

Climate change impacts

Resource sheet 1a

Water

Although it isn't yet possible to say that any single weather event has been caused by climate change, the likelihood of extreme climate-related disasters, such as droughts, floods and storms is increasing. For example, in countries such as Ethiopia and Somalia, droughts are becoming more frequent and more severe due to climate change.

Climate change is likely to have an increasing impact on freshwater supplies in many parts of the world. For example, in some areas, rising sea levels could cause underground and surface fresh water sources to be contaminated by salt water.



Image info: A woman collects water in Somalia. Somalia has been suffering from a drought since 2016. Oxfam is working with local partners to support communities affected, for example, by installing desalination plants activated by solar energy.

Credit: Pablo Tosco/Oxfam

Homes



Image info: A woman walks through flooded land in Bangladesh to get back to her home.

Credit: Peter Caton/Oxfam

As surface air temperatures increase, the sea absorbs more heat from the atmosphere and becomes hotter. This causes it to expand and sea levels to rise. Melting glaciers and ice sheets on land, for example in Greenland and Antarctica, also contribute to increasing sea levels.

Many places in the world are at risk from rising sea levels. Bangladesh is particularly vulnerable. It regularly experiences severe tropical storms and large areas of the country are low-lying.

Some communities will continue to try and adapt to the effects of climate change, others may be forced to leave their homes and move elsewhere.

Food

Today one person in nine around the world goes to bed hungry. Climate change is one of the leading causes of hunger. Extreme climate-related disasters such as droughts, floods and storms, as well as long-term changes in temperatures and rainfall, are affecting the availability of food.

The number of hungry people worldwide has recently grown to 821 million and this number is expected to continue to rise if countries fail to tackle climate change and support people to adapt to its impacts.¹



Image info: A young boy eats rice at home in the Pouh Town area of Grand Gedeh county, Liberia.

Credit: Kieran Doherty/Oxfam

¹ www.fao.org/state-of-food-security-nutrition/en/

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Farmers

The millions of small-scale farmers around the world are particularly at risk from climate change. Rising temperatures and changes in rainfall patterns are forcing farmers to change what crops they grow, and leave them guessing about when to plant. Extreme weather events, such as heat waves, drought and floods, are occurring more frequently and are becoming more severe.

As well as affecting the production and quality of crops, these extreme events can also damage or destroy systems for transporting and distributing food. This in turn impacts on the supply and availability of food and increases food prices. Soon climate change will affect what all of us eat.



Image info: A rice farmer in Vietnam.
Credit: Nguyen Quoc Thuan/Oxfam

Fishing



Image info: Joel used to be a fisherman. He lost his home, boat and fishing equipment to Typhoon Haiyan. Now he earns a living selling scrap metal that he finds along the shore.
Credit: Eleanor Farmer/Oxfam

Fishing communities are particularly vulnerable to the impacts of climate change and the risk of disasters. On 8th November 2013, Typhoon Haiyan hit the Philippines. Strong winds, heavy rains, floods and tidal waves caused widespread damage across much of central Philippines.

More than 8,000 people were killed and four million were forced from their homes. Nearly three quarters of fishing communities were severely affected, with 30,000 boats damaged or destroyed. The typhoon also damaged mangrove forests and coral reefs which are important fish spawning grounds.

The Philippines are regularly hit by typhoons but government records suggest that these storms are getting stronger. Increasing evidence suggests that with climate change, super-storms such as Typhoon Haiyan will become more frequent.

Beaches

Many of the world's beaches and the communities who live there are being threatened by coastal erosion and rising sea levels. Coastal erosion is a natural process where the coastline is worn away by wind, waves and tides, causing it to retreat. An increase in extreme weather events will cause the rates of coastal damage to rise.

In the Pacific, entire islands are having to evacuate, as sea levels rise and contaminate the soil with salt. Two of the islands that make up Kiribati (one of the Pacific island nations) have already been lost to the waves. Many of the world's major cities are near the coast; around 10% of the world's population live in coastal areas that are less than 10 metres above sea level.²



Image info: Boys play on the beach at Barra de Sirinhaém, Pernambuco, Brazil
Credit: Tatiana Cardeal

² www.un.org/sustainabledevelopment/wp-content/uploads/2017/05/Ocean-fact-sheet-package.pdf