

Are there going to be enough resources to Support Future Generations?

Many people believe that resources will run out for a number of different reasons some of these include Malthus' theory, The 'Club of ROMs' theory, deforestation and desertification. However there are also people that believe there will be resources in the future because of reasons such as: Bose up's view, sustainable development (with such as recycling) and future improvements in agriculture.

Improvements in agriculture could be very important in the future so that there is enough food produced for the growing population of the earth. One improvement of agriculture could be the use of GM foods; these are foods that have been genetically modified so that they grow in a certain way, for example a gene normally found in soil was put into the potato so that it old naturally repels bugs and insects that would normally eat it. This can also be used to make crops and foods more nutritious, so that less of them are required to be eaten to have a healthy diet. Bose up was somebody that believed that this was possible.

Setup's view was that in the future as population grew, meaning a growth in food demand, was that scientists would find ways (such as GM foods) to increase crop production. She also thought that scientists could find ways to increase supplies of other resources such as energy. This could be by using renewable energy supplies such as geothermal and wind energy. However Malthus disagrees with these ideas.

In 1798, Thomas Malthus shared his views that in the future resource availability would be outweighed by need. He thought this because he felt that population grows exponentially (by doubling) whereas resource increases arithmetically (1:2:3:4:5 etc.). He therefore felt that in the future there would come a time where there was not enough food or energy so there would be some sort of crisis. A group of scientists named 'The Club of Rome' had a theory which drew similarities to Malthus' view.

'The Club of Rome' predicted that in the future population, resource production and pollution would continue to grow at a similar rate in increasing development. However they then predicted that at some point in the future there would be a global catastrophe meaning that food and industrial production would majorly collapse which would lead to a major decline forcing the population to slowly collapse. They also predicted that pollution levels would stay at a similar rate causing around 2.7 million people to die each year from pollution related illnesses. They believe that a major reason for this happening is deforestation and desertification.

Deforestation is the cutting down of jungles and forests and such as the Amazon rainforest and any other wood or plant land. This can be done for many reasons such as to build on the land or to use it for something as simple as a place for cattle to graze however it can have catastrophic effects. This is because rainforests in particular are major ecosystems that house around 40 - 75% of all the world living organisms and supply 28% of the world's oxygen. Therefore cutting them down would not only destroy a vast percentage of the world's living organisms but would also see a sharp increase in greenhouse gases such as CO₂. Deforestation can also lead to desertification which then makes the land practically unusable.

Desertification could be a major problem in the future as it limits the amount of resources that can be produced due to desert land being virtually unusable. This can be brought on by many factors, one being deforestation of rainforests. This is because rainforests experience a large amount of rain (over 1750mm a year). This therefore means that if the trees and shrubs are cleared out this rain falls on bare land forcing the soil to be washed away which creates a desert. Desertification can also occur because of climate change. This could affect things such as winds which carry rain, so therefore different areas get less rainfall than normal or none at all, which in the long run will turn into desert. However there are ways of reducing the effects if this and this is by developing in a way that is sustainable.

Sustainable development is a way of developing so that there will be enough for generations in the future. This is why it is considered a significant way of making sure that resources don't run out. Sustainable development can be achieved using things such as recycling of different materials such as: paper, cans, glass, clothes, plastics and kitchen and garden waste. This therefore means that these resources can be used over and over again and so won't run out. Other measures to aid sustainable development are to try and get people walking and cycling more instead of using transport and using renewable energy resources such as solar and hydroelectric power. They have tried different ways of being sustainable in Sahel, Africa.

Sahel is a belt-like area in Northern Africa running from the East, to the West of the continent. There have been many ideas of ways to improve the quality of life for people there. One of these ways is by using trees to fight desertification and so therefore sustain the land and make it useful in the future. The idea is to plant 370 000 trees adapted to different parts of the country over 5 years whilst also teaching locals about the importance of plant growth and teaching those new solutions for things such as the use of fuel wood. Another method of increasing food and energy in the area is by increasing crop yield. This works by using things such as fertilisers and pesticides, as well as rain water collected in wet seasons that can then be used throughout the year. Seed cross-breeding could then be used to protect crops and plants from things such as droughts. These methods could also be adopted in China.

In China, due to the vast population it is becoming increasingly difficult to feed everyone. This is because despite having 20% of the world's population China only has 7% of the world's agricultural land. China is therefore trying to adopt methods such as GM farming and the increasing of crop yield. However despite all this the Chinese government admits that it will be increasingly difficult to provide all the wheat and rice needed in the future. This could end up in a long term crisis for China which is what many experts such as Malthus and 'The Club of Rome' feel will eventually happen to the rest of the world.

I conclude that I feel there is a definite possibility of there becoming a too large world population for the resources available. However I do not believe that it will be as extreme as 'The Club of Rome's' prediction. I believe that it will become a necessity to work hard to grow sustainably and that things such as GM farming and fertilisers that can improve crop yields will become vital to the survival of many throughout the world.