system of recording waterborne diseases incidences and costs	As above

WaterAid/ Adam Ferguson

Analyse the data and measure the benefits

Once you have measured your baseline, implemented your WASH intervention and monitored the benefits, you need to analyse the data to understand the financial benefit. Here, we focus on direct business benefits – but you should also consider the indirect business benefits and non-quantitative changes to evaluate and communicate the wider effect on people and communities.

How to measure and summarise financial value

In this guide, we focus on ROI as a measure of financial value and efficiency of investment – 'For every $ spent, how many $s are generated/lost?'[17] It is a commonly used indicator since it is simple and can be applied to different situations. This essentially involves two steps:

1. **Calculate the total costs and total benefits over your given period**[18]
2. **Calculate the ratio of costs to benefits**
   Divide the total benefits over your given period by the total costs to get your ROI.

Common indicators

Drawing on the existing literature and companies' previous experiences, we have identified four key direct quantifiable benefits resulting from WASH or other similar programmes:

- Reduced employee absence
- Improved productivity
- Improved quality (e.g. reduced error rate)
- Reduced staff turnover

Further details on each benefit are provided in Appendix 2 including how to measure it, possible indicators and a worked example. In our worked examples we have defined these indicators to avoid overlap, so that the business value associated with each can be added. You may wish to define the indicators differently, for example to match those used by other parts of your company. In this case, you should be careful to understand whether there could be any overlap, for example productivity may overlap with staff absence and reduced turnover.

Here we work through measuring the financial cost of **absence**.
For more detailed guidance on measuring the other benefits, please see the appendices.

Case study

From consulting the business, Universal Beverages estimated that, when an employee is absent, there is a reduction in production equating to an average of 10kg of tea picked per day. There is a shortage of labour in the region, so it is not possible to find cover to make up for this lost production. However, other workers can work overtime to make up for, on average, 20% of the tea that would have been picked. This means that the cost of an absent day is the cost of lost production ($4/kg of production lost) and the cost of overtime ($1/kg of tea plucked during overtime). Permanent employees are paid for up to 16 days of sick leave a year.[19]

Therefore, the average cost to the supplier of an absent day is estimated to be 8kg x $4 + 2kg x $1 = $34.

There are, on average, 1,000 full-time employees on the tea estate.

Results

Calculating ROI associated with reduced absence

Benefits because of WASH: The total cost of staff absence can be estimated as the **average number of days absent per worker per year x the total number of workers x the cost per absent worker day**. In the baseline, the cost of staff absence is 16 x 1,000 x $34 = $544,000. In the first year of the intervention it is $476,000, in year 2 it is $306,000, and in year 3 it is $136,000. This meant that, over the three years, there were savings of $714,000 compared with the baseline ($68,000 in year 1, $238,000 in year 2, $408,000 in year 3).

Costs of WASH: The costs of the intervention over three years were $150,000.

Return on investment: The ROI is $714,000 / $150,000 = $4.76. This means that for every $1 invested in the WASH intervention, there are $5.25 in core business value benefits.

ABSENCE PERIOD	BASELINE	YEAR 1	YEAR 2	YEAR 3
Average absent days per worker per year	16	14	9	4
Total number of absent days per year	16,000	14,000	9,000	4,000
Cost of absence	16,000 x $34 = $544,000	14,000 x $34 = $476,000	9,000 x $34 = $306,000	4,000 x $34 = $136,000
Savings compared with baseline	N/A	$544,000 – $476,000 = $68,000	$544,000 – £306,000 = $238,000	$544,000 – £136,000 = $408,000

Attribution

Attribution is about establishing causality – how much of the observed changes is due to the WASH intervention rather than to other external factors. It is important to consider this to avoid over-claiming benefits. If you use a randomised controlled trial, then, in theory, it is possible to fully attribute any changes to your WASH intervention, since all other variables are controlled for.

However, in most cases, you will need to use other data and evidence to help you come to a conclusion about attribution. These will not give you a completely accurate or exact figure for attribution but they will help you to understand and make a judgement about the extent to which other factors may have contributed to the observed changes. You can also consider conducting sensitivity analyses to understand how sensitive your results are to assumptions relating to attribution.

Here are three approaches to considering attribution, which can be used in combination:[20]

1. Ask stakeholders how much of the change is due to your WASH intervention

This can be done at the analysis stage through surveys, focus groups or interviews. For example:

- Design a survey to establish the extent to which participants in the programme believe the observed changes are due to WASH. You may use a Likert scale, including questions such as 'On a scale of 1 to 10, to what extent do you believe your productivity has changed because of [the WASH intervention]?'.
- Interview the supplier management to establish their views on the extent to which the changes are due to WASH.

2. Use other data and information you have collected in monitoring during the programme

Use information on external factors during the intervention period that could have contributed to the changes, such as political, policy or environmental changes. You can also use data on the social benefits to strengthen (or weaken) your results. For example, if levels of staff absence fall in line with reported incidences of waterborne diseases, this provides some confidence that a significant cause of lower absence is the WASH intervention.

3. Consult with other organisations that could have contributed to the changes (e.g. other organisations working in the region)

This will help you understand how they have contributed and what proportion of the change you can each take credit for.

Regardless of the way in which you estimate attribution, it is important that you are clear and transparent about the approach you have taken, any assumptions you have made and the limitations.

Case study

Universal Beverages used a 'before and after' comparison to establish the change, which means that the business could not say for certain that the reduction in absence was fully attributable to the WASH intervention. However, interviews with the tea supplier management revealed that there were no significant external factors that could have affected absence and there were no other local health programmes running during the period.

Universal Beverages also conducted a survey at the end of the three-year intervention period with workers on the tea estate to assess the extent to which they felt the reduction in absence was due to WASH (0 meant WASH had no influence, 10 meant WASH had extensive influence). The average result from the survey was 7.

The company also conducted a sensitivity analysis using alternative assumptions on attribution (using one standard deviation above and below the average response). The team presented these results when they briefed the board, alongside the original ROI result.

WaterAid/ Abir Abdullah

Real example

A leading UK-based clothing retailer has a selection of its garments manufactured in factories in Bangladesh. In 2015, it partnered with a pharmaceutical company and an NGO to fund and implement a health and social care programme with sanitation and hygiene elements in two of its supplier factories. As well as improving the health of workers, one of the aims of the programme was to identify the financial value of healthcare interventions to the factories, to strengthen the case for the participation of other suppliers.

A consultancy was hired to undertake this research and identified four indicators that would give a measure of the value gained from the health programme. These indicators were:

- Staff absence
- Staff productivity
- Quality (number of amended or rejected garments)
- Employee turnover

Before starting, a thorough understanding of the factories' operations was gained, and data was collected for one year before the start of the programme to establish a baseline period for comparison.

However, it wasn't possible to conduct an attribution study during the programme.

Factory A experienced a 15% increase in worker efficiency, which led to a higher rate of garment production, and Factory B collected savings of approximately £180,000 from lower staff turnover, lower staff absence and a reduction in errors made to garments.

The company is now rolling this programme out to other factories, and is also commissioning an attribution study to enable it to calculate a robust ROI.

WaterAid/ Abir Abdullah

The garment factories in Dhaka, Bangladesh, are a significant source of employment in the region, with many new slum areas developing in close proximity to the factories.

WaterAid/ Jacques Nkinzingabo

6

Communicate

Once the analysis has been done, the next step is to communicate the results of the WASH intervention and also share these with WaterAid.

Communication will be key to maximising the benefits of the programme by:

- Making the case for reinvestment in WASH within the business
- Engaging workers
- Catalysing action among other suppliers or companies
- Gaining from indirect business benefits, such as improved reputation

When communicating the results, you should be transparent about the methods you have used and any limitations, to ensure credibility of results.

The following table outlines ways of thinking about communication.

Although this comes at Step 6, it is important to draw up a communication plan at the outset, alongside your stakeholder engagement plan.

