

# Finding out about... the impacts of climate change



Year 5 Stewardship



### Click on the buttons to find out about...

2

...the possible impacts of climate change.

...CAFOD case studies. The impacts of climate change around the world.

exit

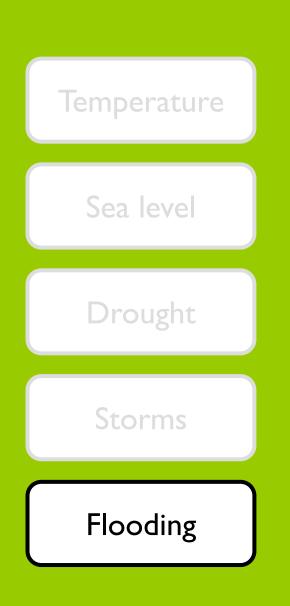


Climate change could affect different parts of the world in different ways.

CAFOD works with local organisations to support poor communities in more than 40 countries worldwide. Some of them are already dealing with the effects of climate change on health and livelihoods in the poorest communities on Earth today.

Scientists have identified some of the likely effects of climate change.

Click on the buttons to find out more. ⊠ back to main menu



Flooding may increase in some areas.

More intense and unpredictable rainfall could produce more flash floods. In coastal areas flooding could occur due to more frequent storms and higher sea levels.

Flooding affects lives - washing away homes, schools and even people. People also need clean, fresh water to live. If flood water contaminates the drinking water supply many people can get sick.



Scientists say sea levels could rise by the end of the century. There are two reasons why this could happen.

I.As the water in the oceans warms, it expands and takes up more space.

2. Ice from the polar caps and from glaciers is melting, adding more water to the seas.

People living on small, low-lying islands may have to evacuate and millions of people in low-lying areas will be at risk of flooding.

Salt from rising sea levels could pollute ground water making it undrinkable and more difficult to grow crops.



Droughts are likely to be more frequent and more intense.

In some areas there will be less water available for drinking and to water crops because there will be less rain.

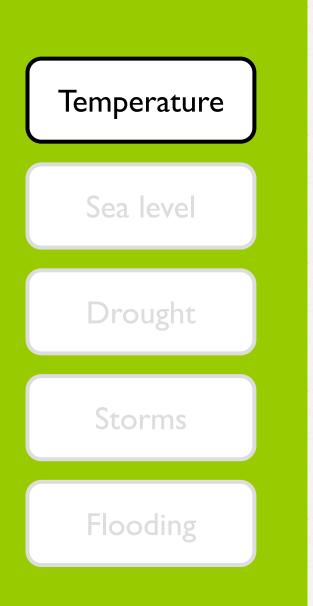
This could mean water shortages for up to four billion people and food shortages for 250 million people.\*

\*Source: Stern Review on the economics of climate change, 2006.



Intense storms, know as hurricanes, cyclones and typhoons (depending on where they occur in the world) could happen much more often and be more intense as a result of rising sea surface temperature.

> Storms can be devastating to the lives of people living in the affected area; with damage to homes and schools and loss of lives.



The earth is getting hotter – the first decade of 21<sup>st</sup> century has been, by far, the warmest decade since records started in 1850.

Experts agree that temperature rises must be below a rise of 2°C to help limit dangerous climate change.

Click on the map to read about the different impacts climate change can have and how CAFOD is helping communities adapt and prepare.

UK

### Guatemala Niger • Nicaragua

#### Bangladesh

Cambodia

**Mozambique** 

 $\boxtimes$  back to main menu

## NIGER

Over three quarters of Niger is desert. The weather is very hot and there are powerful dust storms.

In 2005 the **drought** was much worse than normal and 3.6 million people struggled to find enough food to live. That's more than the whole population of Wales.\*

CAFOD worked with local organisations to set up community food banks and feeding centres for malnourished children during the drought. This helped communities get through the hungry season in 2006.





'Half moons' help the soil absorb more water CAFOD also helped people to adapt and prepare for changes in the climate by growing different types of crops and using the local method of digging 'half moons' into the land to help the soil absorb more water.

It is difficult to say when and where there will be drought. There could even be more rainfall across the region in the next 50 years. However scientists warn that, in the long term, the region will have more regular and severe droughts. This means that methods for adapting to changing weather conditions will become even more important.







Map

Mozambique

In 2000 Mozambique experienced terrible flooding across most of the country. One of the worst-affected places was Chamanculo, a shanty town near the capital Maputo.

The name Chamanculo means 'huge bath' because the ground there absorbs hardly any water.

After the floods, CAFOD partners, the Franciscan sisters began a project to move people to higher ground to protect them from future floods. The new area was dusty and windy but eventually 1,777 families decided to move. Everyone helped out with the building to make sure all the families had homes. CAFOD suggested planting trees to improve the desert-like soil. Groups of people were trained to plant and care for trees like mango and orange, which grow well in the dry conditions. "I have seen a <u>BIG</u> difference in our neighbourhood since we started to plant trees. Before the area was bare, now it is full of life. Thank you for giving us the gift of trees " Elisa Magaia

Map

"Learning to look after plants is caring for the future of the World 1" Rafeal Malunga

🚰 Untitled - Message (Plain Text)

TOIL

Cc ....

