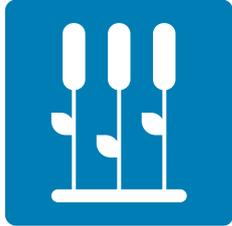




WaterAid/Sam Vox



WaterAid/Anindito Mukherjee

# Boosting business: why investing in water, sanitation and hygiene pays off

Summary  
impact report



**DIAGEO**

Gap Inc.



**TWININGS**  
OF LONDON



**WASH**  
4WORK



# 1 Key findings

*Boosting business: why investing in water, sanitation and hygiene pays off*, is the first-of-its kind pilot research project showing the potential financial returns of investing in water, sanitation and hygiene (WASH) and why it is so beneficial for business.

Having clean water, decent toilets and handwashing facilities at work and within employees' communities is essential. It strengthens the health and well-being of the workforce – which reduces absenteeism – cuts medical and sick pay costs, and boosts staff motivation and productivity. It's a way for companies to raise their brand value, build resilience, reduce supply chain risk and create climate resilient WASH solutions.

Between 2018 and 2022, WaterAid, in collaboration with Diageo, Gap Inc., HSBC, Twinings and ekaterra (which was part of Unilever when this project started), conducted research across four countries. Data was collected from ten workplaces in four sectors – including tea estates in India and Kenya, apparel and leather supply chains in Bangladesh and India, and agricultural smallholder farmers in Tanzania.

The project showed the business benefits of investing in WASH – looking at the effect it has on absenteeism, productivity, attrition, punctuality and the number of medical incidents at each workplace. Each business had unique workplace nuances and factors to consider, so calculations were based on how much each benefit could be attributed to WASH at each location. For the full details on these calculations please see the [Technical note](#).<sup>i</sup>

The results showed the following business benefits from the WASH intervention: Absenteeism decreased across the projects and the general health of employees and their families improved.

The leather tanneries in India saw a **29%** decrease and the tea estate study in Kenya saw a **21%** drop in absenteeism. Workplace medical incidents fell – the clinics on the tea estates in India saw a **5%** drop and the tea estate in Kenya saw a **22%** decrease. Productivity increased – the tea estates in India saw a **27%** boost in productivity after the intervention. Punctuality also increased by **5%** at the ready-made garment factories (RMG) in Bangladesh and **6%** at the leather tanneries in India.

Where possible, a financial return on investment (ROI) for the business was calculated, along with projections for investment costs and benefits over a 10-year period. The ROI figures reported in this summary are overall results for sectors, aggregated across countries and several district workplace locations, with the intention of drawing some useful conclusions around the business benefits of investing in WASH.

The research showed that for every \$1 spent, overall, the apparel and leather sector projects combined, delivered a **\$1.32** return on investment (ranging from \$-5.40 to \$9.04) during the project period. While the tea sector projects combined, saw a **\$2.05** return (ranging from \$-0.17 to \$5.11).

In addition, qualitative evidence was collected showing the social benefits and broader business benefits around brand value and supply chain resilience. The research also identified valuable insights and learnings for how to best implement WASH, promote productivity and drive other business benefits, so that companies, brands and suppliers see the positive impact.

For more information about the specific projects, see the [individual pilot impact reports](#),<sup>ii</sup> as well as the [Technical note](#)<sup>i</sup> which provides further details on the methodology.

i. For a more detailed methodology, see: [wateraid.org/boosting-business](http://wateraid.org/boosting-business).

ii. For all individual pilot impact reports, also see: [wateraid.org/boosting-business](http://wateraid.org/boosting-business).