PURPOSE	USE THE RESULTS TO	KEY AUDIENCE/S
Learn from and improve your WASH intervention/s	• Understand whether the interventions have had the intended business benefits, and if not why not. • Apply learning to improve quality of existing and future interventions.	• WASH implementation team • Internal project sponsors • Interested stakeholders and experts
Influence your business strategy	• Communicate business value to internal teams to make the case for reinvestment of funds and to scale up action within the business. • Make the case to finance teams to provide funding for WASH outside of CSR.	• Corporate teams • Leadership teams • Finance teams
Engage employees and build reputation internally	• Engage employees to inform them about the positive work of the company in WASH to increase internal buy-in and improve employee motivation and commitment.	• Company and supplier employees
Scale up wider action on WASH	• Make the case for other companies to implement WASH in their own operations or supply chain. • Inform specialist organisations of effective interventions, e.g. NGOs, charities, aid agencies. • Inform donors and other partner organisations.	• Donors • Partners • Specialist organisations/NGOs • Other companies/ suppliers
Be a leader	• Position your business as a leader – there is increasing interest from investors and other stakeholders in businesses that measure and monetise their impacts. Find forums and platforms to tell other companies and stakeholders about your work. • Engage other bodies or interested stakeholders. • Include the results in your sustainability and corporate reporting.	• Other bodies, such as forums and councils • The wider business community
Engage policy-makers	• Engage policy-makers to advocate government prioritisation of WASH and reform of WASH governance.	• Policy-makers
Build reputation and brand value among customers	• Inform your customers of your work on WASH. • Build your reputation among customers. (Be sure to engage with your marketing teams on how to effectively communicate results).	• Customers • Marketing teams

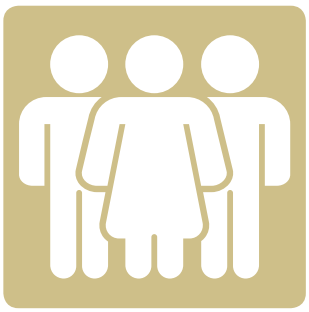
Case study

Universal Beverages used its results internally to get buy-in from leadership to scale up investment in WASH to other regions in India from which they sourced tea. They carried out a thorough evaluation of the successes and drawbacks of the intervention using the data on business benefits, interviews and survey results. These informed learning to be taken forward in the new phase of WASH interventions. They clearly communicated the calculation methods used and their limitations to ensure transparency.

They created a WASH scorecard (using a red-amber-green 'traffic light' system) to score progress against the impact pathway, so that it was clear which expected benefits were achieved. This allowed the operational team to communicate the successes of the project to the corporate function. They also shared the results with their suppliers, and as a result some suppliers volunteered to contribute financially to the interventions, having seen the direct benefits to their businesses.

In the future, the company is considering using forums and other platforms to further communicate its work and results to the wider business community to catalyse action, improve their reputation and highlight themselves as a leader in the field.

Shutterstock/ Alf Ribeiro



Together we can help end the WASH crisis

Diageo, Gap Inc., Unilever and WaterAid are driving a step change in the approach that businesses should take to implementing WASH interventions. Progressive companies have already begun that shift and have been strong advocates of a different approach.

Whether you are already driving change or looking to do so, you can help end the WASH crisis.

- Trial and test this guide and share your results, learnings and feedback with WaterAid to help build the evidence base for increased company action on WASH.
- Encourage your peers and networks to engage with this work.
- Collaborate with governments, or those who support government, on community WASH interventions, to ensure company investment supports the systemic change required to deliver sustainable WASH services for all.[21]
- Test it, learn from it and share your results with us at corporate@wateraid.org

Thank you

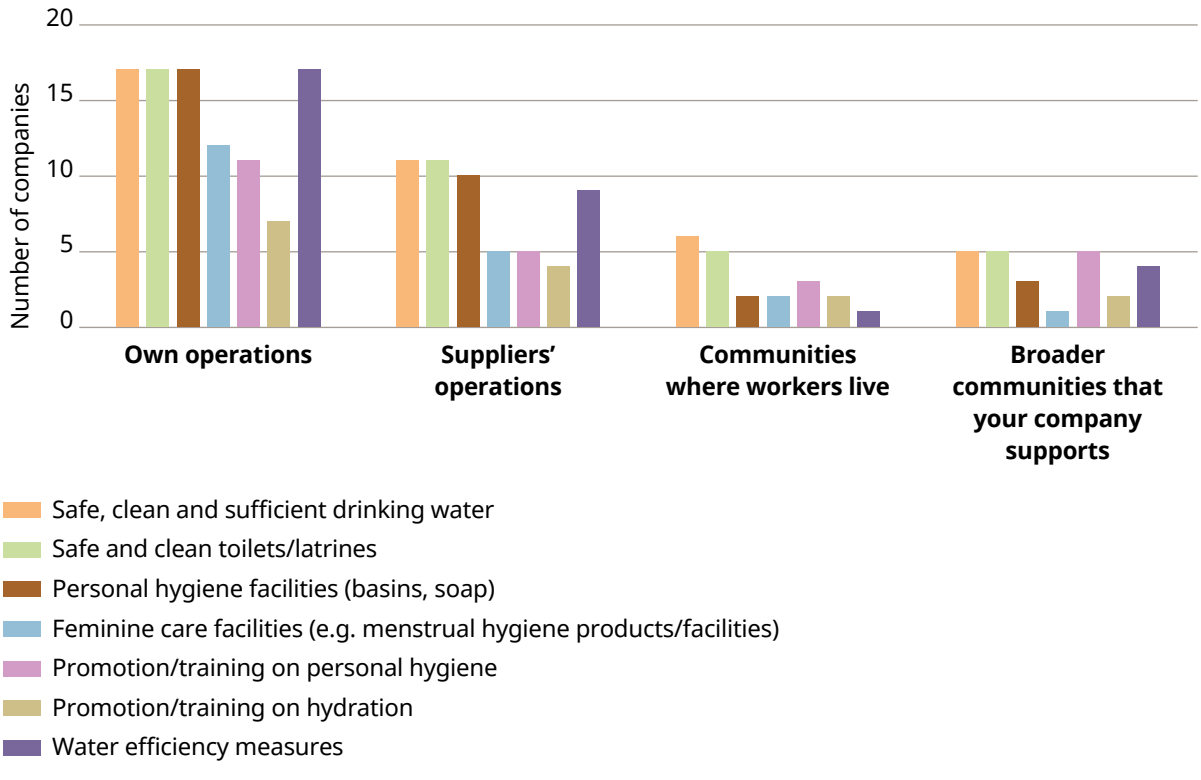
Appendices

Appendix 1: Business and WASH survey results

The following two charts provide details of the responses of 17 companies to the small online survey carried out during the preparation of this guide.

