Plastic pollution is causing a social emergency, as well as an environmental one.

Between 2000 and 2019, plastic waste generation more than doubled. Today, half of all plastic is designed to be used just once before being discarded. And yet some 2 billion people in low- and middle-income countries don’t have access to solid waste collection. They have little other option but to burn or dump it.

The results are wide-ranging and extremely harmful. Plastic pollution is directly impacting the achievement of over half of the United Nations’ Sustainable Development Goals. It is also contributing directly to the climate emergency through plastics production and emissions from the burning of plastic waste.

The impacts of plastic pollution

In part one, we explore these impacts through six different lenses – waste pickers, agriculture, recycling facilities, urban areas, tourism and fishing – which demonstrate the breadth and gravity of the social emergency plastic pollution is causing.

Waste pickers: Without the work of waste pickers collecting and sorting plastic, the impacts of plastic pollution would be even worse. Yet, as the Global Alliance of Waste Pickers highlights, it is waste pickers working on the frontlines who experience many of the problems of plastic pollution, as well as numerous human rights impacts. Furthermore, despite being the backbone of the collection and recycling sector in many contexts, they are rarely consulted in the policy-making processes that shape the waste management sector and affect their livelihoods.

Agriculture: Plastic pollution poses a significant ingestion, choking and entanglement hazard to livestock and affects crop growth through the obstruction of water and air flow. Studies have found that in some low- and middle-income countries, up to a third of cattle and half of the goat population have consumed significant amounts of plastic which they have mistaken for food.

Recycling processes: There are serious safety concerns regarding several of the recycling processes applicable to plastics, particularly when they are operated without effective, well-resourced and independent regulation. These processes include chemical recycling, pyrolysis, gasification and incineration.

Urban areas: Open burning increases the risk of heart disease, cancer, respiratory infection and other health conditions. Burning of waste is responsible for a significant fraction of outdoor air pollution, which collectively accounts for 4.2 million deaths a year. Dumped plastic prevents drainage, causes flooding and creates breeding grounds for disease vectors such as mosquitoes, flies and vermin. The incidence of diarrhoeal disease is twice as high for people living among mismanaged waste.

Tourism: Many low- and middle-income countries rely on tourism as a crucial source of income, jobs and foreign exchange. Plastic waste represents an existential threat to these businesses.
Fishing: Globally, as many as 820 million people depend on fisheries as a source of income to support food security. The most direct impact of plastic pollution is a decreased yield of fish, but there are other impacts such as damage to fishing gear and injuries to people.

For those living in poverty, plastic pollution is not only a threat in its own right, it is also a threat multiplier, amplifying existing threats to people’s health, local environments and livelihoods. For example, while the climate emergency has led to an increased likelihood of extreme weather events such as heavy rainfall, the additional problem of plastic pollution blocking drains and waterways means the resulting flooding can be far worse.

The plastics trap

Not only is plastic pollution a threat, it is also a trap. In part two, we explore how people living in poverty find themselves trapped in a vicious cycle where plastic packaging appears essential to their daily life as the solution to numerous social and economic problems: something that can help save energy, reduce food waste and support access to medicine. But this is not the whole story. This packaging is the same plastic waste that is having such devastating effects on their health and livelihoods, exacerbating the same problems it appeared to solve. No one should find themselves in this position. People living in poverty are caught in a plastics trap, and that trap needs to be sprung by reducing production of and reliance upon plastic.

As we work to spring the plastic trap and transition towards a circular economy we must ensure no one gets left behind. A just transition must ensure that people living in poverty can access the goods that they need and want, particularly in relation to water, sanitation and hygiene (WASH), without harming their health and livelihoods.
The informal waste sector

In part three, we explore the contribution of waste pickers in tackling plastic pollution and the challenges and opportunities they face. At least 20 million people earn an income as waste pickers, collecting, sorting, and recycling plastic. These waste pickers are the backbone of the recycling system, collecting approximately 60 per cent of all the plastic gathered for recycling globally. While we know that plastic production must be reduced, that shouldn’t mean waste pickers are left behind. There is a better way forward.

At a global level, only 14 per cent of all plastic packaging is collected for recycling, so there is scope to substantially increase collection and recycling, while also substantially decreasing the amount of plastic packaging produced. This must be achieved through building on and integrating the existing experience and expertise of waste pickers.

There will be some instances, in some cities and countries around the world, where a reduction in the volume of plastic in circulation will have an impact on waste pickers. In these cases, it is essential to ensure a just transition which supports and involves the informal waste sector to make a transition to better livelihood opportunities as we move towards a circular economy.

A global solution

In the absence of global action to tackle plastic pollution, the OECD projects that plastic consumption will almost triple, and the dumping and burning of plastics will almost double, by 2060.

To prevent this, and instead eliminate plastic pollution, we need global commitments that are binding on both governments and companies and which cannot be watered down or reneged on – strong targets that hold both governments and companies to account and set a level playing field for all.

Tearfund believes that the UN treaty on plastics provides an excellent opportunity to make real progress in tackling poverty, both by lessening the impact of plastic pollution on people living in poverty through reducing use of plastics, and by seizing the opportunity to create improved livelihoods from a circular economy in plastics. In part four, we explore the following six key areas which those involved in the treaty process will need to consider in order to achieve this.

Bring about an end to open dumping and burning

A core ambition for the treaty should be to bring about an end to open dumping and burning of all forms of solid waste, including plastics. This means creating the conditions that make open dumping and burning no longer necessary for individuals and no longer an option for companies and governments.

