



Foreword

At Co-op we have long recognised the need for urgent action to tackle climate change, which is more important than ever as we recognise that we are in the grip of a climate crisis of humankind's making.

We all need to play our part to reduce the impact that we are having on the planet, which is why Co-op's vision is firmly rooted in co-operating for a fairer world - one that is fairer to people, and fairer to the planet. We have committed to reach net zero emissions by 2040, have brought other UK retailers together to commit to this same goal and, in May 2021, as we published our blueprint laying out how we would achieve that long-term target, we made the case for much more urgent attention on climate justice.

As we said then, the climate crisis is having a devastating impact here in the UK and around the globe. We continue to passionately believe that it is a moral outrage that so often it is the world's poorest communities who are bearing the brunt of the extreme changes to weather patterns and crises that we are experiencing. It cannot be right that those countries with the least economic resources to adapt to our rapidly changing climate and mitigate the worst of its impact are those which have contributed the least to its advance but are suffering the most on a daily and weekly basis.

As we look ahead to the coming months, it is apparent that here in the UK we are going to have to continue to navigate the cost of living crisis. Nobody is oblivious to the impact of soaring inflation, driven primarily by the dramatic increases that we are seeing in energy prices and disruption to global supply chains. The conflict in Ukraine caused by Putin's invasion in February 2022 has had incredibly significant ramifications. We have seen shifts in the established patterns of migration as refugees flee conflict, disease and extreme poverty. At the same time, we saw record breaking heatwaves sweeping across Europe through the summer of 2022 alongside drought and famine on unimaginable levels across the Horn of Africa.

Unfortunately, all of this - threats to energy security, disruption of global markets, more severe and prevalent armed conflict, more natural crises - foreshadows what is to come if we fail to take urgent action to slow the advance of global heating. There is a window of hope which we must not squander.

All businesses are having to take difficult decisions in these challenging times.

However, we continue to believe that we all every family, every community, every business, every industry, every government have a part to play.

If that sounds academic or divorced from the reality of day to day life, let me turn to why we are publishing this report, and what I hope you will take from it. Flash flooding destroying infrastructure and threatening lives one summer. Record breaking heatwaves, the declaration of drought amidst failed food harvests and fears for the next year's planting, and communities left without clean running water the next. This is the climate emergency playing out in front of our eyes.

Water is the most precious resource, yet we experience such devastating consequences when we have too much or too little over a prolonged period of time. The simple act of turning on the tap for clean running water is a luxury that in the UK we take for granted, despite the fact that for hundreds of millions of people all around the world not having access to clean water is the daily norm.

So, read on for more about the links between the climate crisis and water scarcity, access to safe water and sanitation, and water pollution - and how at Co-op we will continue to play our part in working for climate justice.

Shirine Khoury-Haq Co-op Group Chief Executive Officer



Message from Duncan Goose

In these ever uncertain political and economic times, yet again, Co-op stands on a platform looking far into the future to call out those who fail to see the realities of the changing world around us, and more importantly what we must do to ensure stability, prosperity and ultimately, the survival of humanity.

It takes one voice to start to call out change, yet, as we look back through the decades there have been many who have called out the need to take action. To protect those at the bottom of the supply chain, to protect land, to protect human rights to protect our future.

Since its first pioneering days to the present day, Co-op has always stayed true to its vision, to collaborate, to act as one voice, to stand up for what they believe in.

Back in 1844 the Rochdale pioneers, the forebears of the Co-op we know today, would have known little about the issues of water scarcity, climate change or land misuse. Times may have changed, but they believed in acting together to create change, to do the right thing, and to ensure fairness and equality.

The launch of this publication is the chance for the current members of the co-operative movement to stand on the shoulders of those who have campaigned for nearly 180 years, to yet again call out those who fail to recognise the severity of the times we live in and what we all need to do to protect the future and livelihoods of the 7.7 billion people who live on this planet.

Because climate change, water scarcity and water security, doesn't just affect those in low income communities, or those in regions like the Sahel, it affects us all - whether it be because of economic migration, political instability, drought, or famine. It's clear: the time to act is now.

Duncan Goose

Founder of The One Foundation and Water Unite.



Executive Summary

At Co-op we have long recognised that the world we share is in the grip of a climate crisis. Climate change is happening, it's being caused by humankind, and it's imperative that we act urgently to avoid catastrophic outcomes for people and planet.

The overwhelming objective is simple to summarise: collectively, we must dramatically reduce how much carbon we're putting into the atmosphere. To be successful, we all need to play our part. Here at Co-op, our approach is guided by three principles:

- We'll follow the science in our target setting and decision taking - above all else, we must rapidly reduce the carbon we release into the atmosphere.
- We'll work for a fair and just transition for people and planet with all our members, customers, partners and suppliers - solving the climate crisis can't come at the expense of those who can least afford it.
- We'll co-operate to drive systems change at every level in the lives of our customers and their communities, because we recognise that we are stronger and more effective when we work with others.

