



# **Caring for the Planet, Feeding Our World**

## **The Environment**

**MDG 7: ENSURE ENVIRONMENTAL SUSTAINABILITY**

**The aim of these lesson plans is to enable teachers to explore the relationship between the environment and people, particularly those living in poverty, with 5<sup>th</sup> and 6<sup>th</sup> class pupils.**

### **This lesson plan will:**

1. Introduce your pupils to global environmental issues
2. Examine the links between the environment and people
3. Introduce your pupils to the Millennium Development Goals (MDGs)
4. Highlight the links between MDG7 and the other MDGs, particularly MDG1 (reducing poverty and hunger).

### **STRUCTURE OF THE LESSONS:**

There are four lesson plans. Each lesson takes between 40 minutes and 1.5 hours. They can be adapted to your pupils' abilities, knowledge and experience. It is not necessary to use all of the lesson plans but they have been developed to lead you through the topics, each lesson building on the one before. They can be done separately or together in a way that fits into your schedule.

### **CONTENTS OVERVIEW:**

Glossary	Key terms used in the lesson plans and their definitions
Lesson 1 overview:	Introduction to the Millennium Development Goals
Lesson 2 overview:	Introduction to environmental issues
Lesson 3 overview:	Case study on farming in Malawi
Lesson 4 overview:	Simulation game on subsistence farming
Lesson 5 overview:	Acting for Rio +20

### **PLEASE NOTE:**

A good way to help your pupils remember the MDGs is to put up a poster of the MDGs in the classroom. Here are different posters for you to choose from:

- Change the World in 8 steps: downloaded from the MDGs Resources section of Oxfam  
[http://www.oxfam.org.uk/education/resources/change\\_the\\_world\\_in\\_eight\\_steps/?37](http://www.oxfam.org.uk/education/resources/change_the_world_in_eight_steps/?37)
- Caritas Australia: downloaded from:  
<http://www.bemore.org.au/attachments/db/bmp/140.pdf>

**GLOSSARY**

*Where words in the glossary appear in the lesson plans they are marked in by a **blue surround***

Agriculture	Growing crops and raising livestock (e.g. cows and sheep).
Agro-forestry	Growing crops and trees together. This helps the crops to grow better. It creates healthy soils and land, and allows the land to be farmed for longer.
Climate change	The changing temperature, rainfall, and wind of a particular place over a long time. Changes in the climate are happening now because of humans and our use of fossil fuels (see below). The changing climate is causing drought in some places and flooding in others. The world's poorest people are most affected by climate change.
Deforestation	The cutting, clearing, removal of forest to make way for other land uses, like farming or building.
Environment	The area where something/someone lives.
Fossil fuel	Oil, coal, or natural gas found in the earth; Made from dead plants and animals which would have lived millions of years ago and now used for fuel.
Grafting	Taking a bud or shoot from one plant, and putting it into a stem of another plant, in which it continues to grow. Doing this makes a better plant, which can provide more food.
Greenhouse effect	The air around the earth does a very important job. It lets the sun's warmth in and traps it, like a blanket. The gases which trap the sun's rays are carbon dioxide, water vapour, and methane. But now, there are too many of these gases in the air and they are trapping too much heat causing the earth's temperature to rise, and causing climate change.
Greenhouse gases	Gases that cause the greenhouse effect e.g. carbon dioxide, water vapour, and methane. Humans have put too much of these gases into the air by burning fossil fuels, causing climate change.
Interaction	A two – way action that occurs as two or more objects have an effect upon one another.
Irrigation	Bringing water to land or soil.
Malaria	A disease which causes a high fever and affects the red blood cells. The disease is given to humans by the bite of a type of female mosquito found in tropical countries.
Nutrients	Ingredients in food which are nourishing and healthy; that is, used by a body to grow and be healthy e.g. vitamins.
Nutrition	Food which provides the body with all the nutrients that is needed for growth and repair.
Undernutrition	When a person does not have enough food to eat and goes hungry.
Malnutrition	Malnutrition can occur when a person does not have good quality, nourishing food to remain healthy; the person can be either overweight or underweight.
Pollution	The damage to soil, water, or the air by harmful substances such as bacteria, chemicals and waste

Sanitation	What we use for getting rid of body waste safely or hygienically, e.g.: a toilet.
Siltation	The pollution of water by very fine (small) pieces of soil
Slum	Area of very poor and overcrowded housing in a city.
Soil erosion	The way that soil is removed from the earth's surface by nature e.g. rivers or by people e.g. when the soil is over used and the rain washes it away.
Soil fertility	Soil which has the right conditions, including nutrients, for growing plants
Smog	Fog that has become mixed and polluted with smoke
Species	A category of a particular plant or animal.
Subsistence farming	Farming that focuses on growing enough food to feed families.
Sustainability	The idea of living within the limits of the environment, so that it can support humans now, and in the future.

## **Lesson 5 – Acting for Rio +20**

### ***Outline: Introduction to Rio +20 The United Nations Conference on Sustainable Development***

#### ***Learning objectives***

##### **The children will:**

- Recognise the need for co-operation to look after the environment and development
- Begin to recognise that they are citizens of Ireland, Europe and the world
- Recognise that they have a voice in environmental decision making

#### ***You will need***

- Ideally - an internet connection in the classroom. The following link will stream the speech delivered by 12 year old Severn Suzuki, known as the girl who ‘silenced the world for 5 minutes’. Severn set up E.C.O, an environmental organisation, saved money, and spoke at the Rio 1992 conference <http://www.youtube.com/watch?v=xPx5r35Aymc>
- Alternatively a transcript of the speech is provided here, which could be read by you, or your class.