For plastics, this can be achieved in two main ways:

Firstly, by substantially reducing the amount of single-use plastics generated, prioritising alternative product delivery systems such as reuse and refill. Reductions in single-use plastics should prioritise the most damaging forms of plastic, notably the sachets that are the cause of large amounts of dumping and burning across low- and middle-income countries.

Secondly, by ensuring that the remaining plastic is collected and recycled safely and responsibly. Improvements in collection should integrate the informal sector so that formal systems build on the strengths of waste pickers’ existing systems for collection, sorting, and recycling, and enable their meaningful participation in new systems. Waste must not only be collected but value must also be recovered from it in ways that minimise harm to people, workers, and the environment. Both incineration and chemical recycling technologies pose significant health and environmental risks if operated in countries which lack independent, well-resourced regulation.

Protecting human rights

The treaty should include a clear affirmation of a rights-based approach. It must recognise the human right to a clean, healthy, and sustainable environment, something that is currently being denied to at least 2 billion people. Moreover, in recognition of the human right to just and favourable conditions of work and to protection against unemployment, the treaty must include specific provisions to enable greater protection and respect for human rights, particularly for the informal waste sector.

A just transition

As we seek to decrease the production of plastics, increase collection and recycling, and move towards a circular economy, we must ensure a just transition for workers in the informal waste sector and communities in low- and middle-income countries who depend on plastic. The treaty must ensure that where livelihoods are affected, plans are in place to support workers to make the transition to better livelihood opportunities; and that people living in poverty can access the goods they need and want, particularly in relation to water, sanitation, and hygiene (WASH), without harming their health and livelihoods.
Participation of affected groups

One of the best ways to anticipate and mitigate against unintended consequences is to involve affected communities, such as the informal waste sector, as key stakeholders in the negotiation process itself. Several statements have been made recognising the contribution of workers in the informal sector. The Secretariat and the Bureau of the International Negotiating Committee (INC) must now work with donor states to make their meaningful and fair participation as key stakeholders a reality.

Implementation and monitoring

The solution to the problem of plastic pollution will not look the same in all contexts. The treaty must have the necessary flexibility to allow national governments to make the right decisions for their country in their National Action Plans. However, it must not leave any room for governments (or companies) to renege on promises, or avoid the consequences of doing so. Mandating increased transparency is key.

Finance

Getting the financial aspects of the treaty right will be essential to achieving its ambitions in low- and middle-income countries, including through a dedicated multilateral fund. Adequate financial provision must be made to build capacity for a just transition and to ensure low- and middle-income countries can meet the obligations of the agreement.

Please join with Tearfund as we demand a treaty which:

- includes a comprehensive plan to tackle the impacts of waste and plastic pollution on people living in poverty;
- puts in place strong, legally-binding targets for reductions in plastic production, provision of waste management and support for waste pickers;
- makes adequate financial provision to build capacity for a just transition for workers in the informal waste sector and communities in low- and middle-income countries who depend on plastic;
- establishes a strong mechanism that holds both governments and companies to account and brings real change, quickly.
Introduction

Since the 1950s, an estimated 8.3 billion metric tonnes of plastic has been produced. That’s one tonne for each person born within the same timeframe. Plastic is prevalent in every area of our lives: in how we work and how we play; in how we eat and how we drink; in how we care for our bodies; and in how we travel about. It is impossible to avoid.

Plastics production is only the start of the problem. Approximately 80 per cent of that 8.3 billion metric tonnes has ended up in landfills, the oceans, loose in the environment or openly burnt. Less than a tenth has been recycled. Today, globally, we throw away about 300 million tonnes of plastic waste every year. That’s enough to cover almost 50,000 football pitches a day!

Thanks to prominent campaigners, organisations and movements around the world, far more people are aware of the impacts of plastic pollution on the environment than they were a generation ago, particularly the disastrous impacts on our marine environment and the ecosystems on which we all depend. Images of turtles and seals caught in plastic bags and whales with stomachs full of plastic waste have become all too familiar, even commonplace, and have demonstrated why reducing the production of plastic is vital.

But what about the impacts on humans? Global awareness of the price being paid by people around the world for our use of plastic has certainly lagged behind. Thankfully, though saddeningly, we are now starting to hear more in the media about these impacts. Tearfund has contributed to a range of articles and radio and TV broadcasts over recent years as more evidence emerges about the devastating toll that plastic is taking on both the planet and its inhabitants.

In communities throughout low- and middle-income countries, as with the climate emergency, the impacts of plastic pollution are being felt first and hardest by the world’s poorest and most vulnerable people: communities that are already struggling in the face of significant threats are being hit hard on social, economic and environmental levels as plastic pollution blights their health, livelihoods and neighbourhoods.

‘It is high time we turn our attention fully to one of the most pressing problems of today – averting the plastic pollution crisis – not only for the health of our planet, but for the wellbeing of people around the world.’