Our suppliers are telling us how the climate crisis is already deeply affecting our supply chain, here in the UK and around the world. It's common knowledge that food security and global trade are amongst the most significant risks that will materialise in the coming decades if we don't do enough to tackle global heating. When it comes to our approach to tackling the climate crisis we therefore have to recognise that, as well as talking about mitigation (limiting the extent to which climate change continues to happen as far as possible), we also need to be talking about the investment needed for adaptation (adapting to the climate change that's already taking place, and that will occur in the future).

The voices that we hear speaking with the most acute clarity and urgency about the impact the climate crisis is having - today, now - include those people and communities from the Global South who are part of our supply chains. We set out why we believe we all need to work towards Climate Justice in our report, published in August 2021.



We hear loudly and clearly from the producers in our supply chain that they are already seeing first-hand the ravaging impact of changing weather patterns and emergence of pests and diseases that devastate crops. Here in the UK, only half of our true carbon footprint is domestically generated, with the remaining emissions generated overseas to meet the high resource demands of UK consumers.

Those in developing nations are contributing the least to climate change and are suffering the most from it, finding themselves with limited resources to combat the increasing challenges they face. It's crucial that we ensure producers in low income countries receive adequate support to cover the cost of adapting to climate change and transitioning to low carbon production. Solving the climate crisis can't come at the expense of those who can least afford it.



Climate Justice for People and Planet, Co-op, 2021

Water is essential to a secure future

2022 felt exceptional, with wild fires and water scarcity affecting swathes of the world. Whilst it's unacceptable that 771 million people around the world do not have access to clean water, it's also clear that the climate crisis is only going to make access to clean water and sanitation a more acute and pressing issue. What we are facing is an increasingly volatile world where precious life-giving natural resources, including water, will be more scarce.

In this report therefore, we set out three key, inter-related themes on the topic of water security, along with a series of recommendations for communities, businesses and governments:

Water, sanitation and hygiene:

ensuring every community has access to safe water, sanitation and hygiene.

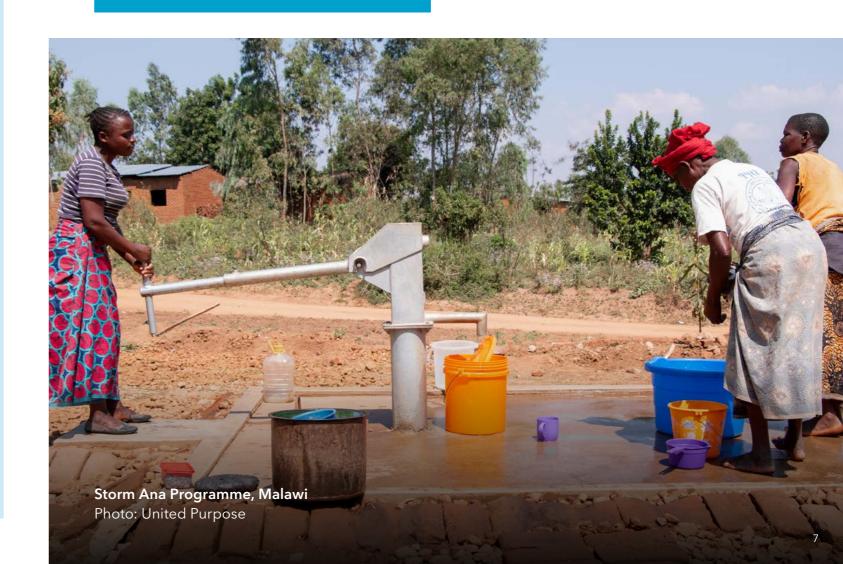
Water scarcity:

ensuring there's enough clean water to go around.

Water pollution:

ensuring that we reduce the contamination of our water sources.

The overwhelming evidence, including from the Intergovernmental Panel on Climate Change, shows that climate change is moving much faster than we are and, as a result, ecosystems and communities are being pushed to their limits. In this context, commitments made on the world stage by Heads of State are crucial, but so too is the less glamorous question of delivery through their domestic agendas. It's not just about Governments either - all of us have a part to play in accelerating our efforts to confront the climate crisis. Action is needed now, to ensure a water secure future for all!



