“Globally Responsible Careers”

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My Career Aspirations

- In the future, I would like to become an engineer. This is because I enjoy subjects in school like physics and maths.
- There are many different aspects of engineering – from civil engineers to biochemical engineers, but the aspect I will focus on is environmental engineering.
- This job designs ways to protect ecosystems, biodiversity and wildlife, while also planning ways to solve water waste, prevent food waste and promote recycling.

Impacts on the Environment

- If I were to become an environmental engineer, it would involve doing a lot to help the world's issues. For example, deforestation – over 50% of the Kutai National Park, Indonesia has been destroyed. It is vital that we protect areas such as these because they harbour so much wildlife – 10% of known plants and animals come from the Amazon basin alone and 80% of all species on Earth come from rainforests. Being an environmental engineer would involve planning and designing ways in which we could protect places such as these. Deforestation is a global issue – we rely on the rainforests for oxygen, food, medicine and timber
- Moreover, environmental engineers would also promote a range in biodiversity. It is increasingly important to keep the three types of biodiversity – genetic, species and ecosystem – healthy and prosperous. Genetic biodiversity is important for keeping wildlife healthy and disease resistant, species is needed to keep food chains working and ensure that there is enough food for all species and ecosystem biodiversity is imperative to reinforce all of the millions of different species of animals and plants. We could promote this by reintroducing animals that were previously endangered and also using breeding programmes. Also, we could use organic farming - 50% more plants and animals are inclined to live on organic farms.
- Additionally, I would also take measures to prevent pollution. This could be by campaigning to prevent the use of harmful pesticides and to promote organic food in supermarkets.

Scientific Issues which Environmental Engineering Entails

- Genetic modification – Is it right to alter the DNA of plants for the good of humans? Some people believe that GM can reduce biodiversity and gene flow could affect other plants although this can be prevented and controlled.
- Waste Disposal and Recycling – It is extremely important that we continue to recycle our waste – only 7.5 million out of 13 million plastic bottles are recycled in the UK each year. It is vital that recycling is made easier and more available.
- Water Pollution – Water is extremely important because it is a basic human need to survive. Globally, 780 million people do not have access to clean water – and that is something that needs to drastically improve.

How can I make environmental engineering more globally responsible?

- Encouraging relationships between different countries: by building organisations that can improve sustainability overseas, we can work together as a global team to improve environmental conditions.
- We can do this by growing businesses, outsourcing, and trading widely.
- We can continue to empower different people and therefore build stronger relationships with others to work together to help the environment.
- We can educate others about issues such as pollution and deforestation and promote a wider range of biodiversity and buying organic food.