# Key facts

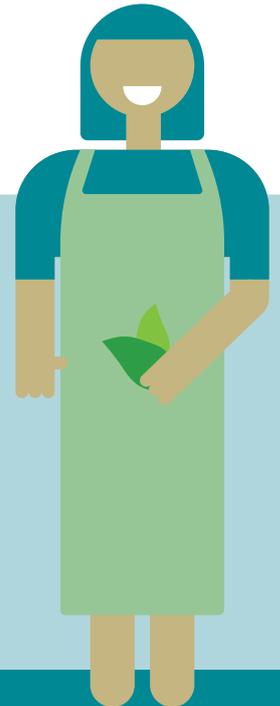


**4 years**

2018 to 2022

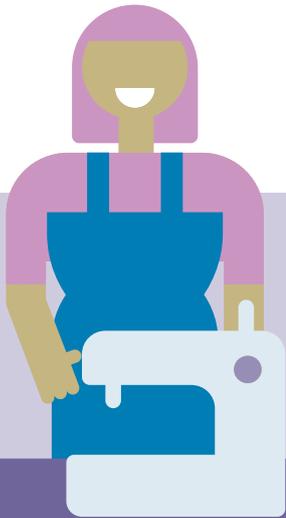
**4 countries**

- Bangladesh
- India
- Kenya
- Tanzania



**4 sectors**

- Apparel
- Leather
- Tea
- Agriculture



**10 workplaces and communities – including factories and fields**

- Three ready-made garment factories
- Three leather tanneries
- Three tea estates
- One smallholder farming community



# Projects



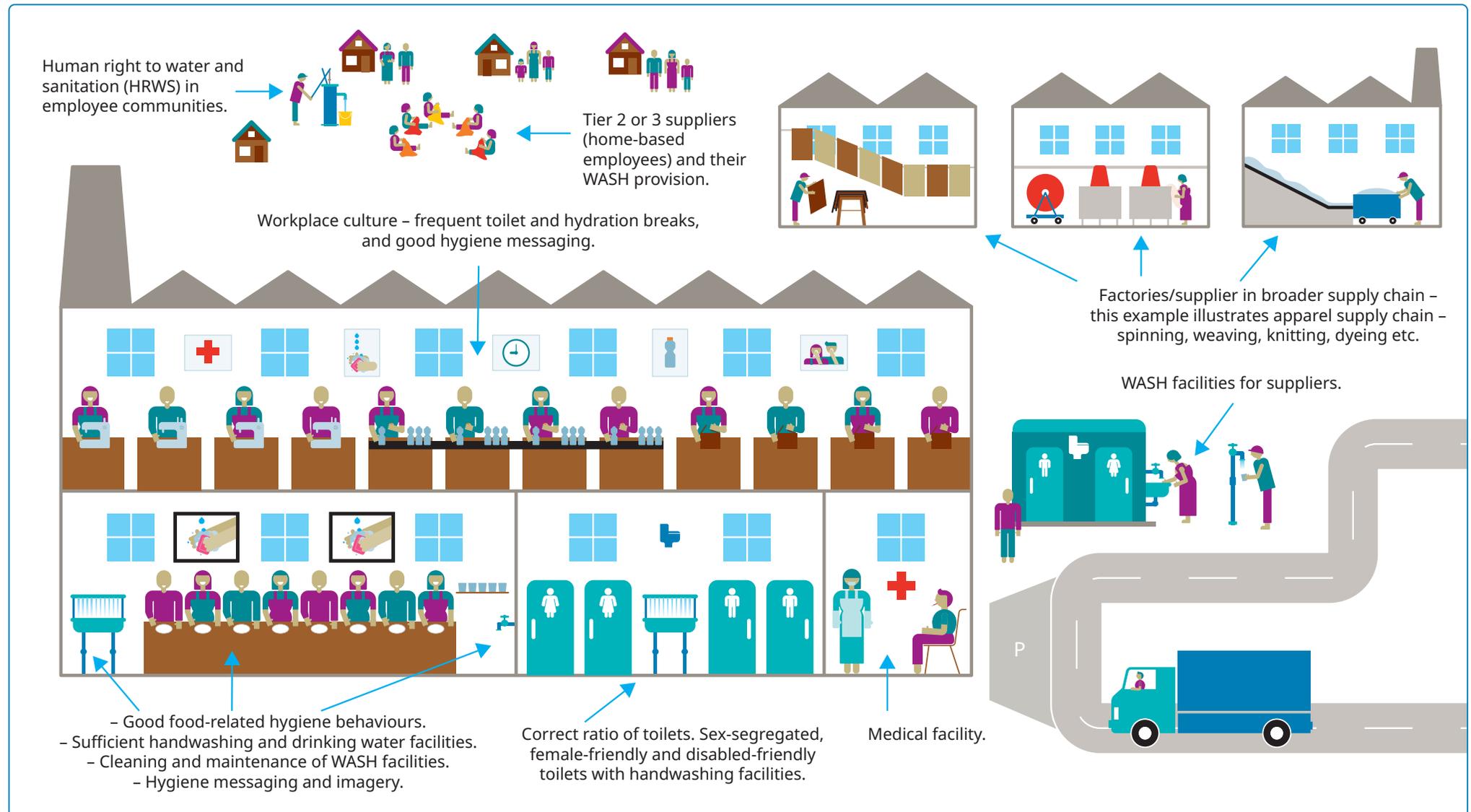
This project focused on 10 different workplaces and their communities – from production lines in ready-made garment (RMG) factories and leather tanneries, to vast tea estates and smallholder farms. Each sector, workplace and stage of the supply chain was assessed for WASH risk and opportunity, with interventions planned collaboratively between company partners and WaterAid.