OUR RECOMMENDATIONS FOR ACTION		
1	All Governments: Take a holistic approach to climate, nature and water and make every effort to deliver the 1.5 degree pathway set out in The Paris Agreement.	See page 3
2	All Governments: Provide bold leadership by signing the 'Fair Water Footprints' Declaration. Signatories to the Glasgow Declaration for Fair Water Footprints (FWF) commit to working towards a series of key outcomes, including zero pollution, sustainable and equitable withdrawals, universal access to safe water sanitation and hygiene, the protection and promotion of nature, and resilience to floods, droughts and water conflict within the water footprints over which they have control and influence, by 2030.	See page 11
3	UK Government: Adopt the principles for good adaptation planning recommended by the Committee on Climate Change within the next round of national adaptation plans.	See page 14
4	UK Government: Prioritise and incentivise the deployment of nature-based solutions to mitigate and adapt to water risk.	See page 14
5	UK Government: Develop effective regulation and invest in fair enforcement, and ensure that those who cause water pollution are held to account.	See page 14
6	UK Government: Support the existing network of catchment partnerships that have been established across the country to enable a more holistic approach to co-managing our water bodies, and the catchments that surround them.	See page 17
7	Businesses: Invest in climate resilience and a just transition in global supply chains, and incorporate water security into ESG strategies and climate-related risk assessments and disclosures.	See page 9
8	 Businesses: Commit to water stewardship & local collaboration, including through: Investing to ensure that the communities in your supply chains have access to safe water, sanitation and hygiene Working with others and supporting collective action projects - as you can't mitigate water risks alone Taking a holistic approach to climate, nature and water by prioritising, investing in and supporting deployment of nature-based solutions Using your influence to advocate for better water governance 	See page 9
9	Businesses: Follow the practical steps set out in WRAP's Roadmap towards Water Security for Food & Drink Supply to become better water stewards.	See page 17
10	Businesses: Raise awareness, so that customers understand the environmental impact of the products and services they are buying.	See page 9
11	Co-op members and customers: We all have a part to play in tackling the climate crisis. Taking steps to reduce how much water we consume at home is just one of the steps we can all start to take.	See page 3
12	Co-op members and customers: The most sustainable thing to do is use a refillable water bottle but, if you do buy bottled water, when you buy it from the Co-op, it enables us to continue to transform lives through our partnerships with The One Foundation and Water Unite.	See page 9

Access to safe water, sanitation, and hygiene

All too often, the impact that climate change is already having is being borne by those communities with the least resources with which to respond. Add in the fact that these are the very same communities contributing the least to the advance of the climate crisis and it's clear why we believe that it's a moral outrage. Changing weather patterns are wreaking havoc for the world's poorest communities, and we have to keep in view the stark reality that as of 2020 - the latest data available from the United Nations - over 25% of the world's population don't have access to a safely managed drinking water service. That's 2 billion people, of whom a staggering 771 million people didn't have access to basic clean drinking water services.

Between 2015 and 2020, the proportion of the global population using safely managed drinking water services increased from 70.2 per cent to 74.3 per cent, with the largest numbers of people gaining access in Central and Southern Asia. Despite this progress, another 2 billion people still lacked safely managed drinking water in 2020, including 771 million who were without even basic drinking water.3



United Nations Department of Economic and Social Affairs

It's not just about access to clean drinking water, of course. There's even more work still to be done to ensure every family has access to safe sanitation facilities - only 54% of the world's population are using safely managed sanitation services. 1.7 billion people lack access to a decent toilet, and every two minutes diarrhoea caused by dirty water and poor toilets kills a child under the age of five. As with considering the question of water scarcity, it's important we recognise the link between how our food is produced and the lack of access to safe water and sanitation that blights so many lives around the world: the FAO estimates that a sixth of the world's population lives in an agricultural area with very high water constraints and competition for available supplies, which has become a significant issue in some areas which grow crops for export that put pressure on water availability.4

It goes without saying that water is critical to all forms of life, but it's worth noting the significance of the UN's Sustainable Development Goal Six: to ensure availability and sustainable management of water and sanitation for all. It underpins the delivery of so many of the other Sustainable Development Goals and the eradication of global poverty. COVID-19 revealed the deep injustices that endure around the world precisely because the very simplest defence against the spread of disease, good handwashing, is impossible without reliable, clean water supplies.

That's why we're so proud of the difference that our members and customers have enabled us to make over the past 15 years with our partners at The One Foundation. Together we have funded over £17m of clean water, hygiene and sanitation projects to change lives in some of the world's poorest countries. During this time, over 2.5 million people have been impacted. It's thanks to this longstanding partnership that we really understand how the lack of fair access to water is a daily reminder that those on the front line of the climate crisis are being hardest hit despite doing the least to contribute to its advance.



For every Co-op own-brand still, sparkling and flavoured bottle of water sold, we donate 3p per litre to our partners at The One Foundation to fund water projects across the globe.

Since 2017, half of the funding from our partnership with The One Foundation is invested into Fairtrade producer communities in sub-Saharan Africa. That means we've been directly investing the money raised through the products we sell back into the communities producing the food we love to eat here in the UK. The majority of the remainder is invested in The One Foundation's priority programmes. Finally, 10% of this funding is reserved to enable us to provide direct emergency support through partners of the Disasters Emergency Committee (DEC). We've now donated a total of £1.2m towards the efforts to respond to crises ranging from famines, war and viruses through to natural disasters such as droughts, earthquakes, hurricanes, cyclones and flooding.

¹ https://fairwaterfootprints.org/

 $^{^2\,}https://wrap.org.uk/resources/guide/roadmap-towards-water-security-food-and-drink-supply-like and a contract of the contr$

³ https://unstats.un.org/sdgs/report/2021/goal-06/ 4 https://www.fao.org/state-of-food-agriculture/2020/tr/

The Ghana Ashanti Programme (£800,000 grant) - The One Foundation and Co-op

Ghana has a growing population of 31 million people and is one of the most urbanised countries in Africa. In spite of the progress that has been made to ensure that children and families in every part of the country have access to safe drinking water, data has shown that 76%* of households remain at risk of drinking water contaminated with faecal matter. Lack of proper sanitation and hygiene frequently compounds the contamination of existing water sources.