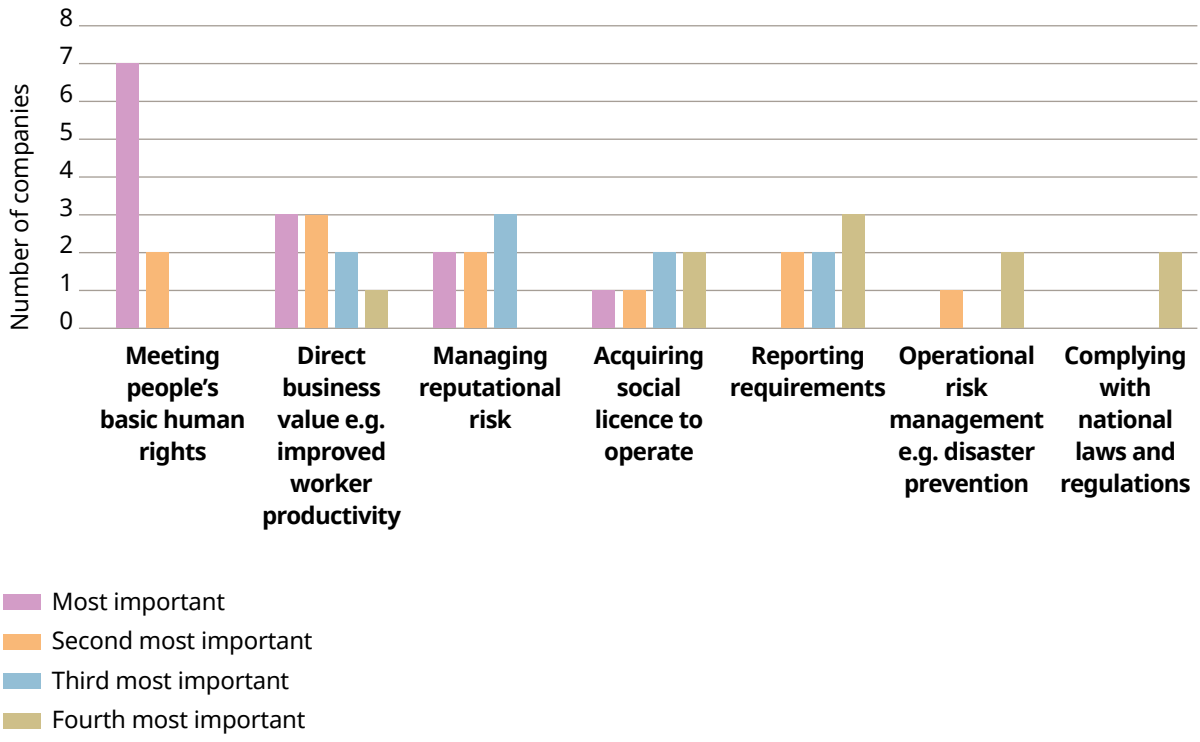
The first chart shows responses to the question asking about 'the extent of WASH provision that the respondent is aware of'. The chart shows clearly that companies provide minimum WASH facilities – drinking water, sanitation and personal hygiene – in their own operations. But the extent of their provision drops off quite sharply in two dimensions – first, the further the location is from own operations, and second, as the WASH intervention moves from minimum facilities to other elements of a more comprehensive approach (e.g. feminine care facilities, promotion and training on personal hygiene, and hydration).

Extent of WASH provision at various levels (n = 17)



The second chart shows responses to the question asking respondents to rank the motivations of the company when undertaking WASH interventions within their own operations, those of their suppliers, or in relevant communities. The chart shows that meeting basic human rights was clearly the most important factor, followed by adding to direct business value and management of reputational risk.

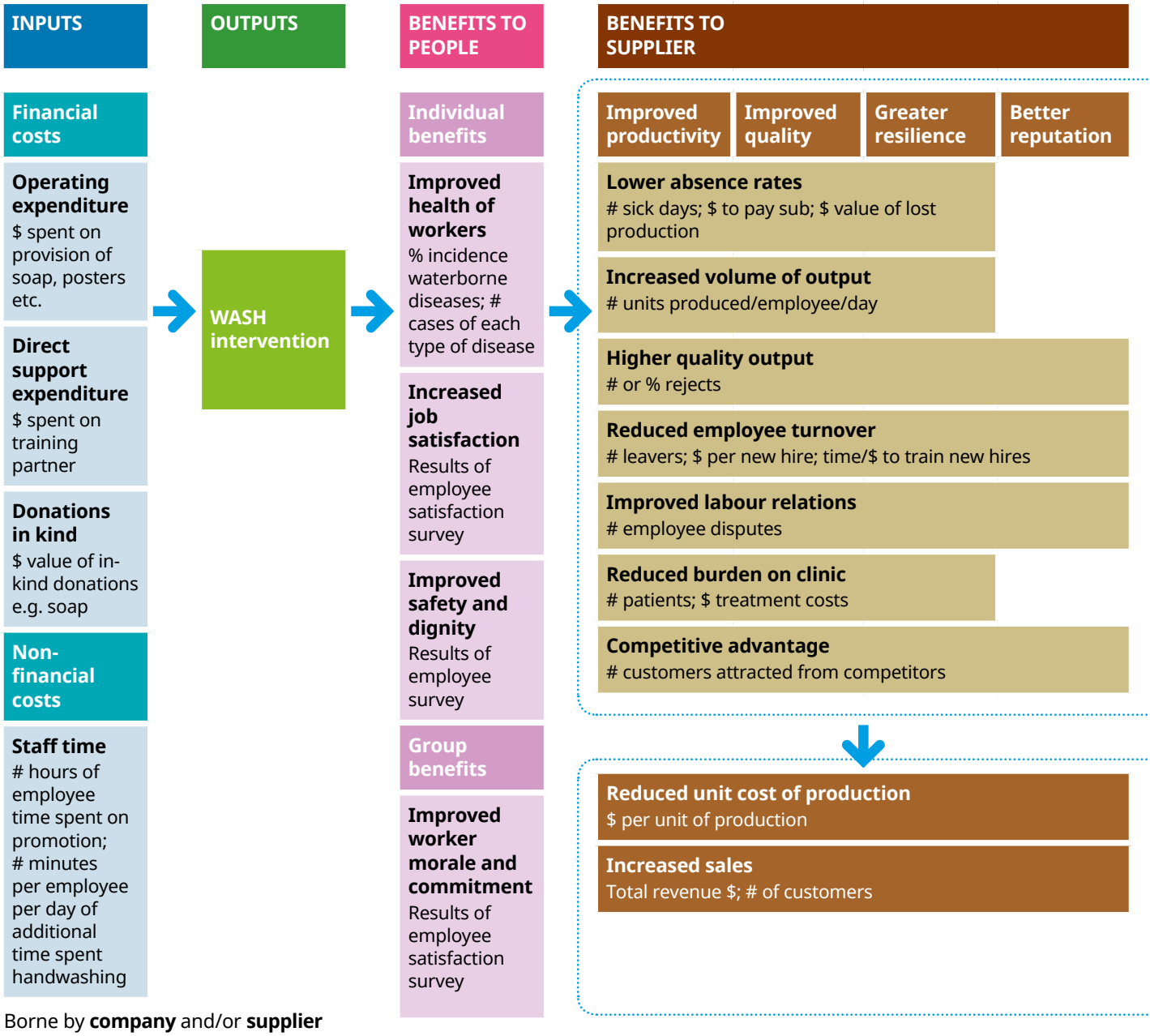
Motivations for undertaking WASH interventions in companies' own operations, those of their suppliers or in communities (n = 17)

