

# CLIMATE CHANGE ACTIVITIES



## HOW TO USE THIS RESOURCE

This resource is designed to raise awareness of climate change, the effects of climate change and how this might impact the food we eat. We recommend reading the 'Climate Change Explained' document beforehand to familiarise yourself with the terminology.

The activities can be done together, or you can pick and choose the activities best suited to the group.

**This activity would help evidence criteria;**

- B2.0** Our School Nutrition Action Group has led a review of food culture in our school, and actions have been agreed
- B3.0** We use the topic of healthy and sustainable food as a theme for assemblies
- S3.3** Our pupils explore the ethical and environmental issues around food choices and this is linked to changes in our school meals

## Learning Outcomes:

- To understand what climate change is and how it impacts us
- To understand how extreme weather affect people and our food systems around the world differently
- To understand how we can help prevent climate change from getting worse

## You will need

- Laptop for video

**Other resources this FFL activity links to (see Appendix):** Extreme Weather Examples, Role Cards, Problem Tree, Solution Tree

### 1. Discuss what we mean by 'climate change'

**Climate change** (or **global warming**), is the process of our planet heating up. Scientists estimate that since the **Industrial Revolution**, human activity has caused the **Earth** to warm by approximately **1°C**. While that might not sound like much, it means big things for people and wildlife around the globe.

Unfortunately, rising temperatures don't just mean that we'll get nicer weather – if only! The changing climate will make our weather more **extreme** and **unpredictable**. As temperatures rise, some areas will get wetter and lots of animals (and humans!) could find they're not able to adapt to their changing climate.

**Show a video explaining what climate change is. Here are some options:**

**What is Net Zero? CAFOD:**

<https://www.youtube.com/watch?v=VqZD-mnC5Gk>

**What is the Greenhouse Effect? NASA Climate Kids:**

<https://climatekids.nasa.gov/greenhouse-effect/>





## 2. Look at Extreme Weather Examples and display pictures of climate change effects.

### Discuss:

- Where you think in the world this might be happening?
- What is happening in this picture?
- Discuss what is happening regarding food and farming in each area, e.g. flooding/ drought / forest fires / tsunami.
- What happens after extreme weather?
- Can you think of any more extreme weather examples? Perhaps you can look on the internet for examples.

## 3. Walking in someone else's shoes - Role Cards

- Lay out Role Cards onto the table for everyone to see. Allow time for students to familiarise themselves with the different people described on each card (includes name, age, country, living situation).
- Explain that you are going to read out the different effects of climate change, as seen in Activity 2 Extreme Weather Examples above (e.g. flooding, drought etc.) After each one is read out, students pick out the Role Cards of who could be affected.
- Discuss each Role Card individually, thinking about what will be affected for that character, and the consequences.
- The aim of the activity is to think about the life of each character. The children will be able to see the Role Cards that were picked out more often, and those that weren't picked out at all. By the end of the activity it should be clear to the students the scale of inequality experienced by people living around our world, and how climate change affects us in different ways i.e. those being hit worst by climate change are those most vulnerable.
- You can also apply this to pupil's own lives and think about ways in which we are affected by climate change in this country. Explaining that although they may be less obvious, they are still there.



## Role Card Example

### CLIMATE CHANGE EFFECT: DROUGHT

**Role card:** Mahlet, 10, Ethiopia, lives on a small farm with her family.

**Consequences:** Mahlet's farmland will dry out. Their crops won't grow. They depend on their crops for food.

## 4. Fill in the Problem and Solution Trees to display in the school:

### a) Fill in the Problem Tree – this can be done as one group or in smaller groups

Ask students to think about all the different causes and effects that contribute to climate change (e.g. transport emissions and high intensity food industry, our planet is getting warmer and deforestation)

### b) Discuss what we can do to help tackle these problems of climate change and fill in the Solution Tree – this can be done as one group or in smaller groups

Ask students to think about various solutions which can help solve climate change (e.g. walking and cycling and changes in law = lower congestion and pollution and more awareness and education around climate change)

## 5. Discuss how the SNAG can share their new learning on climate change with the rest of the school to raise awareness, such as:

- Assembly
- Competition to waste fewer of our resources (electricity, paper etc)
- Celebrate theme days and think of new activities to raise awareness (World Food Day / Earth Day)