In March 2021, The One Foundation and Co-op completed a four-year programme together in the Ashanti region of Ghana that is now bringing a safe and affordable water supply to over 55,000 people living in 10 small cocoa farming towns, through the construction of new water infrastructure managed via a financially sustainable management model.

The new water systems have helped to reduce the time that it takes for community members to collect water. Households now travel an average distance of 450m to fetch water, compared to 600m at baseline. The average time spent per trip to get water is now 11 minutes compared to 21 minutes at baseline. This has had a positive impact on women and children. In an end-of-project evaluation, women said the time saved has impacted positively on their

productivity, giving them time to engage in economic activities such as farming and trading. Children reported benefits in terms of reduced lateness and absenteeism in schools.

Overall, ownership of the project is high, and systems have been put in place for future management. A total of 170 community and district water and sanitation team members were trained on operations and maintenance of the systems. These processes were characterised by strong collaboration between the community management teams and district officials who are expected to supervise the operations of the systems. An example of this is in Akutuase where the community management team and the district assembly have worked together after the handover of the systems to connect 13 households to the water network.



Nana's Story

Nana is a 65-year-old Village Chief, cocoa farmer and father of five who faced challenges with accessing water for both domestic and farming purposes. He explains...

"I spent most of my working hours at home due to challenges with water access and I also had to nurse cocoa seedlings for transplant and expansion closer to a stream which is very far from my farm."

This resulted in low yields and low-income levels as a farmer. It was very difficult for Nana to get enough income to provide for himself and his family. He was not able to plant more seedlings to expand his farm because of the challenge of transporting the seedlings back from the stream's location to his farm.

Thanks to the water supply system installed in Nana's community he has now been able to connect a water service line to his house. As a result, Nana and his family are able to easily access potable water and queues at water service points are a thing of the past. Less time and energy are spent in accessing water, which means Nana is able to spend more time being productive on his farms.

"I am very excited as a Chief and a cocoa farmer for this intervention. Nursing and growing more seedlings has become a very easy task for me as now I can comfortably access water and water them in my backyard. I can also easily transport and plant them to expand my farm and to get high yields to improve my income levels.

Selling seedlings to other cocoa farmers also serves as an additional source of income for me. My children and grandchildren are able to perform household chores and attend school as early as possible. Incidence of waterborne diseases in my household is now a thing of the past, with improvements in the health status of my family members in particular and Offinso Koforidua community members in general."

It is vital that businesses understand the importance of water scarcity and take action in the communities which they source from, and to help their customers understand the impact that the products and services which they are buying have on people and the planet. It is also imperative for all governments around the world to enable a water secure future for all.

That's why we welcome the landmark 'Fair Water Footprints Declaration', 6 also known as the Glasgow Declaration for Fair Water Footprints for climate resilient, inclusive, and sustainable development, launched at COP-26, which sets out to tackle the world water crisis. The Declaration's founding partners bring together some of the wealthiest and poorest countries on the planet with a population totalling 170 million, and nominal GDP of \$4.1 trillion. They include the Governments of the UK, Austria, Finland, Madagascar, Malawi, Panama, and Peru, working alongside multinational corporations and investment companies such as Unilever, Diageo and ACTIAM, and civil society organisations including Water Witness, CDP and WaterAid. Signatories to the Declaration commit to eliminate water pollution and over extraction from rivers and aquifers; improve flood and drought risk management; and bring greater accountability to ensure that investment and economic activity protect and work with nature by 2030. The Declaration will also deliver on the human right to water, and drive universal access to safe water, toilets, and handwashing facilities.

⁵ https://www.unicef.org/ghana/water-sanitation-and-hygiene

⁶ https://fairwaterfootprints.org/



Water milestones

2022

Co-op water security donations surpassed £20m in total, across The One Foundation and Water Unite.

15 projects receive shares of £1.4m from Co-op and the Co-op Foundation's Carbon Innovation Fund, including water preservation projects that combine carbon reduction and water security.

Co-op became a signatory of WRAP's Roadmap towards Water Security for Food & Drink Supply.

2021

In 2021, Co-op reached £15m in donations to The One Foundation, changing the lives of 2.4 million people.

2020

Co-op donated £120,000 to support a COVID-19 emergency response which is helping to ensure that vulnerable and marginalised people living in Syria, Iraq, Lebanon, Bangladesh, Kenya, Zimbabwe and Myanmar receive inclusive and safe support to prevent and reduce the infection risk.

Following initial seed funding from Co-op, the Water Unite Impact investment vehicle was launched to provide risk-tolerant capital to local Small & Medium Enterprises ('SMEs') and entrepreneurs in the water sector across Africa and Asia.

2019

We celebrated over £10m raised for The One Foundation and nearly 2 million lives impacted.

Co-op funded its first five programmes through Water Unite, including the Greater Cape Town Water Fund which has worked to mobilize blended finance for increased water security in South Africa, protecting biodiversity and safeguarding water supplies.

2017

We joined WRAP's collective action water stewardship projects on the River Wye here in the UK, and in South Africa.

Our DEC Emergency Appeal supported, with money raised via the sale of our ownbrand water, Co-op's own banana producer communities struck by Hurricanes Irma and Maria.