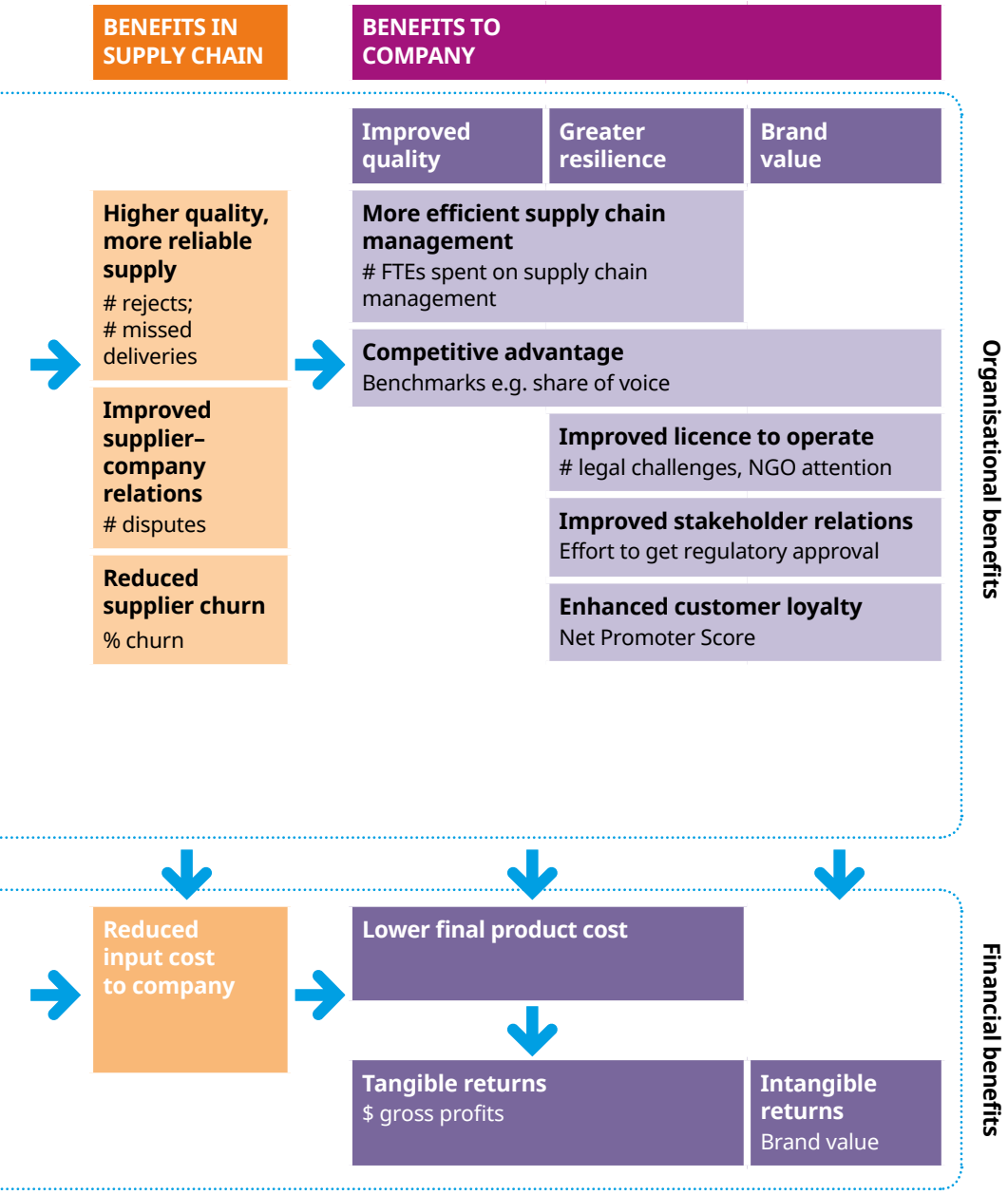


Appendix 2: Generalised impact pathway

Below is a generalised impact pathway we have developed to illustrate the potential benefits of WASH investments. We have also included worked examples for specific WASH interventions in the simplified form used in the rest of the guide. See Appendix 3 for a more detailed list of possible indicators. Note that in this pathway 'benefits' refer to either outcomes or impacts (see Section 1 for further explanation).