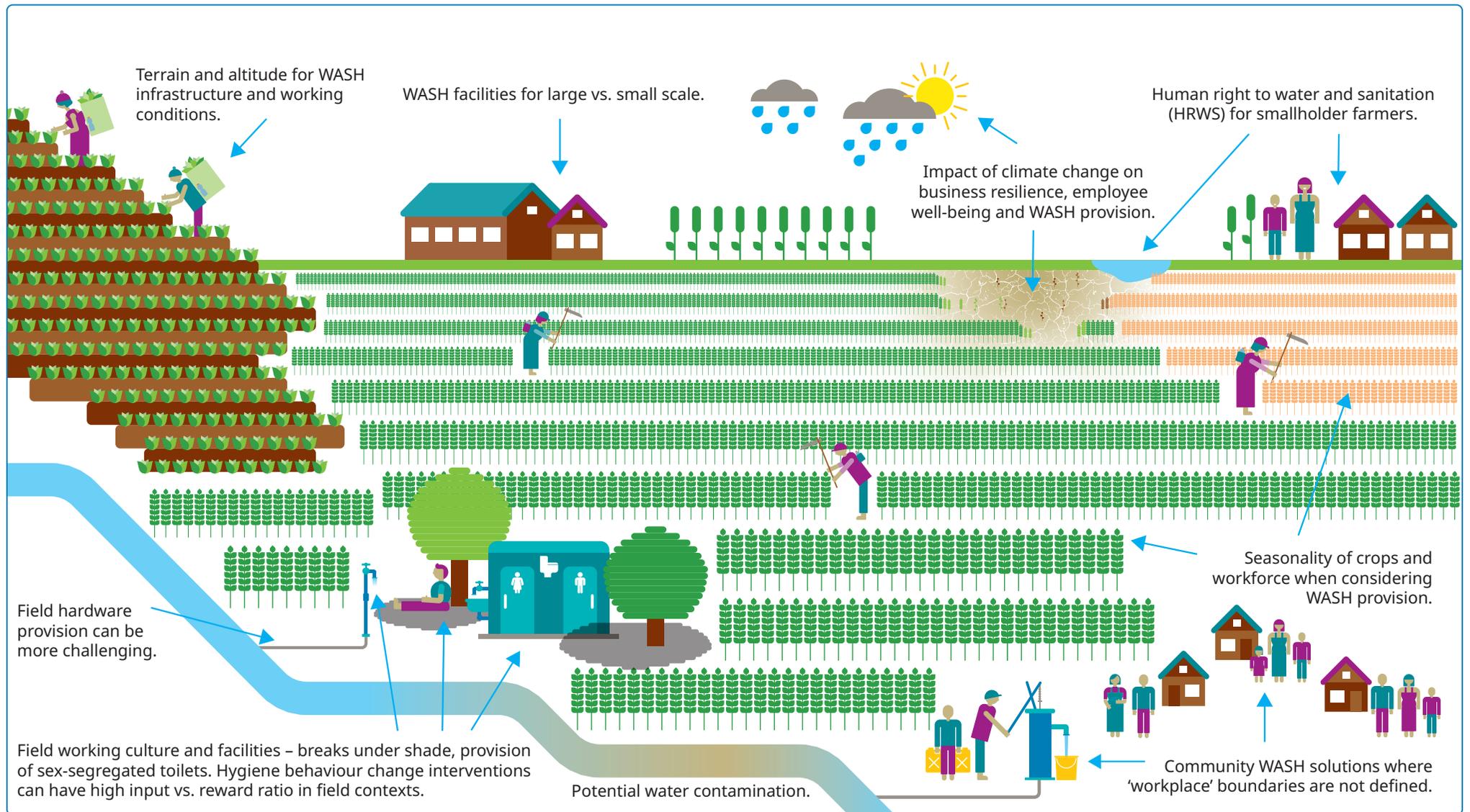
# WASH considerations in different workplace settings