Co-op and The One Foundation agreed that up to 50% of the funds raised through sales of own-brand water could be invested in projects with Co-op's own Fairtrade producer communities in Africa.

Co-op CEO Steve Murrells announced Co-op's commitment to the Global Investment Fund for Water (Water Unite) at a Global Citizen music concert in Hamburg and called on others in the industry to follow Co-op's lead.

Co-op become founding signatories of the Global Investment Fund for Water (Water Unite), pledging to extend support to end water poverty. 1p for every litre of branded water sold goes to the fund.

Co-op extended its support to The One Foundation by creating a similar 3p per litre donation across the rest of the Co-op water range and increasing the own-brand donation by some 35%.

By the end of the year, Co-op had raised £8.7m for The One Foundation over 11 years. This had impacted over 1.7 million people.

2014

Co-op became a signatory of WRAP's Courtauld Commitment 2025, which included ambitions to protect critical water resources.

Co-op was invited by The One Foundation as strategic partners to an event at 10 Downing Street to celebrate the first £10m raised by One.

2005-2010

We became the first UK retailer to launch an own-brand charity water -Co-op 'Fairbourne Springs' in 2007.

This replaced the One Water brand but maintained the donation to The One Foundation.



Co-op supported several pilot projects with One branded products, such as condoms, from which donations supported HIV Aids education, and eggs which created a donation mechanism for African farmers to rear chickens.

We were the first retailer to launch 'One Water' a new brand which was set up to fund its own Foundation to provide clean water and sanitation to those without access in sub-Saharan Africa.



Water Scarcity

Let's address the question of the impact of the climate crisis on water scarcity. Put simply, we're talking about there being enough water (in terms of quantity and quality), and the risks posed by too little water (drought) or too much water (flooding). As the chair of the Environment Agency warned in 2021: "England's water is not as secure as we presume it to be."7 In the summer of 2021 we saw extreme flash flooding, including in London and across the South East.8 Roll forward a year and the UK Government was forced to declare a drought, following such an extended period of heat without rain.9

The Committee on Climate Change has consistently warned that hotter summers with decreased levels of rainfall will - without urgent action to address the climate crisis - become the norm here in the UK by 2050. It is so easy for us to take for granted being able to access clean, safe, and plentiful clean water at the turn of the tap, but we need to bear in mind that this is a luxury which millions around the world cannot afford. As our climate changes, we are already seeing water scarcity become a more pressing and acute issue here in the UK and around the world.

Why does this matter to Co-op? In 2020, we worked with experts from the University of York to identify the risks of climate change related to our key ingredients as a food retailer and wholesaler, which identified that the impact of changing weather patterns on food supply is a risk to the security of food supply, and the livelihoods of those producer communities around the world whom we rely upon for the food we love to eat. Furthermore, the Taskforce on Climate-related Financial Disclosures (TCFD) identifies water security as one of the most material climaterelated risks relevant to the food industry.

52% of the world's population will live in waterstressed regions by 2050, making the urgency of addressing water scarcity worldwide clear.¹⁰ Our experience in the UK in the summer of 2022 should act as a wake-up call. In the midst of a record-breaking heatwave, the residents of Northend in leafy Oxfordshire were left without access to clean running water as a result of water levels falling to such a low level in their local reservoir.¹¹ The impact of the heat and lack of rainfall for those who grow, produce and manufacture our food was incredibly significant, right across the UK.

In this context, and as global demand for water increases, we have to recognise that our food system puts a huge burden on water resources worldwide, with agriculture responsible for around 70% of the world's freshwater withdrawals, and up to 90% in some developing countries.¹² This water is shared with local communities and is also needed for nature to thrive, so we have a shared responsibility to safeguard this vital resource and decrease the water stress the food system is contributing towards.

The One Foundation & Co-op Malawi Tropical Storm Ana Programme (£80,000)

In 2019, Malawi was impacted by one of the worst tropical cyclones on record to affect Africa and the Southern Hemisphere, Cyclone Idai. The long-lived storm caused catastrophic damage and a humanitarian crisis in Mozambique, Zimbabwe and Malawi.

Four years on in late January 2022, Malawi was struck again by Tropical Storm Ana, a deadly cyclone that passed through 16 districts and two cities in southern Malawi, leaving further devastation and destruction in its wake. Declared a State of National Disaster, over 990,000 people in 18 districts urgently required life-saving and life-sustaining humanitarian assistance to help recover from their losses, rebuild their resilience and access basic services again.

By February, more than 190,429 people were displaced and sheltering in over 150 Internally Displaced People (IDP) sites. Access to safe drinking water and sanitation facilities was an urgent concern, and the severity of the flooding heightened the risks of water-borne disease. People living in displacement sites were accessing water from unsafe sources like rivers, stagnant waters and open wells. Nationwide, 20 piped water supply systems and over 1,000 boreholes were damaged, contaminated or filled with silt, impacting access to clean water for at least 300,000 people, while more than 53,900 latrines had collapsed.