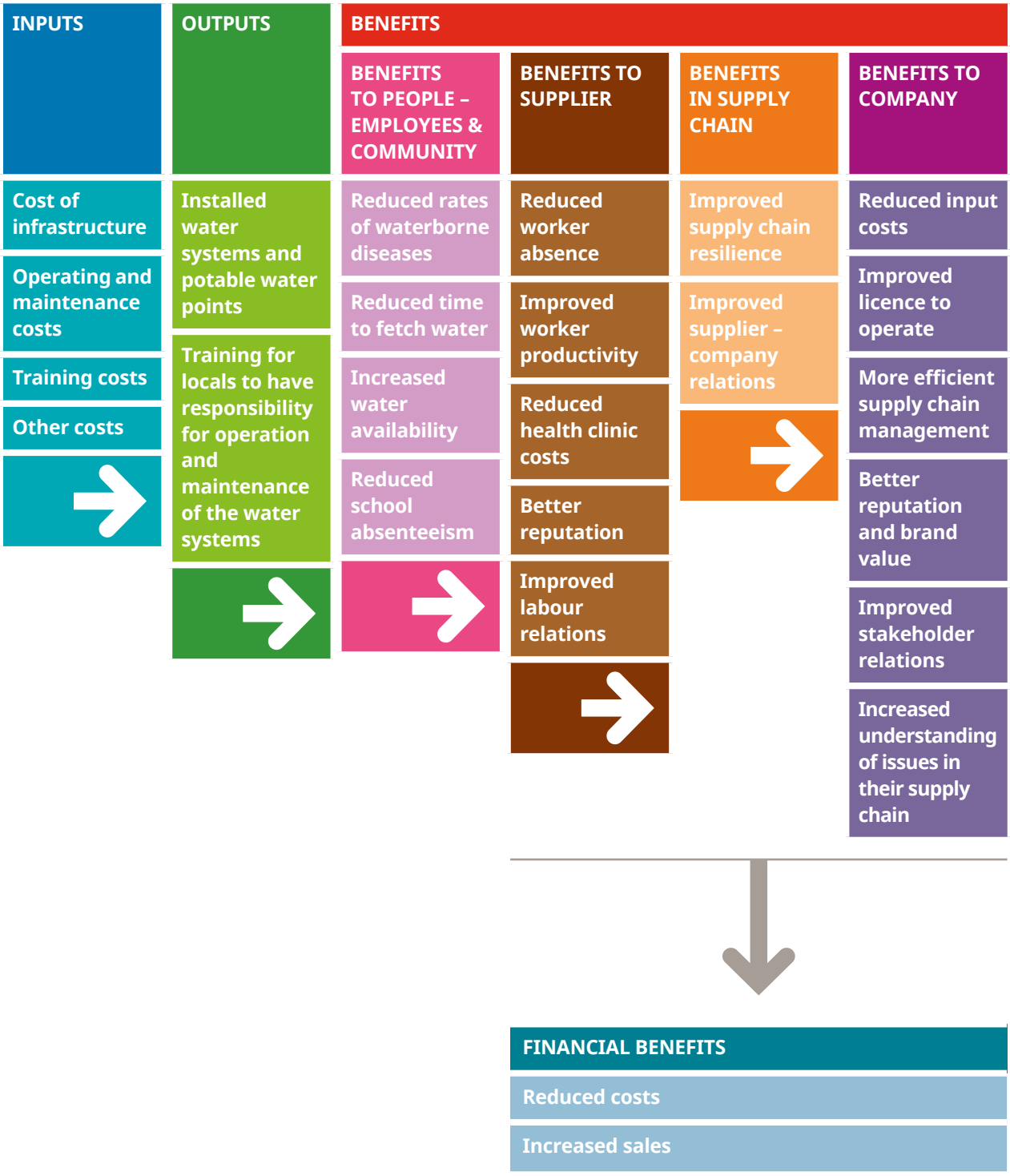
Generalised impact pathway



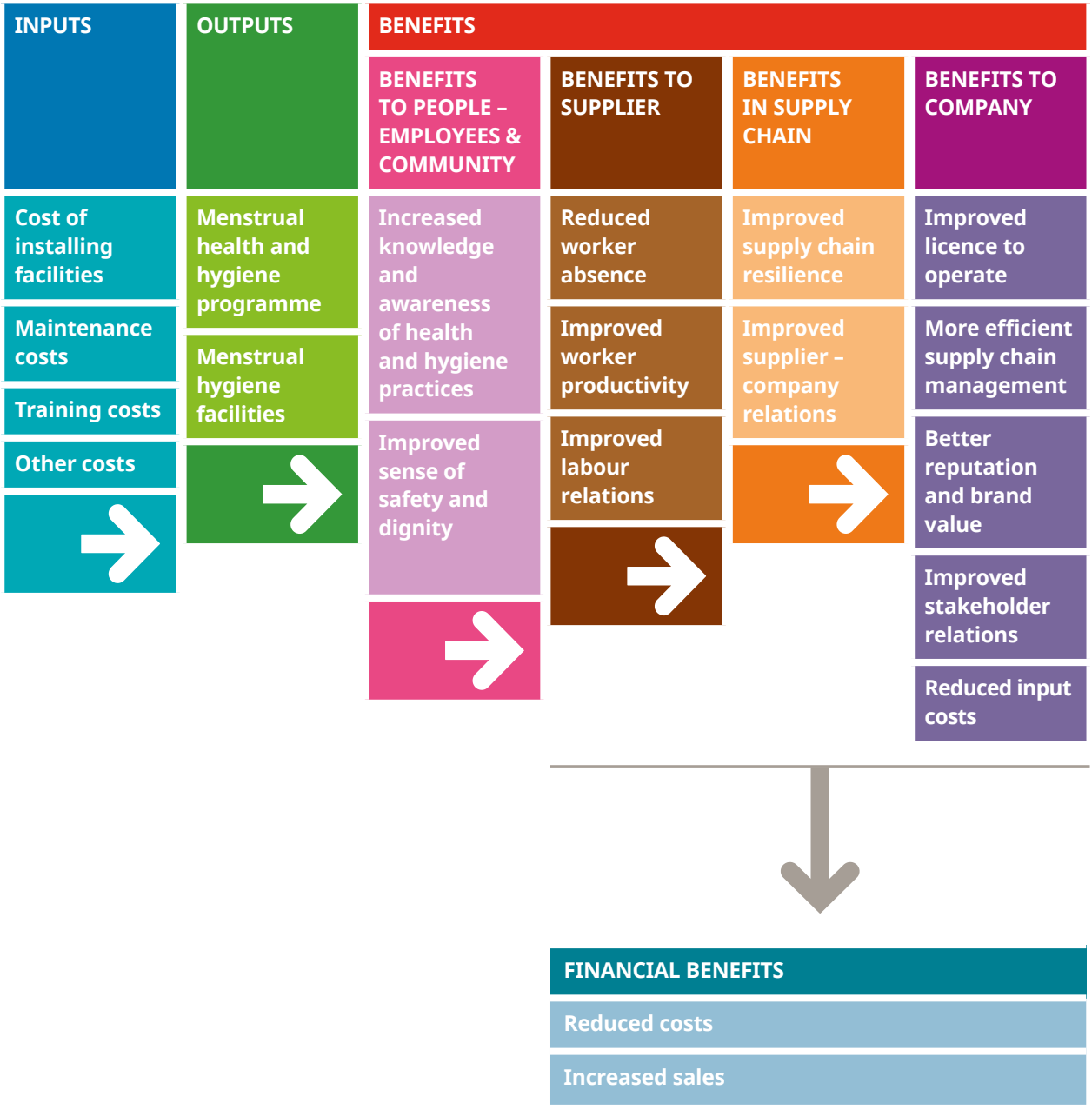

BENEFITS IN SUPPLY CHAIN
BENEFITS TO COMPANY
Improved quality
Greater resilience
Brand value
Higher quality, more reliable supply
rejects; # missed deliveries
More efficient supply chain management
FTEs spent on supply chain management
Competitive advantage
Benchmarks e.g. share of voice
Improved supplier–company relations
disputes
Improved licence to operate
legal challenges, NGO attention
Improved stakeholder relations
Effort to get regulatory approval
Reduced supplier churn
% churn
Enhanced customer loyalty
Net Promoter Score
Organisational benefits
Reduced input cost to company
Lower final product cost
Tangible returns
$ gross profits
Intangible returns
Brand value
Financial benefits

Example specific impact pathways

a) Installing water systems and potable water points in households and workplace (note that not all the benefits listed will be measured)



b) Installing menstrual hygiene facilities and a menstrual health and hygiene programme in workplace



Appendix 3: List of possible indicators for impacts along the impact pathway

Note that some of these indicators are quantitative and some are qualitative. In theory, you can have quantitative and qualitative indicators for each benefit. For example, health and wellbeing can be measured with quantitative approaches like incidence of waterborne diseases and surveys on wellbeing, and through qualitative approaches like interviews.

Some of the benefits can be translated into business value. This means that you can assign a financial value to a change in the indicator.

Indicator key

- Quantitative and can be directly translated into business value
- Quantitative but does not translate directly into business value
- Typically qualitative

Impact	Potential indicators
Benefits to people and communities	
Improved health and wellbeing	Incidence of waterborne diseases
Better worker satisfaction	Level of worker satisfaction
Greater sense of safety and dignity	Sense of safety and dignity
Reduced school absence	Number of absent school days/unit of time
Reduced time taken to fetch water	Average time taken to fetch water
Greater access to potable water	Number of households with access to potable water Average litres of water available per household
Better knowledge and awareness (e.g. of hygiene, sanitation, menstrual hygiene, water management)	Number of people with knowledge about prevention of waterborne diseases Number of people who practise proper handwashing Number of people with knowledge of menstrual hygiene practices Number of people accessing information on health and hygiene
Community empowerment (e.g. to manage water supplies)	Number or percentage of people with knowledge of water supplies Number or percentage of people trained in water management
Reduced water conflicts	Number of water conflicts per year Attitudes towards water conflicts
Female empowerment	Number or percentage of females with access to menstrual hygiene Attitudes of females towards work
Increased community cohesion	Sense of community cohesion Sense of happiness

Benefits to supplier	
Reduced absence	Number of days of worker absence
Increased productivity	Production rate Efficiency rate Total production per unit of time per worker Perceived productivity levels
Lower staff turnover (increase in retention)	Number of staff leaving / unit of time Average retention period Number of new recruits joining / unit of time
Greater retention of women (e.g. due to better menstrual facilities)	Number of women leaving Number of women joining
Reduced cost of hiring / hiring from larger labour pool (e.g. due to better reputation)	Cost of hiring new staff Number of job applicants
Better quality of work	Number of alterations/rejects
Reduced operational costs (e.g. reduced water treatment costs, reduced need for bottled water, reduced energy costs)	Relevant operational cost per unit of time
Improved labour relations	Workers' attitudes towards management Management attitudes towards workers Number of worker complaints
Better water and waste management	Water treatment costs Waste treatment costs
Reduced operational risks	Cost of damage due to flooding Cost of insurance premiums Number of incidences and severity of disease outbreaks
Increased revenue from selling waste (in a circular economy approach)	Revenue from selling waste
Benefits to company	
Social licence to operate	Number of complaints Quality of relationship with local government Local residents' attitudes to the companies Negative or positive media about the company
Strengthened relationships with key influencers	Strength of relationships with stakeholders
Better supply chain management	Efficiency of supply chain management
Reduced supplier churn	Rate of supplier turnover
Improved reputation	Reputation among local residents Reputation among other stakeholders
Social licence to operate	Negative/positive media (e.g. tweets, news articles)
Better brand value	Net promoter score (measures the willingness of customers to recommend a company's products or services to others – which serves as a proxy for customer loyalty)
Increased certification or sustainability scoring	Level of certification Score on sustainability indices

Appendix 4: Step 5 worked examples – quantifying financial value of business benefits

Reduced absence

Introduction

- Absence measures employee time off from work – this may be due to acute or chronic illness, stress, harassment, menstruation (with lack of appropriate provisions), disengagement or family demands, among other reasons.
- Excessive absence can have a negative effect on a company due to the direct costs of staff replacement and lost productivity, and reduced resilience or ability for management to plan.
- WASH interventions can lead to several changes that result in reduced absence. For example:
  - Better sanitation and hygiene behaviour may lead to lower gastrointestinal disease rates
  - Improved facilities at work may lead to better morale and employee motivation
  - Better community health may reduce child sickness and school absence, and, in turn, the need for parents to take time off work to care for sick children.
- Calculating the financial value of reduced absence will depend on factors including the payment terms of employees, the availability of replacement staff, and the level of skill required for the job. Furthermore, the specific data points that are used in the calculation will depend on data availability and a business's management systems (for example, whether absence is measured by the hour or by the day). Guidance on measuring business value is given below, and a worked example is provided.

Measuring the financial benefit from reduced absence

Broadly, the direct financial benefits of reduced absence can be measured by calculating the following:

Change in number of days of staff absence in a given period*

X

Cost per day of absent worker

<table>
<tr>
<td rowspan="5">Number of days of staff absence

This may be calculated on a monthly, quarterly or annual basis, depending on the measurement approach taken.

It requires companies to monitor employee attendance, so that the number of days of work missed before and after the WASH intervention can be tracked. A system for this may already be in place – in which case, data from this can be used. If attendance is not already monitored, then implementation of a monitoring system will enable measurement.