David Attenborough

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2 Ibid.
3 Ibid.
4 This is calculated using the methodology outlined in Tearfund (2020) The Burning Question. The weight of plastic waste is converted to volume using the same ratio used by the Everyday Plastic report, which is based on plastic as it is thrown from the household and before being mechanically crushed. The size of a professional football pitch is 105 by 68 metres, and it is assumed that to cover the pitch with plastic would require a depth of 10 centimetres.
Part one

The impacts of plastic pollution on people in poverty

For many in affluent areas, it can be easy to think that the issue of plastic pollution is exaggerated. Yes, there’s some plastic litter around and recycling boxes are often full to the brim on collection day, but then the rubbish is taken away and it is as if the problem has been solved: out of sight, out of mind. Having regular bin collections can shield people from the scale of the plastic pollution crisis globally. The reality is that very little of the plastic collected for recycling gets processed properly, even in high-income countries, and instead fuels landfill and incineration, or the harmful international waste trade.7

But many people in less affluent areas know that the issue of plastic pollution is by no means exaggerated. Some 2 billion people in low- and middle-income countries don’t have access to solid waste collection and so have little other option but to dump or burn it.8 A further 1 billion people don’t have controlled waste disposal, meaning even when it is collected (eg for a hefty fee by a private company), it is still most likely dumped or burnt. According to the World Bank, in low-income countries about 93 per cent of waste is burnt or discarded in roads, open land or waterways, compared to only two per cent in high-income countries.9

In many cities in low- and middle-income countries, the situation would be even worse without waste pickers, who assume a vital role in collecting, sorting and recycling waste.10 But they also face considerable challenges, including unsafe working conditions, low and insecure incomes, lack of social security and health insurance, fluctuations in the price of recyclable materials, lack of education and training opportunities, and strong social stigma.11

People would burn waste in the open since there were no other means of disposal. This would cause my children to cough and get sick, especially when soft drink bottles were burnt along with other plastics, causing thick, dense smoke. These big and rich companies should do something to help us keep our surroundings clean and stop their bottles from being burnt or lying around.12

Rubina, Pakistan

The lives of people in these communities, which are often already incredibly hard, are being made harder still by the scourge of plastic pollution. Tearfund works with local partners and grassroots organisations in more than 50 of the world’s poorest countries, and it is clear that plastic pollution is hitting the world’s poorest people the hardest, pushing more people further into poverty. Research by Tearfund suggests that between 400,000 and 1 million people die each year in low- and middle-income countries from diseases caused by mismanaged waste, including plastic.13 At the upper end of the scale, that equates to one person every 30 seconds.

Plastic pollution harms people’s lives in low- and middle-income countries in numerous ways, polluting the water, the air and the soil, and creating a growing public health emergency in many towns and cities around the world. Plastic pollution is also damaging agricultural and fishing livelihoods, represents a serious threat to livelihoods related to tourism, and is curtailing economic growth in low- and middle-income countries. It contributes directly to the climate emergency, both through the production of plastic and the emissions from the burning of plastic waste.

*Name has been changed.

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7 The Big Plastic Count, launched by Greenpeace and Everyday Plastic in the UK in 2022, found that 62 per cent of the pieces of plastic recorded in the count are either not collected or poorly collected for recycling by UK local authorities, and are likely to end up in landfill or incinerated. Only 12 per cent of this plastic waste is likely to be recycled at reprocessing facilities in the UK. More of the UK’s plastic waste (17 per cent) is being shipped overseas than being recycled at home. https://thelbigplasticcount.com/media/The-Big-Plastic-Count-Results-Report.pdf
10 There are many different terms used to describe these workers, including in the treaty mandate where they are referred to as ‘workers under informal and cooperative settings’. ‘Waste pickers’ is the term presently used by the Global Alliance of Waste Pickers, and so is likewise adopted in this briefing and Tearfund’s associated communications.
The impact of plastic pollution on waste pickers:

- Without the work of waste pickers collecting and sorting plastic, the impacts described in this paper would be even worse. Yet, as the Global Alliance of Waste Pickers highlights, the informal waste sector is at the frontline of experiencing many of these impacts.14
- Despite being the backbone of the collection and recycling sector in many contexts, many waste pickers live well below the poverty line in their home countries, far from the metric of a ‘living wage’.
- Despite their significant expertise and experience, waste pickers are rarely consulted in the policy-making processes that shape the waste management sector, or included in the design or implementation of corporate Extended Producer Responsibility (EPR) schemes, which threatens their livelihoods.
- Waste pickers are often excluded from the social safety net, including social security and health care. Workers in informal sectors such as waste pickers often lack access to formal banking systems or even identity cards, making them unable to access the loans or other financial services to help improve their income.
- Waste picking without protective equipment frequently results in injuries and, in some cases, fatalities for waste pickers.
- The personal safety and security of waste pickers – particularly women – is at risk, especially when collection takes place at night.

The impact of plastic pollution on agricultural livelihoods:

- Plastic pollution (including agricultural plastics15) damages agricultural livelihoods. It poses a significant ingestion, choking and entanglement hazard to wildlife and livestock and affects crop growth through the obstruction of water and air flow.
- Studies have found that in some low- and middle-income countries up to a third of cattle and half of the goat population have consumed significant amounts of plastic which they have mistaken for food.16 Alongside the suffering this causes the animals, this has dire economic consequences for farmers.18

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The impact of plastic recycling processes:

- There are serious safety concerns regarding several of the recycling processes applicable to plastics, particularly when they are operated without effective, well-resourced and independent regulation. These processes include chemical recycling, pyrolysis, gasification and incineration.
- Chemical recycling processes may involve heat, pressure, chemical solvents and potentially hazardous residues which result in a risk to human health if they are not carefully controlled.
- Anecdotally, there appears to be an increasing number of poorly controlled, small-scale pyrolysis facilities in low- and middle-income countries in recent years.
- Tars and chars from pyrolysis and gasification can contain highly hazardous substances that must be disposed of in hazardous landfills or through thermal processing.