Through our partnership, The One Foundation and Co-op were able to deploy urgent emergency funding in the aftermath of the disaster to support the distribution of chlorine tablets, the repair of non-functional water points, the training of water point committees and the promotion of community hygiene campaigns. The response also helped to support learning sessions which aimed to develop recommendations to improve collaboration between humanitarian responses and development work and to upscale learnings with regional and National WASH Clusters for wider dissemination.



12 https://data.worldbank.org/indicator/er.h2o.fwag.zs

⁷ https://www.gov.uk/government/speeches/water-security-in-a-changing-environment ⁸ https://www.theguardian.com/uk-news/2021/jul/25/thunderstorms-leave-cars-and-buses-stranded-in-london

⁹ https://www.theguardian.com/environment/2022/aug/12/drought-declared-england-hosepipe-ban-water-restrictions 10 https://news.mit.edu/2014/predicting-the-future-of-global-water-stress 11 https://www.theguardian.com/environment/2022/aug/10/oxfordshire-village-living-without-running-water

Supporting people like Alinafe

Gubudu village is in Traditional Authority Changata, situated 46km away from Thyolo district headquarters, Malawi. 102 households in the village (604 people) rely on one borehole for all their water needs.

When Tropical Storm Ana struck in late January 2022, several districts in Malawi, including Thyolo, were severely impacted and the borehole that the village relied on was washed away and the water supply contaminated with flood water.

Struggling to recover from the aftermath of the cyclone, the community had limited resources and capacity to repair the borehole. They had no choice but to drink water from open wells exposing themselves to cholera, diarrhoea and typhoid.

In April 2022, with grant funding from The One Foundation and Co-op, the non-functional borehole in Alinafe's village was rehabilitated.

"Before this borehole was fixed, the only source of water we had was an open well which was about 50 minutes away from our house. The water was dirty and contaminated, but we had no other option. We used this water for all domestic purposes, including drinking. As a result, my family suffered from persistent diarrhoeal diseases which affected our ability to work and earn money as a family."

The programmes used technicians and local Area Mechanics during the rehabilitation process with community members contributing local construction materials, such as river sand, quarry stone, bricks, and labour. As part of community ownership, the Water Point Committees (WPC) committed to a service agreement with Area Mechanics for routine maintenance with monthly maintenance contributions coming from the community members.

"Now that we have access to safe water, we do not get sick often and the money we used to spend on medication is now used for other purposes", shares Alinafe, a 34-year-old female tea farmer from Gubudu village.

This grant from Co-op is estimated to reach 56,000 people, supporting Gubudu Village and many others by improving their access to safe water and building their capacity to effectively manage their water sources, in turn improving their overall health and quality of life.



The experts we've worked with advise that for businesses to improve the sustainable management of water, a focus on water stewardship is vital. Two key elements of this are ensuring that our supply chains adopt best practices in water management at the farm level, and supporting efforts to ensure good governance of water at the catchment and basin level. This is the approach that we're building into the development of our water security strategy.

It's why we were founding supporters of WRAP's Roadmap towards Water Security for Food & Drink Supply,13 which gives us a way of working collaboratively with our peers, our suppliers and with local delivery bodies in the most water-stressed areas from which we source our products and ingredients. Together, our aim is to help achieve sustainable water management to improve the quality and availability of water at catchment scale in the top 20 most important product and ingredient sourcing areas in the UK and overseas, with an overall target by 2030 that 50% of the UK's fresh food is sourced from areas with sustainable water management. To help achieve this, our role as a food & drink retailer is in committing to take action and becoming good water stewards. This means:

- Monitoring water use in our own operations and improving efficiency.
- Identifying water risk hotspots in our supply chain (using the 3 lenses described throughout this report: water scarcity, access to safe water, sanitation and hygiene, and water pollution).
- Supporting collective action water stewardship projects in strategically important sourcing areas.
- Identifying suppliers operating in high water stress areas and encouraging them to engage with water stewardship initiatives in their local catchment.
- Using our influence to advocate for better water governance.

This collective approach is critical because together we can achieve much more than we can individually, and because water is a shared resource - so no single user can tackle water scarcity issues alone. By having a stewardship focus in defined areas we believe we can make a meaningful difference and this will form an important contribution towards UN Sustainable Development Goal 6 - to ensure availability and sustainable management of water and sanitation for all.

The collective action water stewardship projects we are supporting all have a different focus – because the water-related issues are different in different places. But a common theme that has emerged is the use of nature-based solutions to reduce water risks. Simple interventions like planting trees and hedgerows, restoring wetlands, removing invasive species, using cover crops and other regenerative farming practices can have multiple beneficial outcomes when targeted in the right way – including improved water storage, better water quality, habitat creation, improved biodiversity, reducing soil losses, and increasing carbon removals, contributing to Net Zero objectives.

