Life Below Water: Protecting Oceans and Supporting Communities in Mozambique

5th & 6th Class and P7 Pupils

Duration: 45 minutes with options for extension activities and homework.

Summary:

This lesson explores marine biodiversity, threats to healthy oceans and the role of community action through a project at Morrungulo Primary School in Inhambane Province, Mozambique. Supported by Irish Aid and delivered with the Marine Megafauna Foundation, the project helps children learn about sea life, ocean conservation and water safety. Pupils explore threats such as plastic pollution, abandoned fishing gear and changes in seawater chemistry. They discover how Ocean Ambassadors share their learning, how local fishers adapt their practices to protect marine animals, and how their own communities can take informed action

As part of their learning, pupils are encouraged to create an Our World Awards entry showing how their actions connect with the work of Irish Aid and the Sustainable Development Goals (SDGs). For ideas, visit www.ourworldawards.ie/take-part work in this lesson, and afterwards, we encourage pupils to prepare an Our World Awards entry that demonstrates how their actions can link to the work of Irish Aid and the SDGs. For ideas, visit www.ourworldawards.ie/take-part

Lesson Format:

1. PowerPoint: Why marine biodiversity matters, threats to ocean life and the effects of carbon dioxide on seawater.
2. PowerPoint: Get to know Mozambique and it's coastline
3. PowerPoint : Irish Aid's work with partners in Mozambique, Morrungulo Primary School and the Marine Megafauna Foundation
4. PowerPoint: Meet the Ocean Guardians, explore swimming confidence, Chizlene's VR learning experience, the role of Ocean Ambassadors, responsible fishing and the project's impact.
5. Optional Activities: You can select activities as relevant to your class and time available.
   + Protecting local waterways;
   + Discovering marine animals;
   + Connecting SDG 14 with other Global Goals
   + Reflection and next steps: Develop and share an Our World Awards project

Elements of this material may require adaptations to meet the needs and learning styles of pupils in your class.

Supporting Resources:

- PowerPoint Slides for Pupils
- 3 short videos (links are in PowerPoint):
  - Irish Aid & Mozambique – slide 11. Duration: 1 minute and 1 second
  - The Marine Megafauna Foundation (slide 13). Duration: 1 minute and 6 seconds.
  - Ocean Guardians – slide 14. Duration 1 minute and 19 seconds.
  - Marine Life VR experience (slide 17). Duration 1 minute and 32 seconds.

  Included in this guide:

  - Instructions for optional activities
  - Further Information for Teachers
  - Glossary
  - Useful links

Learning Intentions:

Pupils will be enabled to:

- Explain why healthy oceans and marine biodiversity are important to people, wildlife and the planet.
- Compare threats to marine life, including plastic waste, oil spills, wastewater, warming seas and abandoned fishing gear; explain ocean acidification at an introductory level.
- Explore how local communities, Irish Aid and partner organisations work together to protect marine environments.
- Recognise how ocean education, water safety, VR experiences and young Ocean Ambassadors can influence attitudes and behaviour.
- Identify practical actions to protect local waterways and connect their learning with the SDGs

Curriculum Links Republic of Ireland:

Links will vary based on the activities you choose to complete.

- **Primary Language Curriculum** - Oral Language, Reading, Writing
- **SPHE** - Myself and the wider world; Developing citizenship
- **SEE**
  - **Geography** – Human environments - People and other lands; Environmental awareness and care.
  - **Science** - Living things - Plants and animals. Environmental awareness and care.
- **The Arts** - Visual arts (designing awareness materials).

Curriculum Links Northern Ireland:

Links will vary based on the activities you choose to complete.

- **Language & Literacy –** Talking and Listening; Reading; Writing
- **Personal Development and Mutual Understanding**
  - Relationships in the Local and Wider Community
- **The World Around Us**
  - Geography and Science
    - Interdependence; Place; Change over time;
- **The Arts** – Art and Design;

Step by Step Activity Instructions

All activities are optional.

Activity 1: Protecting Water Near You

Pupils investigate a local waterway and explore how they can work with others to protect it from pollution.

1. Explore your area: Ask pupils to identify the nearest beach, river or lake.

2. Investigate: Identify signs of pollution or environmental pressure, using direct observation only where it is safe or photographs and local information instead.

3. Examine causes: Ask pupils to consider where the problems come from and who might be affected. Research any local group already protecting the area.