The impact of plastic pollution on people living in urban areas:

- Burning of plastic waste on street corners, backyards and open dumps releases dangerous air pollutants, including black carbon, that increase the risk of diseases such as heart disease and cancer, respiratory ailments, skin and eye diseases, nausea and headaches, and damage to the reproductive and nervous systems. Outdoor air pollution is responsible for 4.2 million deaths a year,¹⁹ and academic estimates suggest that open burning of waste is responsible for a significant fraction of outdoor air pollution.²⁰
- Plastic waste blocks waterways and drains, which causes flooding, resulting in damaged homes and infrastructure.
- Plastic waste creates a risk to sanitation and affects access to clean water by clogging drains, thus preventing water flows that help flush through human waste and increasing the incidence of waterborne diseases such as cholera.
- The incidence of diarrhoeal disease – a leading cause of death in children under five – is doubled for those living among mismanaged waste.²¹
- Plastic waste that collects rainwater is a notorious breeding ground for mosquitoes that spread malaria and dengue.²²
- Plastic waste creates a breeding ground for flies, which transmit a number of diseases such as typhoid fever, leprosy and tuberculosis, as well as rats and other vermin, which can carry rabies, spread leptospirosis and hantavirus in their urine and droppings, and, through their fleas, transmit typhus and plague.

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Plastic pollution and poverty: A briefing to inform negotiations on a UN treaty on plastics

The impact of plastic pollution on livelihoods related to tourism:

• Many low- and middle-income countries rely on tourism as a crucial source of income, jobs and foreign exchange.

• Plastic waste represents an existential threat to these businesses; no one wants to spend time at a beach, river or lake choked with plastic. On the island of Bali, which is economically dependent on tourism, authorities are overwhelmed by up to 60 tonnes of plastic rubbish washing up on their beaches every day during the monsoon season.23

• Communities that depend on coral reef-related tourism are particularly vulnerable to plastic pollution. According to UNEP, at least 275 million people depend directly on reefs for livelihoods and sustenance.

The impact of plastic pollution on fishing livelihoods:

• Plastic pollution (including fishing gear24) damages fishing livelihoods, posing a threat to fish stocks, fishing gear, vessels and workers.

• Globally, as many as 820 million people depend on fisheries as a source of income to support food security.25

• The most direct impact of plastic pollution is a decreased yield of fish but there are other impacts such as damage to fishing gear and injuries to people.

• Another emerging threat to both fishing communities and human health is the accumulation of microplastics in fish stocks. The human health impacts of ingested microplastics are only just beginning to be understood but the precautionary principle suggests that action should be taken now.26

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24 For more on the problem of fishing gear see EIA (2022) Convention on Plastic Pollution. Essential Elements: Fishing Gear


26 See paragraph 108 (e) in Orellana, Marcos (Oct 2021) Right to science in the context of toxic substances. This is a report by the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes.
And for those living in poverty, plastic pollution is not only a threat in its own right, it is also a threat multiplier, making challenging situations even harder. It contributes to and amplifies existing threats to people’s health, local environments and livelihoods.

Here are just a few examples:

- The climate emergency has led to an increased likelihood of extreme weather events such as heavy rainfall. Add to this the problem of plastic pollution blocking drains and waterways and the resulting flooding is far worse.27

- The climate emergency has increased the number and spread of disease-carrying insects in many countries.28 Informal dump sites provide ideal habitats for these insects and an opportunity for them to come into contact with humans, resulting in greater incidences of insect-borne disease in the community.29

- The climate emergency is warming and acidifying our oceans while plastic pollution is destroying marine life and littering once picturesque beaches. This results in loss of livelihoods related to fishing and tourism.

- The dangerous air pollutant black carbon, which is released by the open burning of plastic waste, is also a major contributor to the climate crisis and its associated impacts. Open burning of waste (which includes plastic waste) produces 11 per cent of global black carbon emissions.30

- Plastic pollution is blocking drains and waterways, and clogging sanitation systems. This exacerbates the problems already caused by lack of access to water, sanitation and hygiene (WASH).

- Reliance on bottled water for access to clean water, and sachets for access to ‘affordable’ health and cleaning products creates additional plastic waste which contributes to all of the impacts outlined in this section.

**Sustainable development goals**

In 2015, all United Nations member states adopted the 2030 Agenda for Sustainable Development. It provides a ‘shared blueprint for peace and prosperity for people and the planet, now and into the future’.31 It includes 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries. In the 2019 report *No time to waste*, Tearfund examined the links between plastic pollution and the SDGs. We found that plastic pollution has a direct impact on over half of the SDGs; they simply won’t be met without tackling this crisis.

The year 2022 marks the halfway point on the journey to 2030 and yet sadly the most recent Sustainable Development Goals Report in 2021 showed that on many SDGs, ‘years, or even decades of progress have been halted or reversed’, largely due to the impacts of the Covid-19 pandemic. SDG 1, ‘End poverty in all its forms everywhere’, looks likely to fail. The global poverty rate is projected to be seven per cent in 2030, missing the target of eradicating poverty.12

Tackling plastic pollution firmly and rapidly through the UN treaty has huge potential to accelerate progress towards successful delivery of the SDGs by addressing both the direct impacts and the threat multipliers outlined in this section.

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27 Tearfund and WasteAid (2018) *Survey on the impacts of plastic pollution on poverty*. This survey of development professionals across the world asked respondents to indicate how frequently flooding occurred in informal settlements. Of the 34 respondents to this question, 31 (91 per cent) reported flooding incidents in the last two years. More than half (56 per cent) indicated that flooding caused by plastic was a serious problem in informal settlements, with at least four or five incidents per year where plastic was a factor. Kampala, Uganda, areas of West Africa and Bangladesh and various parts of India have all experienced flooding that is blamed partly on plastics blocking drains, leading to government bans on particularly problematic items.