Elle Edit View	Insert	Format Iools	Actions Help	
	+	- A B	Ⅰ 및   医营强性性弹的	1 <del>1</del> 2
🖾 Send 🔓 🎯	XB	230	@&/≥!!!* ⊘!⊇:	Options A <sup>‡</sup> 🙆 🚽

#### Subject: Bangladesh – Monsoon flooding



Every year the monsoon rainy season floods up to one third of the country. It is really important to farmers as it helps make the land fertile. Rice is grown in the rainy season and wheat and vegetables are grown in the winter months.

In 2004 and 2007 the flooding was much worse than usual. It affected 40 of the country's 64 districts. Almost five million people, about the same number of people that live in the whole of Scotland\*, were affected; 80 schools were completely ruined and another 2,000 schools were partially damaged.





🚰 Untitled - Message (Plain Text)					
Eile Edit	View Insert Format Iools Actions Help				
1					
I⊡I≦end	🚽 🛃 🔉 🖟 🛄 🔛 🕼 👎 🧏 🕴 🤻 🍅 🖻 Options A <sup>‡</sup> 🕜 🖕				
Tours					
<u><u> </u></u>					
	J Den ele de ele				
Subject:	Bangladesh				



CAFOD helped by providing clean water, food and materials so that people could build shelters. CAFOD has also worked with local organisations to build schools on stilts that can also be used as cyclone shelters!



Scientists believe that the effects of climate change such as more cyclones, stronger monsoons and rising sea levels - could make flooding in Bangladesh much worse and more difficult to predict.







#### Protecting trees.

Trees and plants could be described as the green lungs of our planet. They do a brilliant job of turning  $CO_2$ , water and energy (from sunlight) into oxygen. This process is called photosynthesis.

In Cambodia CAFOD is helping to stop deforestation.

Villagers in O'Chra village collect resin by tapping trees. This means making a cut in the wood and collecting the resin that drips into a container. Most of the resin is sold to paint onto boats to make them waterproof.

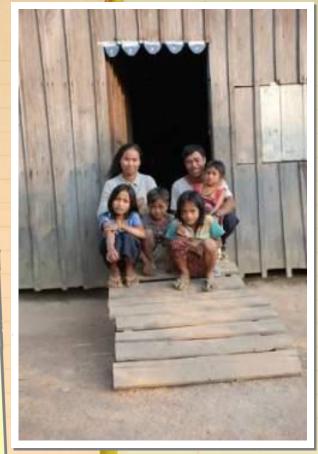
But illegal tree-logging companies have put the villagers under pressure. They want the resin tappers to sell their trees so that they can be cut down for wood. Some of the farmers were told that if they didn't sell their trees, they would be cut down anyway and then they'd get nothing!



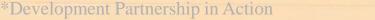


Some of the tappers sold some of their trees because they felt they had no choice. This meant they could no longer make a living from them or pass them on to their children. Large parts of the forest have been destroyed.

> CAFOD'S partner, the DPA, runs a project helping farmers stand up for themselves and learn about their rights.



This helps them protect the trees from being cut down and therefore protect their future.





## THE UK

Climate change is often in the news in the UK especially when weather events are extreme or unusual.

A survey in 2007 found that 88 per cent of people in the UK believed that climate change was happening and 68 per cent believed that they had seen personal evidence of DID

climate change.

#### CAFOD's work

Climate change affects us all – but those hit first and hardest are people living in poverty. CAFOD works with local organisations in developing countries who are already tackling the effects of climate change.

CAFOD also campaigns to make sure our climate change laws are strong and effective in the UK. CAFOD also encourages people to look at how they can make changes to their own lifestyles and become part of the climate-change solution.





Someone in the UK puts the same amount of carbon dioxide into the atmosphere in 22 weeks that someone in Tanzania does in their whole lifetime?

NEW ECONOMICS FOUNDATION

Map

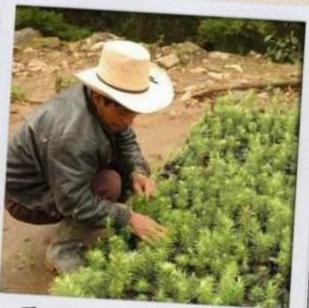
Guatemala

In October 2005, Hurricane Stan caused severe floods and landslides. Many people lost their lives and whole communities were affected.

CAFOD is supporting organisations that encourage people to protect their environment and promote tree planting. This is called '**reforestation'.** Up to 20,000 seedlings are planted up to 20,000 seedlings are planted each year. The trees act as live barriers, the roots help to stop landslides and the branches act as wind breaks.







Trees act as live barriers in hurricanes!





### NICARAGUA

In 1998 Hurricane Mitch hit Nicaragua. Many people died and almost one million people were made homeless\*.

CAFOD is supporting the John XXIII Institute, which helps communities prepare for future emergencies, for example when a hurricane hits.

They have trained people in first aid and rescue methods and have even acted out an emergency so that people could practice the skills they have learnt. Emergency first aid kits, rescue harnesses, torches and blankets are provided so that this can happen successfully.

Fifteen-year-old Darling Urbina Arevalo received training in first aid. Her neighbours are training to fight fires, build a rope bridge and set up an emergency care centre. People now feel safer because they are prepared.





WHAT CAN YOU DO TO BE PART OF THE TO BE PART OF THE CLIMATE CHANGE SOLUTION?

ILLUSTRATION S B1 George Onions and Andy Smith

PHOTOS BY -Eleanor Church \* Peter With Laura storr Marcella Haddad Annie Bungeroth X \* Mel Beardon Alert.net and \* Purple Flame



School eco club

## Finding out about... the impacts of climate change