4. Plan together: In groups, pupils propose a realistic action such as an awareness campaign or an adult-supervised clean-up, noting who they could work with.

5. Share and reflect: Invite groups to explain how they could record results and develop the action into an Our World Awards entry.

Learning Outcome: Pupils identify local environmental challenges and understand how collaboration can help protect waterways.

Activity 2: Discover Marine Animals

Pupils research three marine animals and communicate why marine biodiversity deserves protection.

1. Choose animals: Ask each pupil or pair to select three marine animals, including at least one featured in the Mozambique presentation.

2. Research: Find two or three interesting facts about each animal, for example its habitat, diet or adaptations.

3. Explore threats: Identify one environmental threat faced by each animal and one way people can help protect it.

4. Create and share: Present findings through labelled drawings, a poster, photographs or another creative display.

5. Reflect: Ask pupils to explain how their research could help others care about marine life and inspire an Our World Awards project

> **Learning Outcome**: Pupils investigate marine biodiversity, practise research and communication skills and explain why marine animals need protection.

Activity 3: How does protecting our waters support other SDGs?

Pupils explore how protecting life below water connects with other Global Goals and the wellbeing of communities.

1. Revisit the Global Goals: Highlight SDG 14, Life Below Water, and look at the SDG icons on the slide.

2. Make connections: In pairs or groups, pupils choose two other SDGs that could benefit from cleaner oceans, rivers and lakes.

3. Explain why: Ask pupils to describe each connection, using examples from the Morrungulo project where possible.

4. Present findings: Groups share their chosen goals and explain how taking action for one goal can support another.

5. Reflect: Discuss how pupils could include these connections in an Our World Awards project.

Learning Outcome: Pupils recognise that the SDGs are interconnected and that protecting water environments can support people and communities.

Further Information for Teachers:

Mozambique is a country in south-east Africa with a long coastline, beaches and marine wildlife, including whale sharks, dolphins and turtles. Tourism and fishing are important to coastal communities.

Irish Aid has worked in partnership with local communities in Mozambique since 1996. The presentation focuses on a project supported by Irish Aid at Morrungulo Primary School in Inhambane Province, alongside the Marine Megafauna Foundation (MMF).

MMF works with local communities to protect large marine animals, educate children about sea life and water safety, and help fishers use approaches that reduce harm to other marine animals. The Ocean Guardians programme teaches children about reefs, marine animals, climate change and practical ways to protect the ocean.

The presentation introduces Gina Alface, an MMF researcher who teaches children about sea life, and pupils who become Ocean Ambassadors. It also features a fisher, Alberto Nhampossa, who shares safer fishing practices with other fishers. 500 students have become Ocean Ambassadors since 2023.

The presentation also asks pupils to discuss the relative harm caused by plastic waste, oil spills, wastewater, warming seas and abandoned fishing gear. A science link: Extra carbon dioxide enters the ocean, changes seawater chemistry and increases its acidity. This can make it harder for corals to grow and stay healthy, with consequences for fish, wildlife and people who rely on reefs.

Glossary:

Marine conservation: Protecting oceans and sea life so marine ecosystems can remain healthy.

Marine Megafauna Foundation (MMF): An organisation working to protect large marine animals and support ocean conservation.

Ocean Guardians: An educational initiative helping children learn about sea life, climate change, water safety and protecting the ocean.

Ocean Ambassador: A person who shares knowledge and encourages others to protect the ocean.

Biodiversity: The variety of living things in an area.

Marine biodiversity: The variety of living things and ecosystems in the sea.

Marine megafauna: Large marine animals, such as sharks, rays and whales.

Responsible fishing: Fishing practices that reduce harm to other marine animals and their habitats.

Ocean acidification: A change in seawater chemistry caused when the ocean absorbs extra carbon dioxide, making it more acidic.

Sustainable fishing: Catching fish in ways that help protect fish populations and reduce damage to other marine life.

SDGs: The Sustainable Development Goals, 17 goals for a fairer and more sustainable world.

Links:

Our World Awards – https://www.ourworldawards.ie/

Our World Awards project ideas – https://www.ourworldawards.ie/take-part

Videos included in the presentation:

Morrungulo Primary School – https://vimeo.com/1225984627

Marine Megafauna Foundation – https://vimeo.com/1225987294

Ocean Guardians – https://vimeo.com/1225988877

Marine-life VR experience (slide 17) – https://www.youtube.com/watch?v=penjr5vPzws