29 Schmidt, Wolf-Peter et al (2022) *The effect of improving solid waste collection on waste disposal behaviour and exposure to environmental risk factors in urban low-income communities in Pakistan*. A Tearfund-funded study to estimate the effect of improving waste collection services on waste disposal behaviour and exposure to environmental risk factors in urban, low-income communities in Pakistan found that implementing a low-cost improved waste collection service with centralised waste processing in urban low-income communities can improve waste management at household level and reduce the exposure to synanthropic flies.


Countless grassroots movements around the world are drawing attention to these issues and pushing for solutions, legislation and corporate accountability.

**Malawi**

In Malawi, local networks of activists spotted large amounts of discarded single-use plastic on roadides and at important nature sites. The Malawi Creation Care Network campaigned on this issue and engaged with the Malawian government who decided to ban thin plastics. This was challenged in the courts by the plastics industry, but the Network hired their own legal team to defend the ban. The fight went all the way to the high court, who upheld the ban. The final ruling is likely to be made later in 2022.

**Brazil**

In Brazil, the volume of plastic waste clogging the Tejipió River causes frequent flooding of surrounding urban areas. Institute Solidare and the ‘We in Creation’ movement have responded both by helping local churches and the local community to produce and implement an emergency response plan for when flooding occurs, and by campaigning on flood prevention. Local churches, schools, academic institutions and community leaders have worked together to influence the City Council, Legislative Assembly of Recife and the state of Pernambuco’s Legislative Assembly to prevent the accumulation of plastic in the river. Local government is now taking the flooding of communities along the Tejipió River more seriously and the Tejipió River Basin Committee has been established. Local youth committees monitor the progress of cleaning and protecting the Tejipió River, and local campaigning continues through the Rio Tejipió Popular Forum. Their work is as necessary as ever, with the river flooding again this year, as the effects of the climate crisis take hold.

**Uganda**

In Uganda, the Eco Briks social enterprise in Masaka is tackling the problem of plastic waste head on, finding solutions that are increasing communities’ resilience to the plastic crisis. They are creating green job opportunities in the community: people are paid in cash for every kilogram of plastic that they bring. This incentivises recycling and helps those living below the poverty line, particularly with regard to accessing education. The plastic waste is then turned into pavers, furniture, lumber, household items and more. Eco Briks is also supporting the establishment of the Uganda Recycling Association for waste pickers. This seeks to remove the stigma associated with the informal waste sector, to give workers a voice in decisions that affect their livelihoods and a platform from which to lobby plastic producers. Eco Briks also runs the Plastic 4 Education programme, which provides children with the knowledge and green habits to make a difference today, as well as setting them up to be changemakers in the future.

33 Thin plastics are defined here as any plastics thinner than 60 microns.
Part two

Doesn’t plastic help people living in poverty?

“The possibilities of plastics gave some observers an almost utopian vision of a future with abundant material wealth thanks to an inexpensive, safe, sanitary substance that could be shaped by humans to their every whim.”

Plastic is moldable, it is light and strong, it is waterproof and it is versatile. It also lasts for hundreds or even thousands of years. These properties present a conundrum: plastic packaging can (for example) help save energy, reduce food waste and support access to medicine, but this is not the whole story. Communities should not have to choose between access to clean water and overwhelming plastic pollution caused by empty water bottles and sachets. Nor should the arguments used to support the use of plastic packaging in these positive ways be translated into broad claims in support of all single-use plastics.

Plastic has too often been presented as a solution to the symptoms of poverty when in fact it is contributing yet another cause. Each year, the plastics industry – and fast moving consumer goods companies – sell billions of items of plastic into countries that do not have the capacity to safely manage the consequent plastic waste. Many people in low- and middle-income countries find themselves caught up in a vicious cycle where plastic packaging (especially single-use bottles and sachets) appears essential to their daily life as the solution to numerous social and economic problems. Yet, in reality, plastic packaging is exacerbating these very same problems and having devastating effects on their health, their livelihoods and their environments. No one should find themselves in this position, forced to choose between short-term gain and long-term cost.

34 The Science History Institute, History and Future of Plastics https://www.sciencehistory.org/the-history-and-future-of-plastics
35 The first fully synthetic plastic, known as Bakelite, was patented in 1907 by Leo Baekeland. The first manufactured plastic is widely considered to be Parkesine, patented in 1862 by Alexander Parkes, but this was only a semi-synthetic material (cellulose nitrate) consisting of cotton fibres dissolved in nitric and sulphuric acids then mixed with vegetable oil.
36 The PET (polyethylene terephthalate) bottle was first patented in 1973 by American entrepreneur Nathaniel Wyeth.
38 Based on the height of a Coca-Cola bottle, which is 20.32cm. 500bn x 20.32cm = 100 million kilometres. The distance from the Earth to Mars ranges from 56 million kilometres to 401 million kilometres.
41 In fact, as global plastic production continues to rise it will inevitably continue to outpace and overwhelm any waste management systems put in place, as evidenced by the large volumes of plastic waste being exported by high-income countries, despite them having far more developed waste management systems than most low- and middle-income countries.
Sachets

There are many problematic single-use plastics being distributed in low- and middle-income countries. The ‘sachet economy’ is one of the most visible and harmful examples. Single-portion plastic sachets (made from a multi-laminate material) are used for products as diverse as coffee and washing powder. Introduced in the 1980s, today, 855 billion plastic sachets are sold every year, enough to cover the entire surface of Earth.42

The prolific use of sachets has been justified around arguments of accessibility: many families are unable to afford standard sizes of branded products, so single-serve sachets are a more accessible way for them to obtain these products.

