

Climate Change and the impact on our oceans

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The Method

I researched websites searching for facts about the topic. I found this information on BBC, NASA- climate change, National geographic, Wikipedia and some other websites. I added to my notebook and made sure I remembered the source of my references. I then discussed with my family and wrote down my opinion. Then I researched how to write a report and added everything into this Microsoft notebook as a first version to discuss with my teacher before finishing it.

Introduction

Climate change is really important because it affects everyone – not just today but if we don't find solutions it will change the future for everyone and everything.

One of the things that is changing is the rising sea levels because of climate change. The sea levels are rising because of global warming. Glaciers and ice sheets all over the world are melting and adding water to the oceans. In the project I researched why the sea levels are rising and what we can do to stop it.

Why are the sea levels rising and what can we do to stop it?

What impact does global warming have on our oceans?

1. Because the ocean absorbs most of the excess heat from greenhouse gas emissions, it leads to rising ocean temperatures. These temperature rises impact on both sea creatures and humans.
2. Because glaciers and ice sheets all over the world are melting, they are adding water to the oceans which makes the sea levels rise.

How does global warming affect sea creatures?

Increasing ocean temperatures affect marine species and ecosystems. Rising temperatures cause coral bleaching and the loss of breeding grounds for marine fishes and mammals. Here is a list of facts that I have found out about:

- Temperature is higher so it could hurt or kill sea life.
- If too many fish die, there won't be enough food for bigger sea creatures causing even more to die.
- It would make it harder for sea creatures to mate, so they could die out.
- There won't be many glaciers so that will affect animals that need them e.g. polar bears.
- It causes coral bleaching
- Many fish species are moving towards the poles in response to ocean warming, disrupting fisheries around the world.
- Wetlands are drowning.
- Increase in acidity which is damaging many ocean species.

How does it affect humans?

- It causes displacement of people. For example, hundreds of millions of people live in coastal areas which are becoming more likely to flood.
- Weather-related disasters which destroy homes and habitats cause people to seek shelter somewhere else

What can we do to stop the oceans being damaged by climate change?

There are lots of people trying to stop climate change. For example, Greta Thunberg is a famous Swedish campaigner and activist who is trying to get politicians and governments to do more. An example of how governments take action is the G7 summit in Cornwall last week where they have agreed to *“step up action on climate change and renewed a pledge to raise \$100bn a year to help poor countries cut emissions”* [source: [BBC website](#)].

As well as stopping climate change, there are lots of actions that can help to prevent the oceans from being damaged, such as:

- Planting and looking after mangroves. Mangroves protect coral reefs from sedimentation, they absorb massive amounts of carbon, they can adapt to rising sea levels, they are a habitat for endangered species and provide food for marine life.
- Greenpeace says that “to save our oceans, protect communities and tackle the climate and nature crises we need a network of Marine Protected Areas across the global oceans”. This is the campaign called [30X30 -a blueprint for ocean protection](#)
- Floating solar panels are a brilliant innovation because they generate clean energy and also;
 - Reduce the water evaporation which means the water doesn’t suffer from acidification
 - Doesn’t use land which means it can be cheap to install and run
 - It covers the water which can help reduce the spread of algae
 - It reflects heat from the sun preventing the water from warming

As well as finding ways to help oceans stay healthy, we also need to learn to live with climate change. Lots of people are finding innovative ways to “boost resilience”. These include managing land erosion, building energy systems that withstand disruptions, and designing buildings with rising sea levels in mind.

My parents travelled to Cambodia and saw floating villages in a giant tidal lake called Tonle Sap. This lake rises with the tides so the villagers build everything on stilts or floating platforms. This is a good example of how to make good use of water as a habitat.



A floating school on Tonle Sap in Cambodia



A house on stilts for high tide on Tonle Sap in Cambodia

Conclusion

I've researched about climate change and the impact on our oceans and I believe that with lots of people campaigning and spreading awareness on social media, together we can stop it.