#### ***Learning experience***

##### **1. Learning recap:**

**a. Brainstorm with your class: What have the previous activities shown us about people and the planet?** e.g. That people and the planet are connected; that poorest people are affected most by environmental problems

**b. Brainstorm with your class: What do we do in our daily lives that are environmentally friendly?** e.g. saving water and energy; Recycling , learn more about the environment. **Get the pupils to give specific examples. These are decisions we take to help protect the environment.**

**c. Brainstorm with your class: Who makes decisions about protecting environment?** E.g. in the previous lessons we learnt that our government makes decisions about helping people care for the environment in Ireland and overseas. Governments have to work together to solve environmental problems.

**Teacher explains:** One of the most important international agreements about protecting the environment was made at a high level meeting (called a summit) held in Rio de Janeiro, in Brazil in 1992. World leaders, development and environmental organisations and journalists all attended the meeting which was called the Rio Earth Summit. People agreed

that a healthy environment could help move people out of poverty. All the governments, environmental organisations and development organisations agreed to work together to protect the environment. They agreed to try and stop climate change, species loss and deforestation by making sure everyone, businesses, ordinary people and the government became more environmental friendly. Since 1992 Ireland has done a lot. We have energy saving plans to stop climate change, waste plans to make better use of our resources and plans to help nature.

In 2012 it will be 20 years since the Rio Earth Summit. Next year, the world's leaders will meet again to make a new plan to do more to protect the environment and help people living in poverty. The aim is to create a safer world, and make new plan to build a world where the environment is protected so that future generations can have clean water, enough food and decent housing, so that they can have a good quality of life.

2. **If you got the chance to attend that this big environmental international meeting what would you like to say to the governments, the journalists, the development organisations?** In groups of 3 **write a speech or design a poster** which sends a message to the world's adults about what you would like in the future. You may want to investigate what happened at Rio in 1992 and what will happen at Rio +20.
3. **To help with this activity you could watch the You-Tube video or you could get your class to read the speech** (below) delivered by 12 year old Severn Suzuki, known as the girl who 'silenced the world for 5 minutes'. Severn set up E.C.O, an environmental organisation, saved money, and spoke at the Rio 1992 conference.

***Here is Severn Suzuki's speech:***

Hello, I'm Severn Suzuki speaking for E.C.O. - The Environmental Children's Organisation.

We are a group of twelve and thirteen-year-olds from Canada trying to make a difference: Vanessa Suttie, Morgan Geisler, Michelle Quigg and me. We raised all the money ourselves to come six thousand miles to tell you adults you must change your ways. Coming here today, I have no hidden agenda. I am fighting for my future.

Losing my future is not like losing an election or a few points on the stock market. I am here to speak for all generations to come. I am here to speak on behalf of the starving children around the world whose cries go unheard. I am here to speak for the countless animals dying across this planet because they have nowhere left to go. We cannot afford to be not heard. I am afraid to go out in the sun now because of the holes in the ozone. I am afraid to breathe the air because I don't know what chemicals are in it. I used to go fishing in Vancouver with my dad until just a few years ago we found the fish full of cancers. And now we hear about animals and plants going extinct every day -- vanishing forever. In my life, I have dreamt of seeing the great herds of wild animals, jungles and rainforests full of birds and butterflies, but now I wonder if they will even exist for my children to see. Did you have to worry about these little things when you were my age?

All this is happening before our eyes and yet we act as if we have all the time we want and all the solutions. I'm only a child and I don't have all the solutions, but I want you to realise, neither do you! You don't know how to fix the holes in our ozone layer. You don't know how to bring salmon back up a dead stream. You don't know how to bring back an animal now extinct. And you can't bring back forests that once grew where there is now desert. If you don't know how to fix it, please stop breaking it!

Here, you may be delegates of your governments, business people, organisers, reporters or politicians - but really you are mothers and fathers, brothers and sister, aunts and uncles - and all of you are somebody's child. I'm only a child yet I know we are all part of a family, five billion strong, in fact, 30 million species strong and we all share the same air, water and soil -- borders and governments will never change that.

I'm only a child yet I know we are all in this together and should act as one single world towards one single goal. In my anger, I am not blind, and in my fear, I am not afraid to tell the world how I feel.

In my country, we make so much waste, we buy and throw away, buy and throw away, and yet northern countries will not share with the needy. Even when we have more than enough, we are afraid to lose some of our wealth, afraid to share. In Canada, we live the privileged life, with plenty of food, water and shelter -- we have watches, bicycles, computers and television sets.

Two days ago here in Brazil, we were shocked when we spent some time with some children living on the streets. And this is what one child told us: "I wish I was rich and if I were, I would give all the street children food, clothes, medicine, shelter and love and affection." If a child on the street who has nothing, is willing to share, why are we who have everything still so greedy? I can't stop thinking that these children are my age, that it makes a tremendous difference where you are born, that I could be one of those children living in the Favellas of Rio; I could be a child starving in Somalia; a victim of war in the Middle East or a beggar in India. I'm only a child yet I know if all the money spent on war was spent on ending poverty and finding environmental answers, what a wonderful place this earth would be!

At school, even in kindergarten, you teach us to behave in the world. You teach us: not to fight with others, to work things out, to respect others, to clean up our mess, not to hurt other creatures, to share - not be greedy. Then why do you go out and do the things you tell us not to do? Do not forget why you're attending these conferences, who you're doing this for -- we are your own children. You are deciding what kind of world we will grow up in. Parents should be able to comfort their children by saying "everything's going to be alright", "we're doing the best we can" and "it's not the end of the world". But I don't think you can say that to us anymore. Are we even on your list of priorities? My father always says "You are what you do, not what you say." Well, what you do makes me cry at night. You grown-ups say you love us. I challenge you please make your actions reflect your words. Thank you for listening.