But while sachets may bring convenience and, in some places, a level of affordability, they are a significant contributor to the waste crisis in many low- and middle-income countries. In Tearfund and WasteAid’s 2018 survey on the impacts of plastic pollution on poverty,43 plastic sachets were the most commonly identified item among mismanaged solid waste. The scale of the problem is also apparent from waste audits.44

Sachets are very rarely collected by waste pickers because they have low value and are virtually impossible to recycle in a cost-effective way. In many countries, these non-recyclable single-use plastics are synonymous with blocked drains and widespread open burning, as well as all of the other problems associated with mismanaged plastic waste outlined in this paper.

Water sachets in particular have been a mixed blessing in many low income countries, providing clean drinking water for people who otherwise could not afford it, while simultaneously contributing to the plastic waste crisis. However, the obvious longer term, more economically and environmentally sustainable solution is for governments and donors to increase investment in water, sanitation and hygiene (WASH), which will mean people can access safe water without having to buy it in plastic sachets.

Case study:
Caught in the plastics trap

In Tearfund’s 2020 report, The Burning Question, we met Miriam Abdalah*, a 38-year-old mother of five living next to the Msimbazi River in Tanzania.

Miriam pays for her waste collection, but it is an unreliable service and so she often has to dispose of her rubbish herself. Like countless others in Tanzania without adequate waste collection and disposal, Miriam sometimes has to resort to burning plastic waste: ‘When I finish using it, I sometimes just throw it, sometimes I burn it, I use it to make fire, I burn it in the charcoal, I use the sachet for lighting in the cooking.’ However, she immediately feels the impact. ‘When I burn the plastic to light the fire, there is a choking smell that comes and it will affect us sometimes in our lungs and we get a bit of a cough.’

It’s not only Miriam who suffers. Her children also get stomach upsets and fevers. Miriam blames the plastic waste. ‘The plastic containers get full of water, the water keeps the mosquitoes so they come much in the surrounding areas and then kids can get fever and other diseases.’

Without health insurance Miriam has to use her own money to cover her medical expenses for both the diagnosis of the illness and the treatment, money she would otherwise spend on ingredients for her business. This directly impacts the amount of food she is able to buy for her family.

The UN treaty needs to spring the plastics trap and release people from the vicious cycle of reliance on plastic packaging, so that people like Miriam are able to access the goods that they need and want, without harming their health and livelihoods.

*Name has been changed.

42 Taken from an open letter to politicians and global business leaders authored by A Plastic Planet. The figures cited in the letter are based on research conducted by Future Market Insights, which examined projections for the sachet packaging market from 2019 to 2027.
44 In a waste and brand audit carried out in the Philippines, a total of 54,260 pieces of plastic waste were collected, with most products being sachets. Greenpeace International press release, ‘Nestlé, Unilever, P&G among worst offenders for plastic pollution in Philippines in beach audit’, 22 September 2017.
Part three
Won’t reducing plastic use hurt those who currently earn an income from collecting and recycling it?

At least 20 million people earn an income as waste pickers – collecting, sorting and recycling plastic.45 They are the backbone of the recycling system, collecting approximately 60 per cent of all the plastic gathered for recycling globally.46 Despite the challenges they face, waste pickers have shown incredible entrepreneurship, resilience and ingenuity in their work. In several countries, initiatives working with waste pickers have resulted in an expansion in waste collection as well as improving their livelihoods, workplace safety and sense of dignity.47

Waste pickers are making a tremendous contribution to the fight against plastic pollution, cleaning up their communities and enabling companies to meet their collection targets. There is no doubt that without them the problem of plastic pollution in low- and middle-income countries would be far worse.48

Case study: Waste picker union and co-operative

Waste pickers have been organising together in Pune, India for more than 20 years, and KKPKP currently has more than 9,000 members. Over the years they have been involved in providing various different forms of waste and plastic collection in the Pune area, including door-to-door waste collection (through a contract with the local government) and collection of specific types of waste (through contracts with the private sector).

In 2021, they covered approximately 800,000 households (the majority of the local population), recycling 70,000 tonnes of material. Their work demonstrates the potential to improve both waste pickers’ livelihoods and solid waste management at the same time.49

*Kagad Kach Patra Kashtakari Panchayat

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49 For more information, see [Link]
So, won’t reducing the amount of single-use plastics harm these groups by threatening a vital source of income?

We believe it doesn’t have to; that there is a better way forward.

At a global level, only 14 per cent of all plastic packaging is collected for recycling.\(^5^0\) There is clearly scope to substantially increase collection and recycling, while also substantially decreasing the amount of plastic packaging produced. It is important to do both: academic studies show that we must push as much as possible on both reduction and collection in order to get close to eliminating dumping and burning.\(^5^1\)

The effort to increase plastic waste collection and recycling will require a key role for waste pickers who link the service chain (collection) to the value chain (recycling) in low- and middle-income settings.\(^5^2\) It is therefore important that the treaty includes a focus on improving the livelihoods of waste pickers and other workers in the informal waste sector, through their integration into plastic waste management systems and fair remuneration for their work. This should cover both municipal waste collection schemes, and Extended Producer Responsibility (see below). The Global Alliance of Waste Pickers and WIEGO have extensive experience and understanding of how to make integration work as effectively as possible.\(^5^3\)

Furthermore, unless they are specifically paid to collect non-recyclable plastic (which is unusual), waste pickers are only able to earn an income by collecting plastic that is recyclable. The billions of sachets sold in low- and middle-income countries are non-recyclable and are one of the most damaging forms of plastic waste.