The infographics below provide generalised overviews of basic factory and field workplace settings, highlighting some of the business considerations for WASH provision and potential intervention ideas. These insights and considerations are drawn from WaterAid's experience of WASH implementation in factory and field workplace settings.

## WASH considerations in factory settings



## WASH considerations in field settings



## WASH interventions

WASH interventions focused on four main areas – access to clean water, toilet provision, handwashing facilities and hygiene behaviour training. The interventions included the installation of drinking water points, handwashing stations and rainwater harvesting systems, as well as toilet restoration, hygiene training and menstrual health and hygiene training. Risk assessments were carried out to identify the gaps and opportunities across the business, and how best to design and implement each WASH solution.

WaterAid normally advises a holistic approach to WASH, providing taps, toilets and hygiene training. But for this project, each workplace and community received a tailored intervention based upon the context, risks and opportunities at each business. See the map on page 4 to identify which elements of WASH were prioritised in each project and refer to the individual impact reports for more details on the intervention.



● Julius Gibore Marwa checks the millet crop at his farm in Machochwe village. Serengeti, Tanzania. May 2022.

WaterAid/Sam Vox



WaterAid/Anindito Mukherjee



WaterAid

● The new water kiosk has had a positive impact on the health and work of the farmers and wider community living in Machochwe. Serengeti, Tanzania. May 2022.

● Employees perform the withering process at the factory in Nagrifarm tea estate in Darjeeling, India. May 2022.

# 3 Limitations

This research was carried out during the COVID-19 pandemic, which presented unforeseen challenges and research implications. Some countries declared nationwide lockdowns, which impacted data collection. In the early part of pandemic, there was widespread fear, stigma and uncertainty, so it is likely that families under-reported incidences of WASH-related diseases. As a result, the findings on indicators around sick days and loss of work may have been inaccurate due to under-reporting. Due to the scope of this study, the business impacts without COVID-19 are not fully understood. Some conclusions have been added based upon reasoning and WaterAid's contextual understanding of the situation to help draw a more complete story.

When calculating the business benefits, the results were assessed for each individual business and a proportion of the total benefits was attributed to the WASH intervention based on stakeholder interviews and expert input. Please see the [Technical note](#)<sup>iii</sup> for a full breakdown of the methodology.

● Minara Akter, Factory Supervisor, works alongside her colleagues in the printing section of Fakir Fashion. Narayanganj, Bangladesh. October 2021.



WaterAid/Fabeha Monir



● Sheela Chettri, a peer educator on menstrual health and hygiene, creates a reusable sanitary pad. Barnesbeg tea estate, Darjeeling district, India. November 2021.

# 4

## Results

### Business trends



#### Absenteeism

At the start of the pilot project, it was clear that one of the key reasons for employee absence was the lack of clean water, decent toilets and handwashing facilities, both at home and at work. Women were forced to manage their periods without private, safe toilets or access to menstrual hygiene products. Employees also suffered from bouts of illness, including diarrhoea, dysentery, waterborne diseases and urinary tract infections.

After investment in WASH, workplace absenteeism across the projects decreased and the general health of employees and their families improved. The greatest impact was seen at the leather tanneries project in India, where we estimate the WASH intervention was associated with a **29%** drop in absenteeism, while the tea estate study in Kenya saw a **21%** decrease. The tea estates in Darjeeling only reported a **1%** drop in absenteeism – this was likely due to each employee being entitled to 14 days of leave, whether they are sick or not.