As an extra level of insight, it is useful to gather information on reasons for absence when an employee is off work. This can be used to help attribute reasons to changes in absence. For example, if absence is due to sickness, child sickness or menstrual problems rather than due to a reason unrelated to WASH altogether (e.g. transport strike).

*compare intervention period with baseline period to establish difference</td>
<td colspan="2">Cost per day of absent worker

The way this is calculated will depend on the individual business's circumstances. Consider the following factors when coming up with an estimate:</td>
</tr>
<tr>
<td>Impact of absence</td>
<td>Cost of absence</td>
</tr>
<tr>
<td>Loss of production if an employee is absent</td>
<td>Cost of lost production per day (e.g. average number of garments produced per day x profit per garment)</td>
</tr>
<tr>
<td>Whether cover is required, if it is available, and how much it costs per day</td>
<td>Daily cost of temporary cover</td>
</tr>
<tr>
<td>Whether other workers do overtime to make up for the lost productivity</td>
<td>Cost of overtime</td>
</tr>
<tr>
<td></td>
<td>Whether an absent employee is paid when they miss work, e.g. if they get sick leave</td>
<td>Employee salary per day</td>
</tr>
</table>

Worked example – calculating the business benefit of reduced absence

A tea company implemented a WASH intervention for one of its tea suppliers in India. The tea company measured the number of unscheduled worker days lost per year (excluding planned holiday) over a one-year baseline period and then over a three-year intervention period. From consulting the business, they estimated that when an employee is absent there is a reduction in production equating to, on average, 10kg of tea picked per day. There is a shortage of

labour in the region, so it is not possible to find cover to make up for this lost production. However, other workers can work overtime to make up for, on average, 20% of the tea that would have been picked. This means that the cost of an absent day is the cost of lost production ($4/kg of production lost) and the cost of overtime ($1/kg of tea plucked during overtime). Permanent employees are paid for up to 16 days of sick leave a year. Therefore, the average cost to the supplier of an absent day is estimated to be 8kg x $4 + 2kg x $1 = $34. There are, on average, 1,000 full time employees on the tea estate.

Results

Period	Average absent days per worker per year	Total number of absent days per year	Cost of absence	Difference compared with baseline
Baseline	16	16 x 1,000 = 16,000	16,000 x $34 = $544,000	n/a
Year 1	14	14 x 1,000 = 14,000	14,000 x $34 = $476,000	$544,000 - $476,000 = $68,000
Year 2	9	9 x 1,000 = 9,000	9,000 x $34 = $306,000	$544,000 - $306,000 = $238,000
Year 3	4	4 x 1,000 = 4,000	4,000 x $34 = $136,000	$544,000 - $136,000 = $408,000

Calculations

Total business benefits over three years compared with baseline = $68,000 + $238,000 + $408,000 = $714,000

Costs of WASH: The costs of the intervention over three years were $150,000.

ROI: 714,000 / 150,000 = $4.76. This means that for every $1 invested in the WASH intervention there were $5.25 in core business value benefits.

In this example, a 'before and after' comparison was used to establish the benefit, which means that the business could not say for certain that the reduction in absence was fully attributable to the WASH intervention. However, interviews with tea supplier management revealed that there were no significant external factors that could have affected absence and there were no other local health programmes occurring during the period. They also conducted a survey at the end of the three-year intervention period with workers on the tea estate to assess the extent to which they felt the reduction in absence was due to WASH (0 meant WASH had no influence, 10 meant WASH had extensive influence). The average result from the survey was 7. The company also conducted a sensitivity analysis using alternative assumptions on attribution (using one standard deviation above and below the average response). The team presented these results when they briefed the board, alongside the original ROI result.

Increased productivity

Introduction

- We define productivity as the amount of work done per worker or per unit of time, for example, the volume of an agricultural product harvested, the number of items produced in a factory or the number of orders processed. We calculate productivity on a per person basis so that we don't double count with the effect of change on absence.
- Other definitions of productivity may absorb effects of absence and quality – so be careful when defining productivity to ensure that there is no overlap. If there is overlap, be careful when summing across the benefits to ensure that you do not double count.
- Productivity is affected by workers' health, wellbeing, morale, and by practical considerations such as time taken to use bathrooms.
- Low productivity has a negative effect on a company due to lower production rates – which ultimately means lower profits, and the potential for fines/loss of contracts if orders are missed. These can have effects in the supply chain, including higher supplier churn and poor relationships between suppliers and lead companies.
- WASH interventions can lead to several changes that result in increased productivity. For example:
    - Better sanitation and hygiene may improve physical and mental health, and therefore energy and concentration at work.
    - Improved facilities at work may prevent time wastage (e.g. walking long distances and queuing to use toilets).
    - Better access to potable water facilities may reduce the time taken to fetch water outside of work, and increase the time available for sleep or other activities.
- Calculating the financial benefit of increased productivity will depend on factors including the nature of the work and the type of product made (e.g. agricultural, manufacturing). Guidance on measuring business value is given overleaf, and a worked example is provided.

Measuring the financial benefit from reduced absence

Broadly, the direct financial benefits of increased productivity can be measured by calculating the following:

Change in units of product made per time unit*

X

Revenue or profit per unit

Change in units of product made or harvested The unit of product will depend on the company but may be weight of agricultural product harvested or number of items produced. It can be calculated by using the total amount of production per week/ month/quarter divided by the number of employees and hours worked, or by using existing metrics on employee productivity or efficiency. *compare intervention period with baseline period to establish difference	**Revenue or profit per unit** To calculate the financial benefit from increased productivity, you need to know the profit or revenue per unit. For example, what is the average profit or revenue to the company from producing another pair of trousers, picking another kg of coffee, or harvesting another kg of oranges? Since profit margins are commercially sensitive, companies may use revenue per unit as a proxy if the data will be externally communicated.

Worked example – calculating the business benefit of increased productivity

A retail company implemented a WASH programme in one of the garment factories it sources from, involving an education and hygiene awareness programme, improved menstrual hygiene facilities and better toilets. The supplier company calculated the average number of pieces produced per worker per hour as a measure of productivity. Factory workers work in a line to produce garments, so the average was calculated as the total number of garments produced divided by the number of workers in a line. They also calculated the average profit for each garment to enable them to estimate the business value of increased productivity. These were measured over a six-month baseline, and then over a three-year intervention period.

Results

Period	Average number of pieces produced per worker per day	Difference (increase) compared to baseline
Baseline	10	n/a
Year 1	10.2	0.2
Year 2	10.1	0.1
Year 3	10.3	0.3
	Average	**0.2**

Calculations

Average profit per piece = $10

Average annual increase in number of pieces produced per worker per day across intervention period = 0.2

Extra number of pieces produced per year = 0.2 x number of employees x days worked per year = 0.2 x 400 x 320 = 25,600

Additional profit = 25,600 x 10 = $256,000

Cost of programme = $60,000

ROI over three years = $256,000 / $60,000 = $4.3

Every $1 spent on the WASH intervention contributed to a value of $4.3 in core business value benefits over the three-year period.

In this example, a 'before and after' comparison was used to establish the benefit, which means the business cannot say for certain the increase in productivity is fully attributable to the WASH intervention. However, biannual surveys were conducted with workers to enquire about their attitudes towards work, their perceived levels of productivity and the reasons for any changes in perceived levels of productivity. These were consistent with the observed changes in productivity, and provided some confidence to management that the WASH programme contributed to the improvements.