Actions being taken are specific to the local context. For example - in South Africa, Co-op is supporting a WRAP collective action project in fruit-growing areas heavily affected by drought in recent years, which has affected crops yields and has put huge pressure on supply. The main focus is clearance of alien, invasive species, improved water management at both the farm and catchment levels, and supporting farmer-tofarmer learning on water issues and best practices through employment of local co-ordinators. A groundwater monitoring programme is also being implemented to help track progress over the long term. To date, the work has resulted in 170 million litres of water being replenished back to nature annually: a huge boost to available water supplies, helping local suppliers become more resilient, as well as creating job opportunities for local communities.14

¹³ https://wrap.org.uk/resources/guide/roadmap-towards-water-security-food-and-drink-supply

¹⁴ https://wrap.org.uk/sites/default/files/2021-07/WRAP-Courtauld-Commitment-Annual-Report-2021.pdf

Water Unite and Co-op mobilising blended finance for increased water security in South Africa (£135,000 grant)

Between 2015 and 2017, Cape Town, South Africa, experienced the worst drought in 100 years. In 2018, dam reservoirs dropped below 20%, and the city prepared for the day when the taps would run dry. Severe water restrictions, transferred water from a neighbouring storage scheme, and the arrival of the winter rains postponed a crisis that would have affected 4 million people – 40% of whom live below the poverty line.

The spread of invasive alien plants has resulted in reduced groundwater replenishment and dam runoff to the Western Cape Water Supply System. This has been an ongoing issue in the region for at least 20 years, threatening local biodiversity and communities in the region.

The Greater Cape Town Water Fund (GCTWF) aims to protect biodiversity and safeguard water supplies in South Africa to promote water security via nature based solutions. The core objective of GCTWF is to comprehensively clear invasive alien plants in seven priority sub-catchments within South Africa's Western Cape Water Supply.

Restoration follows a long-run financing strategy, developed with the support of Co-op and Water Unite, for implementation and maintenance over a 30-year horizon. GCTWF currently supports upstream ecosystem management, restoration and protection for local water catchments.

Such areas include the Theewaterskloof, Berg River, the Atlantis Aquifer and Wemmershoek Dam.

Key achievements:

- 47,464 acres (19,208 hectares) cleared in priority source catchments
- 8.9 billion litres/year to be returned to the regional water system
- 120 green jobs have been created, with a focus on hiring women and young adults, plus an additional 40 high-angle technicians trained to work in remote mountainous terrain
- US\$16M (243M Rand) saved in future clearing costs





Water Pollution

Water pollution, or the contamination of water bodies including lakes, rivers, oceans, aquifers, reservoirs and groundwater, is an increasingly urgent issue. As we've noted already, nature, industry and communities all need sources of clean water to survive and thrive, but globally there are increasing examples of the impact that pollution is having.

We know that an estimated 51 trillion microplastic particles litter the ocean, 15 an estimated 3.4 million people die each year from water-related diseases, 16 and that wastewater gives rise to up to 7% of all greenhouse gas emissions globally: more than flying.¹⁷ WWF has also estimated that nearly 1/3 of all freshwater fish globally are threatened with extinction due to human activity, including agriculture and pollution.¹⁸

More locally, in England only 14% of rivers are in good ecological health, and all fail to meet chemical standards. Of these failing rivers, agriculture impacts nearly two thirds, with significant consequences for some of the UK's iconic rivers, such as the River Wye. 19 Clearly, and continuing the theme when considering water scarcity and access to safe water and sanitation for all, the role of the food industry is significant. Furthermore, as water becomes more scarce and as more and more communities worldwide face water poverty, the impacts of water pollution will become more concentrated and exacerbate these problems. Many communities are already having to live with ecosystems increasingly impacted by the effects of agricultural runoff, lack of sanitation services, and consumer waste (plastics).

It was recognising the need to tackle water pollution, and drive scale in investments in the circular economy worldwide, that led to our decision to become a pioneer partner of Water Unite.

Together with our branded suppliers, we donate 1p per litre for all branded water bottles sold in our stores across the UK. Water Unite works to leverage investment in the systems needed to keep clean water flowing, and to tackle plastic pollution. So far, we've now invested over £3m in water, sanitation and hygiene programmes, driving the circular economy. Our funding has helped support innovative local entrepreneurs working to tackle water, sanitation, and plastic waste issues in developing countries across Africa and Asia. We're incredibly proud of this partnership, and incredibly proud that when our members and customers shop with us, their purchasing choices mean that we are able to invest directly in water pollution programmes that change lives.

Finally, the collective action water stewardship projects that we support through our commitment to WRAP's Roadmap towards Water Security for Food & Drink Supply also provide an important mechanism for us to work with others to tackle agriculturally related water pollution issues in key food production areas. For example, in the River Wye catchment we have been supporting a project <u>led by the Wye & Usk Foundation</u> that provides targeted farm support to deliver practical on-farm measures that address the specific challenges identified for key agricultural sectors in the area.²⁰

Examples of interventions range from physical infrastructure to improve drainage on-farms, to creating watercourse buffers to protect the river from soil erosion and nutrient leaching.



Water Unite & Co-op - GREE New Energy, Indonesia (over £220,000 invested)*

In Indonesia alone 1,350 primary food processors generate more water pollution than a population of 185 million. Food processors in Indonesia emit 50 million tons of CO₂ equivalent per year. Removing this is equivalent to taking out 10 million cars from the road every year.

GREE Energy, based in Indonesia, is a company that decarbonises food processors in developing countries by transforming their wastewater into biogas. They offer a new generation of wastewater treatment facilities centred on a waste-to-energy model to supply green power to rural areas of emergent economies.