Workplace medical incidents reported at clinics on the tea estates in India and Kenya also dropped because of WASH – with a decrease of 5% in Darjeeling, India, and a drop of **22%** in Kiambu County, Kenya.

**“Absenteeism levels were higher before the project period. Employees generally don’t fall sick due to the improvement in hygiene, hence less absenteeism.”**

Welfare Team Leader, ekaterra (formerly Unilever) tea estate, Kenya

**“This intervention, in addition to the heightened awareness about personal hygiene during the COVID-19 pandemic, has resulted in fewer people falling ill and reporting sick to work.”**



Bhanu Khawas, Health Worker, Nagrifarm tea estate, Darjeeling, India

**Ready-made garment factories, Narayanganj district, Bangladesh**

**15%** reduction in absenteeism attributed to WASH

**Leather tanneries, Uttar Pradesh, India**

**29%** reduction in absenteeism attributed to WASH

**Tea estates, Darjeeling, India**

**1%** reduction in absenteeism attributed to WASH

**Tea estate, Kiambu County, Kenya**

**21%** reduction in absenteeism attributed to WASH

**“I know my work well, but a bout of illnesses in the past few years had started interfering with it. Either I would be too sick to report for work, or feel exhausted on returning too soon after recovery,”**



Shri Ram, Tannery employee, Superhouse tannery, India



## Productivity

Productivity rates are affected by many different factors, not least weather variations and seasonal conditions. Rates of staff absenteeism and attrition, employee health, punctuality and morale, also influence productivity which means as an indicator, it has a big impact on the overall return on investment.

Research from tea estates in India showed the largest boost in productivity (that in our estimation could be attributed to WASH), with rates increasing **27%** after WASH intervention. This was considerably higher than the other projects due to tea estate management verifying the value of the project and attributing benefits to WASH.

The apparel and leather sectors showed a much smaller overall increase, but at the ready-made garment factories in Bangladesh punctuality increased **5%** and attrition dropped **2%** thanks to WASH investment. These indicators would have inevitably had an influence on productivity. The leather tanneries in India also saw a **6%** increase in punctuality overall.

**“[The intervention] has made the management realise the importance of a clean ambience and how it also affects productivity.”**

Brijendra Singh, Manager, Superhouse tannery, India

**“Now with the touch of our ID cards, we get sanitary pads at a reasonable price. Our work performance has improved. I hardly see girls missing out on workdays.”**

Moushumi Khatun, Factory employee, Fakir Fashion, Bangladesh

|  |  |
|--|--|
| Ready-made garment factories, Narayanganj district, Bangladesh | 0.1% increase in productivity attributed to WASH |
| Leather tanneries, Uttar Pradesh, India                        | 2% increase in productivity attributed to WASH   |
| Tea estates, Darjeeling, India                                 | 27% increase in productivity attributed to WASH  |
| Tea estate, Kiambu County, Kenya                               | 1% increase in productivity attributed to WASH   |

**“Water is one of the most important human needs and we support areas with serious shortage where our contribution makes a real difference. WASH is linked to good health. With no good health there is no productivity. But when farmers are healthy, they can produce more and therefore provide for their families and improve wellbeing.”**



Justine Damian, Communication and Sustainability Manager, Serengeti Breweries Ltd.

## Community benefits

We believe that the best results are possible when interventions in the workplace are supported by WASH investment in the wider community where the employees live. By investing in employees' communities, businesses can reinforce behaviour change, increase impact and generate profits, while doing social good.

A range of community interventions were carried out for each project providing water, sanitation and hygiene investment – including the installation of drinking water kiosks, handpumps and toilets, as well as hygiene training. The benefits from these community interventions were included in the ROI calculations.

The type of investment depended on the workplace setting. Employees working in factories tend to live off-site, whereas those in the field sometimes live on the tea estates or next to their smallholding – so each intervention was set up to achieve the greatest impact.

In Bangladesh, community investment in WASH has ensured a third of staff at the ready-made garment factories (**31%**) now have access to safely managed water and **26%** of households have safely managed sanitation services compared with 0% at the start of the project.

