



In 2019, disaster-related economic loss amounted to \$122 billion globally



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In 2021, weather extremes were the main drivers of acute food insecurity in eight African countries, with 23.5 million people in crisis.



During the past 20 years, 2 billion people have experienced a major flood, and 1.5 billion, drought



Since the 1990s, climate shocks have more than doubled in developing countries already vulnerable to food insecurity and malnutrition



# WHAT IS THE PROBLEM?

Rising temperatures and extreme weather are having a huge impact on people who already live in some of the toughest places on earth.

We are all seeing more and more extreme weather events like floods and wildfires, which destroy homes and crops. But what is less well-known is that climate change has become a big cause of rising hunger around the world.

People already struggling to get the food they need can face complete and utter devastation when hit by a drought, flood or heatwave.

In 2020, extreme climate events drove 30 million people from their homes. If global temperatures keep rising to hit the 2°C mark, an additional 189 million people could face life-threatening hunger. In a 4°C warmer world, this could rise to as many as 1.8 billion people.

The climate emergency is a humanitarian emergency. Without change, there will be food crises globally due to the warming climate and biodiversity loss. Extreme weather events will become more frequent and growing seasons will be shorter.

Without climate adaptation strategies, farmers, fisherfolk and pastoralist communities face a difficult choice: migrate in search of other livelihood opportunities or stay put and face hunger.

If someone does choose to flee, this often means long, perilous treks to find a safe haven to start again. There is no guarantee that there will be food or land available when – if – they arrive. It means more people competing for dwindling land and water supplies, which can lead to conflict.

Conflict also forces people to flee from their homes and their land and move elsewhere. Creating a cycle of danger, violence and life-threatening hunger.

That's not to say that communities do not welcome people who have had to abandon their land. But it does mean that, at best, thousands of newly-arrived people then have to share land with struggling host communities and move elsewhere.

Since 2008, nearly 175 million people in some of the poorest and most fragile countries in the world have been forced to flee their homes due to climate-related disasters — a number that's growing year on year.

Beyond the immediate dangers of trekking across open country with your belongings on your back, facing bandits, thirst and starvation, people on the move can't get medical help and their children can't go to school which creates a never-ending cycle of poverty and life-threatening hunger.

The painful fact is the worst consequences of climate change are faced by the poorest – the people who have done the least to cause the problem in the first place.

Climate change leads to steep falls in food production, which means less income for small producers and higher food prices – putting a healthy diet beyond the reach of the poorest people on the planet.

#### And the problem is getting worse.

Countries across the world are experiencing more and more climate-related disasters. Severe drought is a leading cause of undernutrition in more than a third of countries that have seen a rise in hunger levels in the past 15 years.

In the Sahel region of Africa – which includes countries such as Niger, Mali, Chad and Burkina Faso - the rainy seasons are becoming more erratic. Droughts are leading to a decrease in food production while floods are causing outbreaks of diseases like cholera.

Climate change is a long-term threat to food security and nutrition. By 2050, the risk of hunger and malnutrition could rise by 20 per cent if the global community fails to act now to mitigate and prevent the adverse effects of climate change.



## WHAT IS THE SOLUTION?

Action Against Hunger is tackling the crisis. Right now.

#### **Farmer Field Schools**

We're teaching farmers about "climate-smart" growing techniques. From Cameroon to Pakistan, we have set up Farmer Field Schools. Our agriculture experts teach farmers climate-smart growing techniques, introducing nutritious, hardy crops that can better survive extreme weather conditions.

We provide practice plots for people to test what they've learned and, when ready, our students take seeds and tools we provide, and their new skills, back home to their own land.

#### **Pastoral Early Warning System**

We help herders dodge drought. In the Sahel region of West Africa, livestock accounts for 40 per cent of agricultural output. But climate shocks make decent pasture ever harder to find.

To solve this problem, we created the Pastoral Early Warning System (PEWS), an innovative system of real-time alerts that help herders find better grazing land.

We use satellite imagery of crops and water, which we combine with mobile surveys of people on the ground who feed in local market prices, trends in animal diseases and reports of bushfires.

We then analyse the combined data and send alerts to around 100,000 herders via radio, text, and community bulletins. This means they know what areas to avoid – and where to go to feed their livestock.