# APPENDIX





# EXTREME WEATHER EXAMPLES

## DROUGHT





# EXTREME WEATHER EXAMPLES

## FLOODING





# EXTREME WEATHER EXAMPLES

## FOREST FIRE



# EXTREME WEATHER EXAMPLES

## SNOW STORM





# EXTREME WEATHER EXAMPLES

## TSUNAMI





# EXTREME WEATHER EXAMPLES

## TORNADO





# ROLE CARDS



## ROLE CARD 1

**NAME:** MAHLET ALI (GIRL)  
**AGE:** 13  
**COUNTRY:** ETHIOPIA

**DESCRIPTION:** You live in a small, village with your mum, dad, sister and brother. You walk to and from school each day. Your dad is a farmer. After school you help him to grow vegetables on the small farm. You depend on these vegetables for food to eat. You cook them on a fire because you do not have an oven. You and your mum also bring vegetables to the market to sell and earn some money for your family. When it does not rain, the vegetables do not grow. You are often hungry. Sometimes you are so hungry that you cannot go to school.



## ROLE CARD 2

**NAME:** DAWIT (BOY)  
**AGE:** 11  
**COUNTRY:** ETHIOPIA  
**CITY:** ADDIS ABABA

**DESCRIPTION:** You live with your mum and dad. Your dad works in an office. You get the bus to school every day. Your favourite subject in school is computers. After school your mum cooks you dinner in the kitchen while you play computer games. You like to help her do the shopping at the market. When the weather is warm you go to the big hotel to use their swimming pool.

## ROLE CARD 3

**NAME:** JACK (BOY)  
**AGE:** 9  
**COUNTRY:** NORTHERN IRELAND  
**CITY:** BELFAST

**DESCRIPTION:** You live with your dad and brother. Your dad is a teacher in the secondary school. He brings you to school every day in his car. After school you do your homework, play the PlayStation and watch television. Your dad cooks you dinner with food that he has bought in the supermarket. You went to Spain on an aeroplane for your holidays last summer.





## ROLE CARD 4

**NAME:** EILEEN (GIRL)

**AGE:** 12

**COUNTY:** CORNWALL



**DESCRIPTION:** You live with your mum, dad, two sisters and brother. You cycle to school every day. There was a bad storm last year that closed your school for two days. Your dad owns a small fishing boat. His fishing boat got damaged in a bad storm last year. Now he cannot catch as many fish so it is difficult for him to make money. Sometimes you eat the fish that your dad catches for dinner. Your mum loves to grow vegetables which you love to eat. If your vegetables do not grow your mum buys food in the supermarket.

## ROLE CARD 5

**NAME:** SANVI (GIRL)

**AGE:** 12

**COUNTRY:** BANGLADESH

**CITY:** DHAKA

**DESCRIPTION:** You live in a small apartment with your mum, three sisters and four brothers. You used to live in a small village. Your family depended on the food that you grew on your farm. Changing weather made it too difficult to grow food. Your family had to move to the city to find work. You do not go to school. You and your mum work in one of the many big factories in the city making clothes. You need to earn money to help buy food for your family. Big trucks come each day to take the clothes you make to the airport. The clothes are brought to Europe and America.

## ROLE CARD 6

**NAME:** ACHARA (GIRL)

**AGE:** 7

**COUNTRY:** THAILAND

**DESCRIPTION:** You live in a coastal village with your extended family. Your mum and dad work in a tourist hotel 10km away. They work long hours so you spend lots of time with other friends and family who live near you. Members of the village come together to cook dinner in the evening and share the food equally. Your sister loves to read you books. Your village had to be re-built after a tsunami hit the coast 4 years ago. Most of the buildings were destroyed and your family lost all their belongings.





## ROLE CARD 7

**NAME:** ANGELA (GIRL)

**AGE:** 10

**COUNTRY:** MALAWI

**DESCRIPTION:** You live with your mum, dad, sister and brother. Before you go to school, you walk 2km (1 hour) to collect water at the local river. Your mum and dad are farmers. After school, you help your mum by doing the chores in your house, so that she can work on the farm. You cook the dinner for your family on a fire because you do not have electricity. When it does not rain, the crops do not grow, so you have nothing to cook. You often have to drink dirty water which makes you sick. When you are sick, you miss school.



## ROLE CARD 8

**NAME:** RAJU (BOY)

**AGE:** 12

**COUNTRY:** PAKISTAN

**DESCRIPTION:** A huge flood washed away your home. For the past year you have been living in a tent with your parents, two aunts, four brothers and three sisters. You have not been able to go to school since the flood happened. You want to return home but your family does not have enough money to build a new house. You are scared that heavy rains and floods will come again while you are living in a tent. Your family must cook food on a fire because you have no kitchen or electricity.