**“...employees adapt quickly to new changes and take in the learnings. There have been positive changes in the employees and the WASH project will benefit all the employees and their families.”**

General Manager, Nagrifarm, Darjeeling, India

**“I feel more satisfaction at the workplace, especially due to the handwashing facilities and improved handwashing behaviour of the other workers.”**

Tea estate employee, ekaterra (formerly Unilever) tea estate, Kenya

**“Tea pickers are no longer shy talking about hygiene, and their self-esteem has improved.”**

Assistant Field Manager, ekaterra (formerly Unilever) tea estate, Kenya

In India, **83%** of tannery employees noted their handwashing behaviours had improved and the availability of toilets at home had increased from 70% to **80%** thanks to WASH intervention.

On the Darjeeling tea estates, **74%** of households had a water source close by (less than 50m away), at the end of the project, compared to 55% at the start.

In Kenya, there was a **37%** increase in the proportion of tea pickers washing their hands after intervention and the frequency increased too – nearly doubling from 2.8 times a day to **5.3 times a day** at the end of the project.

In the Mara Region of Tanzania, a new water kiosk increased provision to villagers with plans to extend the water pipe network underway to provide 16 further domestic water points when complete.

**“If the factory is clean, women feel safe, and would like to be loyal to the workplace. It is working in this factory that has helped me earn my livelihood.”**

Kavita Devi, Tannery employee, Kings International Ltd, India



**“Now that the hydrant is installed here, I no longer have to wake up at 5.30am or 3.30am in winters when water becomes scarce. This time that I have gained for some extra rest means that I can report to work on time and am not as tired from all the water gathering as I used to be.”**

Siddarth Rai, Plantation employee, Nagrifarm tea estate, Darjeeling, India



# Return on investment

This study set out to calculate the return on investment (ROI) for investing in WASH, weighing up the cost of intervention against the financial benefits for the business, over the period of the project – ‘Project ROI’. In some of the pilots, financial contributions towards the project were made by other stakeholders, and in such cases the return for the business, relative to the business’ own investment, was higher.

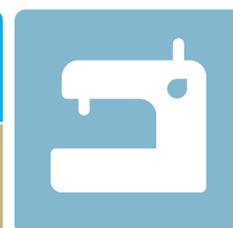
In addition, the ROI was also estimated over a 10-year period, showing what the ultimate impact for the business could be with ongoing operational maintenance of WASH infrastructure and behaviour change training – ‘Projected ROI’. This calculation is important to see the full extent of the impact over time, as some benefits are likely to take longer to realise.

Even given the limitations and challenges surrounding the research, it is encouraging that three out of the six apparel pilots generated a positive ROI and only two were marginally negative. Research in the apparel and leather sectors showed an overall positive ROI during the project period – meaning that for every \$1 invested in WASH, the factories and tanneries gained an average of \$1.32 return (ranging from \$-5.40 to \$9.04).

Looking at the projected ROI over a 10-year period, assuming continued investment in WASH services and operational maintenance, for every \$1 invested, the businesses could expect \$4.40 return (ranging from \$-9.21 to \$30.03).

## Overall apparel ROI across three ready-made garment factories in Bangladesh and three leather tanneries in India:

| Business   | Project ROI (per \$1 investment) | 10-year Projected ROI (per \$1 investment) |
|--|----------------------------------|--|
| RMG – Next Accessories, Bangladesh                                 | 0.35                             | -0.46                                      |
| RMG – Fakir Fashion, Bangladesh                                    | 9.04                             | 30.03                                      |
| RMG – Esquire Knit Composite Ltd., Bangladesh                      | -5.40                            | -9.21                                      |
| Leather – Kings International Ltd, India                           | -0.06                            | -2.42                                      |
| Leather – Superhouse I, India                                      | 3.96                             | 8.32                                       |
| Leather – Superhouse II, India                                     | -0.02                            | 0.13                                       |
| <b>Average of all apparel and leather factories studied (\$)iv</b> | <b>1.32</b>                      | <b>4.40</b>                                |



iv. The average apparel and leather ROI figures are overall results, drawn from an aggregation across two countries, two apparel sub-sectors, several district locations and different business units, with the intention of drawing some useful conclusions around the business benefits from investing in WASH in this sector.