The partnership with Co-op and Water Unite is advancing GREE Energy's mission to fight climate change by scaling profitable and proven biogas solutions that transform agro-food industry wastewater into valuable resources for people and the planet and decarbonise the food supply chain.

*As per the FX rate on 18.10.22

The first pilot at Hamparan food processing plant, in the province of Lampung, is currently removing 3,600 tonnes of BOD5 (organic water pollution) per year, creating clean water for the local population. In addition, the plant is mitigating climate change by producing green energy and reducing 65,000 tonnes equivalent of CO₂ per year.

By opening further treatment facilities, GREE Energy is committed to harnessing the power of biogas to reduce 12 million tons of CO₂ equivalent every year by 2030.

"The partnership with Co-op and Water Unite not only supports GREE Energy's business development efforts in Southeast Asia, but also shows GREE Energy's impact business model that delivers profitability and impact for the people and the planet works as supported by a prominent impact investment company. Only 9% of the food processing facilities have biogas installed, there is still a massive opportunity to decarbonise the supply chain to fight climate change."

Nicolas Stirer, CEO and Founder of GREE Energy

https://iopscience.iop.org/article/10.1088/1748-9326/10/12/124006;jsessionid=123F0E078E457FC6106D3ACEE956F209.c3.iopscience.cld.iop.org
 https://www.voanews.com/a/a-13-2005-03-17-voa34-67381152/274768.html
 https://unesdoc.unesco.org/ark:/48223/pf0000372985.locale=en

¹⁸ https://wwfuk-newsroom.prgloo.com/news/one-third-of-freshwater-fish-threatened-with-extinction-new-report-warns

https://www.bbc.co.uk/news/uk-england-hereford-worcester-62071721
 https://www.wyeuskfoundation.org/the-wye-agri-food-partnership

Co-op & Water Unite - Mr. Green Africa, East Africa (over £175,000 invested)*

Linear economies have created enormous plastic waste challenges, particularly the pollution of rivers and waterways. Less than 15% of the plastic produced globally is recycled, which has resulted in over 51 trillion micro-plastic particles littering in the ocean.

Africa alone generates 22 million tonnes of urban plastic waste each year, the majority of which is not collected for recycling. Recycling has long been an industry rife with exploitation, with waste pickers at the bottom of the recycling chain being underpaid by middlemen and brokers who take a huge share of the economic surplus, resulting in low collection rates.

Mr. Green Africa is an East African plastics recycling pioneer on a mission to turn waste into value, thereby integrating and strengthening a localised circular economy in emerging markets. Using innovative technology Mr. Green Africa creates a

transparent value chain by sourcing its plastic waste ethically and transparently whilst giving waste pickers their fair share.

Support from Co-op and Water Unite has allowed Mr. Green Africa (MGA) to build on its success and scale its business model. The company has created a new sourcing stream by integrating consumers from all income brackets incentivised to deposit plastic waste back into the MGA collection systems. MGA also plans to increase the capacity of the production plant to process 15-20,000 MT of plastic waste in the East Africa region.

By 2025, MGA is targeting 30,000 metric tonnes of plastic waste recycled per year with 500,000 consumers connected. This will create over 250 direct jobs and empower more than 10,000 waste collectors, whilst saving up to 30 million kg of CO₂ emissions per year.

*As per the FX rate on 18.10.22



Helping people like Nathan

Nathan Muelea lives in Kibera Slum where he runs a small shop as well as acting as an aggregator of plastic for MGA. His business model is to give people credit to spend in his shop when they bring plastic to him, which he then aggregates and sells to MGA, creating his own function within the circular economy solution that MGA provides.

Nathan's next project is to expand his plasticstoring capacity by building a platform on top of his shop, as his service is proving to be popular and beneficial to the community.

"We are delighted to bring together and align such diverse groups of partners and investors, including Co-op and Water Unite, to join this journey of Mr. Green Africa. It's a testament to the authenticity of the vision and purpose of what the company and its people stand for."

Keiran Smith, Co-Founder and CEO of Mr. Green Africa



Conclusion

Here at Co-op we will continue to press for urgent action to address the climate crisis in every sphere, from every level of government to industry and to local communities. Through this report we have sought to bring to the fore the impact that climate change is already having on the world's poorest communities, and to highlight the link that all of us in the UK have to those very same communities through the products and services we buy every day.

The issues associated with each of the pillars in this report - access to safe water, sanitation and hygiene for all, water scarcity, and water pollution - are all acute, are all directly related to the unrelenting advance of the climate crisis, and are all particularly relevant to businesses within the food industry.

We are proud of the impact of our partnerships with The One Foundation and Water Unite, and collaboration through WRAP's Roadmap towards Water Security for Food & Drink Supply. There is no doubt, however, that there is much more to do to ensure the sustainable management of water which will require collaboration from governments, businesses and communities to ensure a water secure future for all.

Water is the most precious resource, sustaining all life on earth. Water security is one of the most tangible and immediate threats that the food industry faces as a result of the climate crisis. For the sake of every generation still to come, there is absolutely no time to waste.