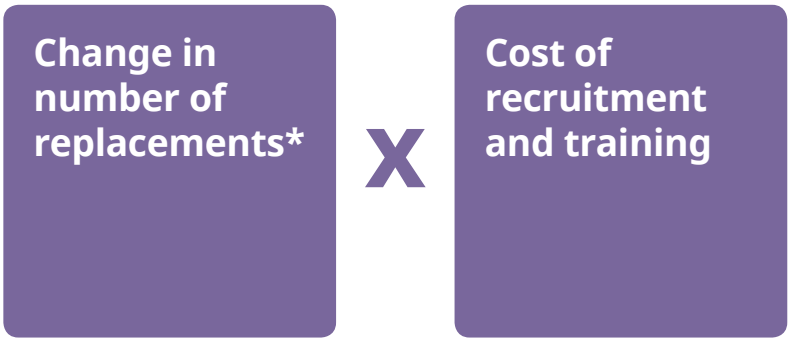
Reduced staff turnover

Introduction

- Staff turnover measures the number of staff leaving who need to be replaced.
- Staff turnover is affected by workers' health, wellbeing, level of work satisfaction and morale.
- High staff turnover has a negative effect on a company due to costs of recruitment and training, loss of key skills and reduced productivity as new workers undergo training – which ultimately mean higher costs. It can also lead to reduced resilience in the supply chain, and reduced ability to plan.
- Our research indicates that there is anecdotal evidence from companies that WASH provisions have resulted in reduced staff turnover. This may occur because of:
  - Higher level of satisfaction and contentment.
  - Reduced permanent leave due to sickness.
- Calculating the financial benefit of reduced staff turnover will depend on having knowledge of training and recruitment costs.

Measuring the financial benefit of reduced staff turnover

Broadly, the direct financial benefit of reduced staff turnover can be measured by calculating the following:



Change in number of replacements	**Cost of recruitment and training**
You can either use the number of new recruits or the number of leavers per unit of time. If using number of new recruits, take into consideration any organic growth in the size of the workforce. *compare intervention period with baseline period to establish difference	The cost of staff turnover can be estimated from the cost of recruiting and training new employees to replace those leaving. There will also be other costs in terms of reduced productivity while new staff learn on the job, and loss of key skills. However, these are more difficult to measure. Estimating the cost of recruitment requires an understanding of how the recruitment process works. For example, are there fixed recruitment days that occur every month regardless of the number of new recruits? If so, what is the additional cost of each new recruit above the constant baseline? Or are recruitment days held in response to the business need? Similarly, estimating the cost of training requires an understanding of what the recruitment process entails and what the additional cost of each trainee is. Liaise with the HR department of the supplier or site to come up with an estimate of the cost of recruitment and training.

Worked example – calculating the business benefit of reduced staff turnover

A household products company implemented a WASH programme in one of its manufacturing factories and the surrounding communities in Vietnam. It suffered from a high staff turnover, low worker morale, and high levels of sickness due to waterborne diseases. The WASH programme involved an education and hygiene awareness programme in local schools and the workplace, and a female health clinic in the factory. The company monitored the number of people leaving the company and the number of new replacements required, as well as the associated costs. This happened over an 18-month baseline and a four-year intervention period.

Results

Period	Average number of leavers per month	Difference compared with baseline
Baseline	53	n/a
Year 1	58	+5
Year 2	45	-8
Year 3	33	-20
Year 4	24	-29

Calculations

Average cost of training and recruitment per new employee = $100

Reduction in total number of leavers/joiners compared with baseline = (-5+8+20+29) x 12 = 624

[x 12 so that it is on an annual basis]

Total reduction in costs of leavers/joiners = 624 x 100 = $62,400

Cost of programme over four years = $20,000

ROI over four years = 62,400 / 20,000 = 3.12

The company estimated that about 50% could be attributed to the WASH programme, based on stakeholder surveys with management and the staff and discussion with other organisations working in the region. This gives an estimated ROI of $1.56 of core business value benefits for every $1 invested over the four-year period.

Improved quality

Introduction

- Improved quality will mean different things to different sectors, and will vary a lot in the way that it is measured.
- Poor quality can have a negative effect on a company because of:
  - Time needed to make corrections
  - Wasted materials if items are rejected
  - Lost reputation if poor quality products are shipped

- WASH interventions can lead to several changes that result in improved quality, in a similar way to those that improve productivity:
  - Better sanitation and hygiene may improve physical and mental health, and therefore concentration at work.
  - Better access to potable water facilities may reduce the time taken to fetch water outside of work, and increase the time available for sleep or other activities, increasing concentration.
- Calculating the financial benefit from improved quality will depend on knowledge of your factories' or farms' processes.
- There may be some overlap with productivity, so be careful to avoid double counting.

Measuring the financial benefit from improved quality

Broadly, the direct financial benefits of improved quality can be measured by calculating the following:

Change in number of amendments or rejects*

X

Cost per amendment or reject

Number of amendments or rejects	**Cost per amendment or reject**
This will depend on the monitoring systems in place for the factory. For example, in some factories, both amendments and rejects may be recorded. However, for others, amendments are simply re-processed by the individual in the production line who was responsible for the error – and this is absorbed in their normal work. There may also be different controls that monitor rejects – for example, an internal control and then a pre-shipping random check. Find out from the factories or other sites what the processes are for quality control and how these can be used for the purpose of measuring ROI. *compare intervention period with baseline period to establish difference	This will likely be an estimation based on the amount of time or material wasted when an item is amended or rejected. Consult with the company to derive an estimate.

Worked example – calculating the business benefit of improved quality

A clothes retailer implemented a WASH intervention in one of its manufacturing factories in India to improve the health of workers, and in turn the quality and efficiency of work produced. It visited the factory to understand the manufacturing process and returns process. In the factory, there is an internal quality control that checks the garments prior to packaging. If there are problems, the item is either returned to the workers to be amended or rejected. The factory keeps track of the number of items returned for amendment, and the number of items rejected. It came up with a cost estimate for each of these. This formed the pilot study, prior to roll out across ten different sites. A baseline was calculated using data from records over the previous three years. The intervention period was six months.

Results

Period	Total production per half year	Number of amendments per half year	Number of rejects per half year
Baseline	719,590	39,038	486
Endline	719,590	36,483	360
Difference	0	2,555	126

Calculations

Difference in number of amendments = 2,555

Difference in number of rejects = 126

Cost per altered piece = $0.18

Cost per rejected item = $2.16

Business value over six months from improved quality =
2,555 x 0.18 + 126 x 2.16 = $732

In this case, an ROI has not been calculated since data was only obtained on the benefits.

Therefore, the company presented the data in terms of business value, while explaining that input costs were not tracked so calculating a ROI was not possible.

Appendix 5: Other useful resources

Measuring business benefits

BSR/HERproject (2011). *HERproject: Health enables returns – The business returns from women's health programs*. BSR.
Available at www.bsr.org/reports/HERproject_Health_Enables_Returns_The_Business_Returns_from_Womens_Health_Programs_081511.pdf (accessed 27 Jun 2018).

Adhvaryu A, Kala N, Nyshadham A (2017). *The Skills to Pay the Bills: Returns to On-the-job Soft Skills Training*.
Available at jobsanddevelopmentconference.org/wp-content/uploads/2016/10/ADHVARYU-Namrata-Kala-Anant-Nyshadham-PACE_aug2016.pdf (accessed 27 Jun 2018).

Adhvaryu A, Garg L, Kala N, Nyshadham A (2017). *An Experiment in India shows how much companies have to gain by investing in their employees*. Harvard Business Review.
Available at hbr.org/2017/07/an-experiment-in-india-shows-how-much-companies-have-to-gain-by-investing-in-their-employees (accessed 27 Jun 2018).

Measuring social benefits

The SROI Network (2012). *A guide to social return on investment*. SROI.
Available at socialvalueint.org/wp-content/uploads/2016/12/The-SROI-Guide-2012.pdf (accessed 27 Jun 2018).

M&E guides

School of Geography & Environment, Oxford University (2014). *A step by step guide to monitoring and evaluation*. Oxford University, Oxford, UK.
Available at www.geog.ox.ac.uk/research/technologies/projects/mesc/guide-to-monitoring-and-evaluation-v1-march2014.pdf (accessed 27 Jun 2018).

International Federation of the Red Cross and Red Crescent (2011). *Project monitoring and evaluation (M&E) guide*. IFRC, Geneva, Switzerland.
Available at www.ifrc.org/Global/Publications/monitoring/IFRC-ME-Guide-8-2011.pdf (accessed 27 Jun 2018).