## Overall tea ROI – across two tea estates in India and one tea estate in Kenya:

| Tea estates  | Project ROI (per \$1 investment) | 10-year Projected ROI (per \$1 investment) |
|--|----------------------------------|--|
| Nagrifarm tea estate, India                                | -0.17                            | 2.44                                       |
| Barnesbeg tea estate, India                                | 1.20                             | 4.07                                       |
| ekaterra (formerly Unilever) tea estate, Kenya             | 5.11                             | 15.59                                      |
| <b>Average of all tea estates studied (\$)<sup>v</sup></b> | <b>2.05</b>                      | <b>7.37</b>                                |



In the tea sector, two out of the three estates generated a positive Project ROI with one marginally negative. The average ROI was also positive during the project period – with **\$2.05** return for every **\$1** invested (ranging from \$0.17 to \$5.11). Over 10 years, with continued investment in WASH services and management, it is projected that this will increase to **\$7.37** return for every **\$1** invested (ranging from \$2.44 to \$15.59).

The overall payback period for both the apparel and tea industry pilots starts right after the project ends in Year 2 of the project activity, and the financial benefits increase at a steady rate into the future.

The agricultural sector smallholder pilot project found insufficient data for financial analysis, which meant calculating the ROI was not possible. However, the project generated some valuable insights and learnings.

It is also noted that while results overall are positive, not every individual workplace generated a positive ROI. Analysis suggests this is due to external factors (including COVID-19 and wider market fluctuations in demand for products), the nuances of each business, and the scale of the initial investment (see [individual reports](#) for more information). However, qualitative evidence showed that WASH interventions had a positive effect, particularly on business indicators like absenteeism, employee health and productivity across each sector.



● Nausheen uses a community handpump retrofitted by WaterAid to collect drinking water near her home in Unnao, Uttar Pradesh, India. April 2022.

v. The average tea ROI figures are overall results, drawn from an aggregation across two countries and three tea estates, with the intention of drawing some useful conclusions around the business benefits from investing in WASH in this sector.

# 6 Learnings

There are some valuable insights and learnings that have been gained from implementing WASH in the workplace:

- **ROI is not everything** – Providing a ROI can bolster the business case presented to internal financial teams for increased WASH commitments. But the broader socio-economic benefits for employees and their communities will also support companies' and supplier's broader sustainability commitments.
  - **Positives of WASH investment** – There are many positive business trends and benefits gained from WASH investment, including reduced staff absence, lower medical costs and staff turnover, as well as improved punctuality and employee morale.
  - **Results can take time** – Capital Expenditure (CapEx) on a project can be daunting and returns might not be immediate, but some low-cost solutions can provide big results in the long term. Initial evidence from the pilots suggests that hygiene behaviour change (HBC) training has the potential to drive beneficial business benefits and potentially the greatest ROI. However, ongoing investment in HBC must continue to sustain ongoing positive results for a business.
  - **Collective action can improve outcomes** – Investing in WASH projects can be beneficial when carried out in collaboration with peers within the sector, ultimately driving sector change. Working with a WASH implementing partner, can also support learning, implementation and ultimate success.
  - **Systems strengthening** – To achieve sustainable WASH, strong systems are needed to ensure gains last and deliver benefits to everyone. Effective stakeholder engagement of business, government and civil society is central to success.
  - **Holistic WASH solution** – Each pillar of WASH is just as important as the other – they are all complementary. HBC is often the forgotten pillar but has huge potential to make impactful results at relatively low cost. For example, improving menstrual health and hygiene and handwashing, ultimately increase employees' health and productivity.
  - **Don't consider the workplace in isolation** – All the pilot projects have shown the best results where WASH is implemented in both the business and the wider community, where the employees live.
  - **Workplaces are all different and require separate assessment and management approaches** – Factories and indoor settings present clearly defined boundaries between home and work, but field locations are not a controlled environment, which means community WASH projects are even more important to success. With challenging terrain and complex operating environments, some interventions, like hygiene behaviour training, can often be easier and cheaper to implement in the field compared to other interventions, like taps and toilets. Understanding the baseline WASH conditions are also important prior to project design. Effort vs. reward should also be considered.
- Tailor-made WASH design is required for each workplace setting. Regardless of the location though, WASH infrastructure needs ongoing maintenance, and this must not be undervalued.