However, in some instances, in some cities and countries around the world, there are nevertheless likely to be impacts on waste pickers if the volume of plastic in circulation decreases. In these cases, it is essential to ensure a just transition, which means that:

- before rolling out bans on or reductions in plastic materials, or making changes to collection and recycling infrastructure, plans must be in place to ensure that waste-pickers and other workers in the informal waste sector are supported to make a transition to better livelihood opportunities.
- waste pickers are able to collect the remaining plastic waste, through a requirement for producers to use highly recyclable materials and provisions on integration into collection schemes.

For more on what a just transition would look like for the informal waste sector see the Global Alliance of Waste Pickers’ position paper for the treaty’s first intergovernmental negotiating committee meeting.\(^5^4\)

### Whose waste is it anyway?

Extended Producer Responsibility (EPR) laws require companies to take responsibility for ensuring the collection of the waste they generate and to pay the full costs of the environmental impact of their plastic packaging, including disposal.\(^5^5\) This can also be described as the ‘polluter pays’ principle which says that the company who produces the plastic is responsible for dealing with it once it has been used for its intended purpose. Companies should be working with governments in the countries where they operate to establish mandatory inclusive EPR schemes and should be required to publish data on the amount of plastic packaging they are distributing. It is crucial that EPR schemes also integrate the waste pickers who are already operating in the context in question. The consequences of excluding them from EPR can include severe human rights impacts and a threat to their livelihoods.\(^5^6\) This is just one area where the UN treaty has the potential to make a real impact by establishing legally binding targets on EPR and ensuring waste picker integration is mandated.

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52 Ibid.


Part four
What can a global treaty do about it?

The obvious question, then, is this: what can be done about the impacts on humans of the plastic pollution crisis in the face of ever-increasing production and consumption of single-use plastics? In the absence of global action to tackle the issue, the OECD projects that global plastics consumption will almost triple from 460 million tonnes in 2019 to 1231 million tonnes in 2060.57 Meanwhile, mismanaged plastic waste will almost double over the same period, with the build up of plastics in lakes, rivers and oceans more than tripling.58 The impact of this increase on the lives of people living in poverty will be catastrophic.

Voluntary actions have proven insufficient. Not all companies have made commitments, and existing promises have not delivered meaningful change fast enough. A recent report found that ‘even the more ambitious commitments are not commensurate to the severity of the plastic pollution crisis. Most come with serious problems around transparency and accountability; companies fail to report independently verified data, and consistently miss their own targets’.59 Academic modelling confirms that current promises are completely inadequate to address plastic pollution.60

What is needed are global commitments that are binding on both governments and companies and which cannot be watered down or reneged on – strong targets that hold both governments and companies to account, and set a level playing field for all. This is something that many companies themselves recognise the importance of and have called for. And this is where the treaty, to be negotiated by UN member states over the next two years, comes in.

While it must not excuse a lack of immediate, sustained action on the part of governments and companies, the treaty clearly provides an incredible opportunity to bring about systemic, wide-ranging change on plastics and waste, to accelerate progress towards successful delivery of the SDGs and ultimately to bring about real change for people living in poverty.

Here are some of the key things the treaty can and must address.

Ending open dumping and burning

The opening burning of plastic waste releases dangerous air pollutants that are damaging to human health. A core ambition for the treaty must be to bring about an end to open dumping and burning of all forms of solid waste, including plastics. Some 2 billion people in low- and middle-income countries lack access to solid waste collection and so have little other option but to burn or dump it. This is not about targeting or punishing them for doing that; they are not to blame. Rather it is about creating the conditions that mean open dumping and burning is no longer necessary for individuals and no longer an option for companies and governments.

For plastics this can be achieved in two main ways:

1. By substantially reducing the amount of single-use plastics generated, prioritising alternative product delivery systems such as reuse and refill.

Reductions in single-use plastics should prioritise the most damaging forms of plastic, notably the sachets that are the cause of large amounts of dumping and burning across low- and middle-income countries. These efforts must also be careful to minimise unintended consequences, such as substitution with other damaging forms of throwaway packaging or reductions in access to goods and services for vulnerable communities.

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57 OECD (2022) Global Plastics Outlook: Policy Scenarios to 2060. At the time of writing, this report was available as a preliminary version ahead of its full publication later in 2022.
58 Ibid.
2. By ensuring that the remaining plastic is collected and recycled safely and responsibly.

Improvements in collection – whether through increases in access to municipal solid waste management or EPR for plastics – as well as shifts to alternative product delivery systems, should integrate the informal sector. Integration means that formal systems build on the strengths of waste pickers’ existing systems for collection, sorting and recycling, and enable their meaningful participation in the design, implementation, and monitoring of new systems.61 Integration initiatives can seize the opportunity to create improved livelihoods within a circular economy in plastics.

Waste must not only be collected but value must also be recovered from it in ways that minimise harm to people, workers and the environment. Recent independent academic research commissioned by Tearfund found that mechanical recycling approaches to recovering value from plastic waste are by far the safest and most tried and tested, as well as producing fewer carbon emissions. Both incineration (including co-firing in cement kilns) and chemical recycling technologies pose significant health and environmental risks if operated in countries which lack independent, well resourced regulation.62

The treaty must include ambitious goals in both of these areas resulting in legally binding and enforceable targets for those who are ultimately responsible.

**Protecting human rights**

The treaty should include a clear affirmation of a rights-based approach. According to the UN’s own principles, the treaty must leave no one behind,63 and must recognise the human right to a clean, healthy and sustainable environment,64 something that is currently being denied to at least 2 billion people.

Furthermore, in recognition of the human right to just and favourable conditions of work and to protection against unemployment, the treaty must include specific provisions to enable greater protection and respect for human rights. This is particularly important in the case of the informal waste sector, where workers who play a significant role preventing plastic waste being dumped and burnt experience numerous human rights abuses.