United Nations Development Program (2009). *Handbook on planning, monitoring and evaluating for development results*. UNDP, New York, USA.
Available at web.undp.org/evaluation/handbook/documents/english/pme-handbook.pdf (accessed 27 Jun 2018).

The World Bank (2004). *Monitoring & evaluation: Some tools, methods & approaches*.
The World Bank, Washington D.C., USA.
Available at siteresources.worldbank.org/EXTEVACAPDEV/Resources/4585672-1251481378590/MandE_tools_methods_approaches.pdf (accessed 27 Jun 2018).

Cost benefit analyses

HM Treasury (2016). *The Green Book: Appraisal and evaluation in central government*.
HM Treasury, London, UK.
Available at www.gov.uk/government/uploads/system/uploads/attachment_data/file/220541/green_book_complete.pdf (accessed 27 Jun 2018).

HM Treasury (2011). *The Magenta Book: Guidance for evaluation*. HM Treasury, London, UK. Available at www.gov.uk/government/uploads/system/uploads/attachment_data/file/220542/magenta_book_combined.pdf (accessed 27 Jun 2018).

WASH

WaterAid (2018). *Quality programme standards*. WaterAid, London, UK. Available at washmatters.wateraid.org/publications/quality-programme-standards (accessed 27 Jun 2018).

WaterAid (2012). *Hygiene framework*. WaterAid, London, UK. Available at washmatters.wateraid.org/publications/hygiene-framework (accessed 27 Jun 2018).

WaterAid (2011). *Sustainability framework*. WaterAid, London, UK. Available at washmatters.wateraid.org/publications/sustainability-framework (accessed 27 Jun 2018).

WaterAid (2011). *Sanitation framework*. WaterAid, London, UK. Available at washmatters.wateraid.org/publications/sanitation-framework (accessed 27 Jun 2018).

WaterAid (2011). *Urban framework*. WaterAid, London, UK. Available at washmatters.wateraid.org/publications/urban-framework-2011 (accessed 27 Jun 2018).

LIXIL, Oxford Economics (2016). *The true cost of poor sanitation*. LIXIL, Oxford Economics. Available at www.lixil.com/en/sustainability/pdf/the_true_cost_of_poor_sanitation_e.pdf (accessed 27 Jun 2018).

Endnotes

[1] World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) Joint Monitoring Programme (JMP) (2017). *Progress on drinking water, sanitation and hygiene: 2017 update and SDG Baselines*. WHO/UNICEF, Geneva. Available at www.who.int/water_sanitation_health/publications/jmp-2017/en/ (accessed 27 Jun 2018).

[2] WaterAid, CEO Water Mandate and World Business Council for Sustainable Development (2017). *Corporate engagement on water supply, sanitation and hygiene: Driving progress on Sustainable Development Goal 6 (SDG6) through supply-chains and voluntary standards. A high-level summary of research findings and recommendations*. WaterAid, London. Available at washmatters.wateraid.org/publications/corporate-engagement-on-water-supply-sanitation-and-hygiene (accessed 27 Jun 2018).

[3] Companies sign-up to the WBCSD WASH at the Workplace pledge. Available at www.wbcsd.org/Clusters/Water/WASH-access-to-water-sanitation-and-hygiene/WASH-at-the-workplace-Pledge (accessed 27 Jun 2018).

[4] International Labour Organization (2016). *WASH @ Work: A Self-Training Handbook*. Available at www.ilo.org/global/industries-and-sectors/utilities-water-gas-electricity/WCMS_535058/lang--en/index.htm (accessed 27 Jun 2018).

[5] Available at: www.a4ws.org/ (accessed 27 Jun 2018).

[6] WASH4Work is an initiative to support business action towards the Sustainable Development Goal on universal access to water and sanitation. See wash4work.org/ (accessed 27 Jun 2018).

[7] The World Health Organization (2012). *Global costs and benefits of drinking-water supply and sanitation interventions to reach the MDG target and universal coverage*. WHO, Geneva. Available at www.who.int/water_sanitation_health/publications/2012/globalcosts.pdf (accessed 27 Jun 2018).

[8] WaterAid, CEO Water Mandate and World Business Council for Sustainable Development (2017). *Corporate engagement on water supply, sanitation and hygiene: Case-studies*. WaterAid, London. Available at washmatters.wateraid.org/publications/corporate-engagement-on-water-supply-sanitation-and-hygiene (accessed 27 Jun 2018).

[9] BSR (2010). *HERproject: Investing in women for a better world*. Available at www.bsr.org/reports/BSR_HERproject_Investing_In_Women.pdf (accessed 27 Jun 2018).

[10] Key informant interviews were conducted with representatives of eight multinational corporations and one multilateral agency working with supplier factories in the apparel industry. The online survey was completed by 17 corporations in sectors including food and beverages (4 corporations), apparel (4), fast-moving consumer goods (2), oil and chemicals (2), and one each in the automotive, construction, furniture, professional services and sanitation sectors.

[11] Diageo (2015). *Diageo's water blueprint: Our strategic approach to water stewardship*. Diageo: London. Available at www.diageo.com/pr1346/aws/media/3791/diageo_water_blueprint_april_2015.pdf (accessed 27 Jun 2018).

[12] Hennes & Mauritz AB (Group) (2016). *Sustainability commitment: H&M business partner*. H&M. Available at sustainability.hm.com/content/dam/hm/about/documents/en/CSR/Sustainability%20Commitment/Sustainability%20Commitment_en.pdf (accessed 27 Jun 2018).

[13] Nestlé (2014). *Nestlé commitment on water stewardship. Appendix to the Nestlé policy on environmental stewardship*. Nestlé: Vevey. Available at www.nestle.com/asset-library/documents/library/documents/corporate_social_responsibility/nestle-commitment-water-stewardship.pdf (accessed 27 Jun 2018).

[14] Summary of internal Unilever Policies

[15] Core business value – financial or non-financial, but ultimately has a financial value for business associated with it.

[16] For information and resources, see the Toilet Board Coalition www.toiletboard.org/sanitation-economy (accessed 27 Jun 2018).

[17] There are other possible ways to measure and present the financial value of your WASH investment, e.g. net present value and internal rate of return. These all use similar concepts to ROI and rely on having similar data, so the appropriate choice will depend on what is most familiar to your stakeholders.

[18] If you intend to assess the programme over multiple years, you should consider discounting the value of future costs and benefits to reflect the fact that the value of money is greater now than in the future. Discuss this decision with your finance team to establish whether it is appropriate, and, if so, which discount rate to use.

[19] This is a simplified example for illustrative purposes. In reality, it is likely that you will have to factor in seasonal differences (e.g. differences in tea plucked and number of workers during peak vs. off-peak seasons). Furthermore, in this case, there is a severe labour shortage, so cover is not available. The financial impact is the lost production. In cases where you can find substitute workers, or pay other workers overtime to cover absent workers, the financial impact of absence isn't lost production, but instead the additional cost of paying temporary workers or paying overtime.

[20] For more information, see The SROI Network (2012). *A guide to social return on investment*. SROI. Available at socialvalueint.org/wp-content/uploads/2016/12/The-SROI-Guide-2012.pdf (accessed 27 Jun 2018).

[21] Agenda for Change promotes collaborative action driving systemic change to ensure adequate water, sanitation and hygiene services at district level. See www.washagendaforchange.net (accessed 27 Jun 2018).

Above: Women fetching water from a WaterAid-installed water tank in the village of Yaarli, Province Sindh, Pakistan.

Cover image: Local farmer Nalongo Jowani Bujwera holds ripe coffee berries at their coffee farm in Kichwamba, Rwenzori Region, Uganda.

WaterAid
July 2018

This guide can help your company establish the business value of water, sanitation and hygiene interventions and calculate your financial return on investment (ROI).
Test it, learn from it and share your results with us at corporate@wateraid.org

washmatters.wateraid.org/business-case-WASH-measure-value

@wateraid

Suggested citation: WaterAid (2018). *Strengthening the business case for water, sanitation and hygiene. How to measure value for your business*. WaterAid: London, UK.

DIAGEO

Gap Inc.

Unilever

WaterAid