WaterAid/Anindito Mukherjee

● This community-managed toilet facility was installed by WaterAid India in the residential area of Garhi – where most tannery employees live. Unnao, Uttar Pradesh, India. April 2022.

### Design principles

These elements should be considered by the company and implementing partner when trying to execute a successful WASH programme where there is an objective of business return:

- **Take time** to understand the sector or the business, as well as their objectives, commitments and priorities.
- **Solicit** senior level engagement and ensure that suppliers are engaged and supportive of what needs to be implemented.
- **Identify** the 'low-hanging fruit' where there is scope for making improvements in workplace WASH provision. Also consider the communities where the employees live.
- **Ensure** WASH solutions are context specific and climate resilient – designed for the business and objectives of the project.
- **Consider** effort vs. reward when identifying WASH solutions for the business, large CapEx isn't always required.
- **Consider** potential of reach, scale and replication across the business.
- **Leverage** funding from government or other stakeholders which both offsets the company costs but also enhances the outcomes and results.



WaterAid/Edgar Kemboi

● Esther Opana, Welfare Team Leader, washes her hands at the tea estate in Kenya. May 2022.

# Act now

## Everyone, everywhere has a human right to water and sanitation – at home, in their community and at work.

Investing in WASH must be considered a core business priority and part of a water stewardship strategy, rather than an act of philanthropy or corporate social responsibility.

With growing populations and the impacts of climate change, businesses have an important role to play in supporting the long-term sustainability of water resources in workplaces, supply chains and communities. If business, government and civil society work together, companies can not only address important environmental, social and governance (ESG) criteria, but we can fulfil sustainable development goals (SDGs) to achieve 100% access to safe and sustainable WASH by 2030.

### To build a strong business, take the following actions:

- Make informed WASH investments in the workplace, supply chains and communities.
- Seek expert advice and work with an implementing partner to learn how your organisation can benefit from WASH intervention.
- Draw on the best practice from WASH4WORK and the WASH community.
- Understand each organisation's role in managing and mitigating social, economic and environmental risks.
- Make sustainable WASH a unique selling point of your business.



How could your company benefit from WASH investment?  
To find out, visit [wateraid.org/boosting-business](https://wateraid.org/boosting-business)

Tea estate employees pick tea at the Nagrifarm tea estate in Darjeeling, India. May 2022.



● A tea estate employee picks tea in Kenya. May 2022.



● Front cover images: (left) Joyce Mwita is a farmer in Machochwe village, Serengeti, Tanzania. May 2022.

(right) Shri Ram works at the Superhouse tannery in the Wet Blue department where they measure and weigh the raw-blue hides. Unnao, Uttar Pradesh, India. April 2022.

**WaterAid is an international not-for-profit, determined to make clean water, decent toilets and good hygiene normal for everyone, everywhere within a generation. Only by tackling these three essentials in ways that last can people change their lives for good.**

## Acknowledgements

This summary report would not have been possible without:

- Consultancy support from Catalyst Management Services (P) Ltd., Human Development Research Centre (HDRC) and Infacto Consulting.
- Consulting Technical advice from ODI and PwC (advisors are not responsible for the contents).
- WASH project design and implementation by WaterAid Bangladesh, WaterAid India, WaterAid Tanzania, WaterAid UK, and project partners.

**Participating business units:** Kings International Ltd., Superhouse I and Superhouse II, Fakir Fashion Limited, Esquire Knit Composite Limited, Next Accessories Limited, Barnesbeg and Nagrifarm Tea Estates, WaterAid India, WaterAid Tanzania, WaterAid UK, and project partners.

**Authors:** Ruth Loftus (Senior Private Sector Advisor) and WaterAid UK; and endorsement by our WASH4Work partners.

**DIAGEO**

Gap Inc.



**TWININGS**  
OF LONDON



**WASH**  
4WORK