**A just transition**

As we seek to decrease the production of plastics, increase collection and recycling and move towards a circular economy, we must ensure a just transition for workers in the informal waste sector and communities in low- and middle-income countries who depend on plastic.

The treaty must anticipate the possible consequences for the informal waste sector relating to reductions in production of plastic materials and changes to collection and recycling infrastructure.65 The treaty must ensure that these impacts are addressed through provisions on integration (see below) and by making certain that, where livelihoods are affected, plans are in place to support workers to make the transition to better livelihood opportunities.66 The treaty must also ensure that people living in poverty can access the goods they need and want, particularly in relation to water, sanitation and hygiene (WASH), without harming their health and livelihoods.

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61 Department of Environment, Forestry and Fisheries (2020) Waste Picker Integration Guidelines for South Africa

62 Tearfund (2022) Safety first: Recovering value from plastic waste in low- and middle-income countries

63 ‘As we embark on this great collective journey, we pledge that no one will be left behind. Recognizing that the dignity of the human person is fundamental, we wish to see the goals and targets met for all nations and peoples and for all segments of society. And we will endeavour to reach the furthest behind first’ (from the 2030 Agenda for Sustainable Development). The resolution, ‘End plastic pollution: Towards an international legally binding instrument’, reaffirms the United Nations General Assembly resolution 70/1 of 25 September 2015, by which the United Nations General Assembly adopted the 2030 Agenda for Sustainable Development.


66 For more on what a just transition would look like for the informal waste sector, see the Global Alliance of Waste Pickers’ position paper for the first intergovernmental negotiating committee meeting on plastic pollution:
**Participation of affected groups**

One of the best ways to anticipate and mitigate against unintended consequences is to involve affected communities, such as the informal waste sector as key stakeholders in the negotiation process itself (and in the creation of National Action Plans in due course). The resolution that was passed at UNEA 5.2 in February 2022 recognised the ‘significant contribution made by workers under informal and cooperative settings to collecting, sorting and recycling plastics in many countries’.

At the Open Ended Working Group in May 2022, several countries spoke out in favour of the participation of waste pickers in the treaty negotiation process, recognising the huge amount of lived experience and expertise they have to offer to the process. The Secretariat and the Bureau of the International Negotiating Committee (INC) must now work with donor states to make their meaningful and fair participation as key stakeholders a reality.

**Implementation and monitoring**

At Tearfund we recognise that the solution to the problem of plastic pollution will not look the same in all contexts. For a low- or middle-income country where access to WASH is a key challenge, the journey will look different to that of a high-income country where habit and convenience are the main drivers of plastics consumption. Similarly, the need to ensure continued access to goods and services in settings where the plastics trap is commonplace may result in different approaches to those where it is not. The treaty must have the necessary flexibility to allow national governments to make the right decisions for their country in their National Action Plans. However, it must not leave any room for governments (or companies) to renege on promises, miss targets or avoid the consequences of doing so.

Furthermore, it is vital that the treaty does not let large corporations and producers off the hook for causing this crisis, instead increasing their accountability to governments and embedding the ‘polluter pays’ principle into the treaty. Mandating increased transparency is key: for example, through governments requiring companies to report the volume and composition of all plastics (including single-use plastics) that they distribute on a country-by-country basis.

**Finance**

As well as effective means of implementation and monitoring, the treaty must also include arrangements for the provision of finance, both for low- and middle-income countries and for key stakeholders, including waste pickers. Getting the financial aspects of the treaty right will be essential to achieving its ambitions in low- and middle-income countries, including through a dedicated multilateral fund. Adequate financial provision must be made to build capacity for a just transition and to ensure low- and middle-income countries can meet the obligations of the agreement.

The resolution agreed at UNEA 5.2 references many of the issues described in this paper and recommends that they be addressed by the treaty. Relevant extracts of the resolution and our response to them can be found [here](#).

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Part five

Conclusion

We have seen that plastic waste is not just a threat to our planet but also to its inhabitants. As with the climate emergency, the impacts of plastic pollution are being felt first and felt hardest by the world’s poorest and most vulnerable people: those who are the least well-equipped to deal with the consequences.

We have explored how plastic pollution is making life harder for them, pushing many further into poverty and hampering progress towards numerous SDGs. Plastic has too often been presented as a solution to the symptoms of poverty when it is, in fact, contributing yet another cause. Dreams of a plastic utopia have created a plastics trap for people in low- and middle-income countries.

The versatility and affordability of plastic, sold to us through slick marketing campaigns, has led to an explosion of single-use plastics, to the point that they are now unavoidable. We must now reject this narrative for the sake of those who are paying the price on a daily basis.

Tearfund believes that the treaty provides an excellent opportunity to make real progress in tackling poverty, both by lessening the impact of plastic pollution on people living in poverty through reducing use of plastics, and by seizing the opportunity to create improved livelihoods within a circular economy in plastics.

Please join with Tearfund as we demand a treaty which:

✓ includes a comprehensive plan to tackle the impacts of waste and plastic pollution on people living in poverty;
✓ puts in place strong, legally-binding targets for reductions in plastic production, provision of waste management and support for waste pickers;
✓ makes adequate financial provision to build capacity for a just transition for workers in the informal waste sector and communities in low- and middle-income countries who depend on plastic;
✓ establishes a strong mechanism that holds both governments and companies to account and brings real change, quickly.

Thank you.
‘This is the most significant environmental multilateral deal since the Paris accord. It is an insurance policy for this generation and future ones, so they may live with plastic and not be doomed by it.’

Inger Andersen, Executive Director UNEP