#### Hydroponics, vertical gardens and healthier soil

Even when rainfall is limited, it's possible for gardens to flourish and provide enough to feed families and livestock. By teaching innovative techniques – such as hydroponics, which uses less water and soil - our teams are helping farmers grow more crops with less water.

We also encourage the planting of 'vertical gardens' – vines that rely on a smaller plot of soil – and therefore water – but which yield lots of fruit and vegetables. Think runner beans: small footprint, big impact.

Droughts can reduce soil fertility, resulting in lower harvests and less nutritious foods. We're working with farmers to create healthier soil where crops can thrive.

In Pakistan we're introducing crops like sugar beets, which can help reduce salt levels in soil – a consequence of drought and rising tides. Around the world, our teams are also working with farmers to teach ways to produce more fertile fields, such as composting.

#### Farmer cooperatives and shared storage facilities

We also set up farmer cooperatives so farmers can rent larger plots of land for farming. In Uganda, farmers' groups get together to negotiate fair prices for their produce.

Each year, many farming communities face the hunger season - the time between harvests when food supplies run out. Climate change has made hunger seasons longer and more unpredictable. We're helping families make their crops last longer by supplying tools needed to dry and preserve their crops and storage facilities to keep them safe.



#### Harnessing the power of the sun

During a drought or a heatwave, the sun beats down. But that energy can be turned into a force for good. Using solar power, the sun helps to fuel everything from water pumps to irrigation systems.

And while we focus on helping communities prepare for crises and help build their resilience, we are of course ready to step in with emergency help when needed.

Our teams are ready to truck in food and water when disaster strikes. And we provide cash for families in trouble. This is because when a family is forced to flee by disaster, money is often the fastest and best way to help them find food, a place to stay, buy medicine and the other things they need to survive. It gives them the flexibility to help themselves.

#### Campaigning for change

Our escalating climate emergency is also a humanitarian emergency. Even if rising temperatures can be kept within 1.5°C (and current trends suggest we are on course for 2.7°C) – the world can expect a future of worsening global food crises, biodiversity loss, more frequent extreme weather events and shorter growing seasons. It is likely that fresh water will become scarcer and disease and malnutrition will rise, contributing to displacement of people and conflict between communities.

So, as well as running practical programmes which address climate change, we also carry out important advocacy and campaigning work to tackle its root causes.

We believe that all governments should speed up their work to limit the average rise in global temperatures to 1.5°C. We believe governments should implement climate adaptation strategies. And we believe all governments should commit more funding to tackle this issue which threatens the health, safety and nutritional status of people all around the world.



### **SABUDA'S STORY**

Sabuda, 50, lives in Gobindapur, Bangladesh with her husband, two daughters and a son.

Flash flooding, cyclones, and erosion have made it impossible to earn a living through crop cultivation as the village is underwater for half of the year, forcing Sabuda and her family to work in low-paid, heavy manual jobs.

"We have experienced many disasters," says Sabuda. "Cyclones, floods and erosion have destroyed our home more than eleven times now. Every year we spend three months with our land underwater, and it takes another three months to dry out and get back to everyday life.

"We struggled and starved for countless days. We could hardly get rice and salt during the days when we had no work. Our only way of surviving was to rely on hard labour, which was also seasonal.

"My daughter-in-law could not get enough to eat during her pregnancy. I had no idea how we could change our lives."

Action Against Hunger has helped Sabuda and her community with business training. We have shown communities new ways to increase food production using new climate change resistant farming methods. We have also created fish ponds in the community. This means families can get good food and even sell the surplus.

"We have learned how to grow vegetables in our yard," says Subuda. "Our entire family got involved in growing vegetables and working in the fish pond. After keeping vegetables for our family, I sell vegetables to our neighbours. By selling fish, we saved enough to buy cattle. I have chickens and a cow. Our lives have transformed so much. I can even buy chocolates for my grandchildren."

#### Contact us for more information, we would love to hear from you.

For individuals, trusts or foundations - Philanthropy@actionagainsthunger.org.uk or - if you are corporate - Partnerships@actionagainsthunger.org.uk

Together, let's take action against hunger.