Every inhabited region of the world is experiencing the effects of climate change which is one of the three major drivers of hunger, alongside conflict and poverty. The number of weather-related disasters has increased five-fold over the past 50 years. In 2020, extreme weather contributed to most of the world’s food crises and was the primary cause of acute food insecurity in 15 countries.

The climate crisis

Since the 1970s, global surface temperatures have increased faster than in any other 50-year period for at least two millennia, and to the highest levels for around 125,000 years. Around the world, hot extremes (including heatwaves) and heavy rains that cause flooding have become more frequent and more intense. Droughts and extended dry seasons are increasing in many places, as are tropical cyclones.

Our food systems are hugely vulnerable to these climate impacts given their dependence on climate-sensitive resources and, in particular, on smallholder farmers who produce most of the world’s food but are not always well-equipped to adapt. Extreme weather spoils crops or makes conditions impossible for growing. It exposes people and livestock to disease and deadly events such as mudslides, wildfires and drought, and forces many to leave their homes. In 2020, disasters — mostly caused by storms and floods — displaced 30.7 million people within the borders of their own country. This is the highest figure in a decade and more than three times the number displaced by conflict and violence.

Climate disasters and extreme weather events can rapidly become deadly emergencies, with high economic and human costs. Moreover, as climate change worsens resource scarcity, spikes food prices and disrupts incomes, it can exacerbate or trigger conflict and poverty. All of WFP’s life-saving and life-changing activities aim to prevent crisis and promote prosperity by improving people’s self-reliance and resilience to shocks and stresses, such as climate disasters and weather extremes.
Enabling early action

Anticipatory action at community level can reduce the average cost of an emergency by as much as two-thirds.\(^6\) WFP uses Earth Observation data,\(^7\) climate analyses and weather forecasts to gauge the health of vital ecosystems and anticipate events that could threaten food security. This early warning data and analysis means that we can act before disaster strikes — and enable governments and communities to do the same through:

- **Timely and useful climate information to people** in harm's way through mobile phones, communal radio programmes and networks so that they can plan ahead and limit losses

- **Forecast-based cash transfers to vulnerable households** who can use these funds to take anticipatory action — such as fortifying infrastructure, protecting livestock, stocking up on food and medicines, or moving family members to safety

- **Technical support to governments** so that they can strengthen their own early warning systems and forecast-based support to communities

Managing risks and improving resilience

Social assistance programmes enable households to better manage the risks they face. We work with governments around the world to develop and strengthen **shock-responsive national social protection systems** — which can reach more people than humanitarian organizations.

**Climate risk insurance** can also enable people to withstand shocks — helping smallholder farmers to absorb the effects of failed harvests and governments and humanitarian agencies to manage climate risks. Microinsurance provides payouts to smallholder farmers which enable them to buy food and invest in agricultural inputs or livestock feed.\(^8\) Macroinsurance allows governments and WFP to reduce the time they take to fund a response. In 2020, more than 2 million people in 13 countries were protected by climate risk insurance solutions developed or supported by WFP.\(^9\)

When combined with **other risk management approaches**, such as access to natural capital, information and financial services, insurance can increase people's longer-term resilience and food security.\(^8\) Evidence from the R4 Rural Resilience Initiative, for example, shows that women doubled their savings capacities over three years.\(^8\) And in Malawi, the number of participating households not resorting to negative-coping strategies after a shock increased from 40 percent to 72 percent.\(^8\)

Protecting people & planet

Future resilience and prosperity for all depends on protecting both people and planet — enabling communities to thrive in harmony with nature. In 2020, WFP enabled more than 1.6 million people to access **sustainable energy services**,\(^9\) promoting clean cooking solutions; providing households and schools with more efficient, less-polluting appliances; and connecting smallholders to energy equipment and services that improve food production, processing and storage. Together with **training in the sustainable management of landscapes and natural resources**, this support helps people to strengthen their livelihoods and protect the environment for generations to come.

WFP also invests more than US$120 million every year in supporting **community-led landscape restoration projects** that rehabilitate ecosystems (which act as natural buffers against climate shocks and stresses) and protective infrastructure (such as reservoirs and flood protection walls).\(^9\) These **nature-based adaptation solutions** help to reduce their vulnerability to climate shocks and hazards while also protecting biodiversity and promoting social cohesion. Since 2014, communities supported by WFP have rehabilitated 1.5 million ha of land and created as many as 55,000 ponds, wells and reservoirs.\(^8\)

---


\(^3\) Global Report on Food Crises 2021


\(^6\) Laganda, G., Climate change topic brief (internal)

\(^7\) Bugler, W. 2020, January 18. What does Christmas look like from space? Acclimatise News

\(^8\) WFP. 2021. Does climate insurance work? Evidence from WFP-supported microinsurance programmes

\(^9\) WFP. 2021. Annual Performance Report for 2020

\(^10\) Average between 2014 and 2019. In: Laganda, G., Climate change topic brief (internal)