## ROLE CARD 9

**NAME:** JAMES (BOY)

**AGE:** 8

**COUNTRY:** USA

**CITY:** NEW YORK

**DESCRIPTION:** You live in a big apartment with your mum and sister. You get the bus to school each day. Your mum owns a clothes shop. She imports clothes from Bangladesh to sell in her shop. Your mum is very busy so your sister usually buys you dinner from the shop and cooks it in the oven. At the weekend you like to go to the cinema with your friends. It gets cold in the winter in New York. When the snow comes you love throwing snow balls at your friends.

## ROLE CARD 10

**NAME:** HELEN (GIRL)

**AGE:** 13

**COUNTRY:** AUSTRALIA

**STATE:** NEW SOUTH WALES

**DESCRIPTION:** You live in a house with your mum, grandma and 2 brothers. You walk to school each day with a friend and normally go to after-school activities. Your favourite sport is athletics. Your mum works at the local doctors' practice. Your grandma cooks dinner each night and you eat with all your family. In the summer it gets extremely hot in this part of Australia. It is a big worry that there will be bushfires due to the heat. Last year, you were very lucky the fires didn't reach your town.

## ROLE CARD 11

**NAME:** GABRIEL (BOY)

**AGE:** 10

**COUNTRY:** PHILIPPINES

**DESCRIPTION:** You live with your mum, dad, two sisters, brother, and two cousins. You have a community of lots of other families around you who you celebrate many festivals and traditions each year with. You go to church every Sunday and 2 other times during the week. You go to school every morning and come home for lunch to eat with your whole family. In the afternoon you either play football or go with your dad to help members in the community fix their houses. There are often big storms in the Philippines and your parents are always trying to build better structured buildings.



# PROBLEM TREE



# SOLUTION TREE



Making it easier  
for people to eat  
more veg and  
less meat

**SLOWED  
CLIMATE  
CHANGE**

More people  
growing  
their own



# CLIMATE CHANGE EXPLAINED



## KEY WORDS THAT RELATE TO CLIMATE CHANGE:

### THE GREENHOUSE EFFECT:

greenhouse gases (e.g. carbon dioxide, methane) trapping heat into the atmosphere

### WEATHER:

A description of what conditions are like in one place at one time (hot, cold, windy, calm)

### GLOBAL WARMING:

the process of our planet heating up (increase in Earth's average temperature)

## WHAT IS CLIMATE CHANGE?

Climate change explains the long-term changes to our weather patterns.

There will always be natural changes in the climate. However, the climate is significantly changing now at speed.

### Causes of climate change:

- Burning fossil fuels (oil, gas) for energy
- Agriculture (planting crops, rearing animals)
- Deforestation



### Why does climate change matter?

The consequences of the Earth's surface warming will have an impact on human society and the natural world. Many of the world's biggest challenges (from poverty to wildlife extinction) are made more difficult by climate change.

**CLIMATE:**  
the average of weather over time and across large geographic areas

## Effects:

- Extreme weather (more rainfall, prolonged heat waves)
- Rising sea levels
- Ice melting (e.g. arctic sea ice)
- Threat to wildlife (flowers, plants, animals)
- Wildfires and droughts

## How can we help?

There are many ways we can reduce greenhouse gas emissions (e.g. reducing car use, reducing the amount of meat we eat, reducing water use, planting trees).

You will look at ways of individually helping in the Climate Change Activities resource.



## Climate and food:

### HOW DOES WHAT WE EAT IMPACT THE CLIMATE?

- Food security
- Crop yields
- What crops can be grown
- Fish stocks
- Nutritional value

Food security - how safely a country can access the food they need to keep them healthy; Crop yields - how much of a plant is grown; Fish stocks - how many fish there are in the sea; nutritional value - how much goodness we get from our food.

### HOW DOES WHAT WE EAT IMPACT THE CLIMATE?

All farming and food processing (getting food ready to eat) impacts the climate. But some farming and foods have more impact on the climate than others. Food impacts the climate due to:

- Water use
- Fertilisers and pesticides (chemicals that help plants to grow and protect them from insects)
- Farm machinery like tractors
- Damaging and not looking after the soil
- Vehicles transporting food a long way from farms to shops
- Processing food a lot (changing it from its natural state)
- Packaging food
- Wasting food

Can you make a difference to these things?

