## Why is Ecotourism a good way to use the rainforest?

The tropical rainforest in Brazil is being cut down very fast for a number of reasons. The correct word for this is deforestation. It is estimated that 7.5 million hectares of rainforest are being cut down each year – that is the same as 20 football pitches every minute. When trees are cut down, approximately 28 other trees are damaged which come down with it, leaving an empty space in the rainforest. However, there is an area of rainforest the size of Western Europe remaining in South America.

Firstly tropical rainforest is being cut down because of logging, especially in the Amazon Rainforest in Brazil. It is being cut down for timber, which is used to make furniture and paper, so they select an area of the forest that contains the trees they need and clear most of it away. However, mainly hardwoods such as mahogany, is obtained by logging companies and as hardwood is a valuable source of income for Brazil, little attempts has been made to replant deforested areas. Hardwood trees take many years to grow back so can be difficult to replace. Many people up to half a million people are forced out of their tribe or village so that they can clear the area.

Secondly, rainforests are being cut down because of deforestation. This is when you clear land for, farming, building and for wood to use as a fuel or building material. Deforestation also happens when the land is cleared to develop the region and to make roads, many companies have to transport items such as timber, minerals, farm produced goods and people, so they use lorries for transportation. But the journey is too long so to reduce journey, they build roads going though the forest. As a result they have to deforest the trees, and in order to make a road, you have o cut down plenty of trees. So far, over 12,000km of new roads have been built across the rainforest, the largest being the 5300km Trans-Amazonian highway. Furthermore, a 900km railway has been built from Carajas to the coast and a number of small airships have also been constructed Lorries, trucks and other vehicles travelling through the forest would also mean that there would be pollution and noise, which can result in endangering animals and plant life, or even causing them to become extinct, taking away many animals' habitats (a place where an animal lives).

In addition, commercial agriculture is also decreasing the amount of trees in the tropical rainforest. Farming is estimated to be responsible for 25 percent of the Amazon forest being cleared and there are three types of farming. Firstly "slash and burn" involves cutting down and burning a small area of the forest, the ashes being used as fertiliser. Although this is the most sustainable of the tree types, it nerveless causes significant areas to be cleared. Secondly, subsistence farming has increased as a result of the government providing land to some of Brazil's 25 million landless people. In places, 10km strips of land were cleared alongside highways, and settlers were bought in from places that were even poorer, like the drought areas in the north east. Thirdly, commercial cattle ranching are run by large companies which sell beef mainly to fast food chains in developed countries. These companies' burn the forest, replacing trees with grass, but as the soil does not have many nutrients, the grass will not be a good source of food for the animals. As a result, the meat will not be good quality.

Finally, big areas of the Amazon rainforest are being deforested because of mining, so that minerals can be extracted from ground for example the Carajás iron ore mine. Roads are constructed through previously inaccessible land, opening up the rainforest. Severe water, air and land pollution occurs from mining and industry.

It is important for Brazil to make money from the rainforest because it is a LEDC, meaning that it is a less economically developed country, so it is very poor. Brazil does not have money to make better buildings, for development, improving their living standards and quality of life, so they should make more money in the rainforests, but only in a sustainable way. Sustainable development means using something or doing something in a way that minimises damage to the environment e.g. by using renewable rather than scarce resources.

The Brazilians could use the rainforest in a sustainable way by rubber tapping, It is not damaging to the forest as it does not require the tree to be cut down in order for the latex to be extracted. As many as 63,000 families now earn their living from rubber tapping in the Amazon forest. To date only 5,000 tons of rubber is extracted from the Amazon to supply 1.4 percent of the national market for rubber in Brazil.

Another sustainable way that the Brazilians could use is collecting exotic fruits, nuts, spices and honey because it will not harm the forest in any way and it will also grow back. Over 48 native fruits in the Amazon have been identified with the potential for sale on the international market. In addition, many native tribes in the Amazon collect Brazil nuts as their main source of income.

If the rainforest is used in an unsustainable way, many animals will die which may lead to a food chain problem e.g. if small insects or plants die, then birds and other animals which feed on them will not have anything to eat. This will result in a decreasing amount of birds and other species, or they may even be extinct in the following years. The food chain will slowly disappear, meaning tribal people and others who live in the tropical rainforests will have nothing to hunt for, forcing them out of the rainforest and migrating.

Ecotourism is another sustainable way to make money from the rainforest, but any tourist destination can be harmed by a large amount of amounts of tourism. There are many reasons why it is a sustainable way to make money for the country. Firstly it helps because; local people can make money by allowing tourists to observe the natural beauty, see rare animals and plants, appreciate traditional cultures and to see their native habitat, whilst at the same time protecting the natural environment and minimising damage to the land and local people.

Secondly it is good because when tourists come, they do not have hotels with air conditioning and buses to travel to different places. This is good because using electricity causes an increase of pollution and carbon dioxide to the global community when the electricity generated. If they used electricity for everything, it would cause pollution not only to the tropical rainforest but to the whole world. There would also be a change in weather and climate, leading to habitats environment to change as well. Following on, it would cause animals to migrate. Trees and plants would also die soon, destroying the rainforest.

But as tourists are coming from MEDC country, which means more economically developed country, it is a completely different atmosphere and style of living for them, local people in the rainforest may be offended as they do not have a supply of electricity, gas supply or water coming out of taps, and they also have to hunt for their food as there is no local supermarket; tourist will have to except that fact. But there are rules when the tourists explore the topical rainforest. They would have to protect the environment by keeping to footpaths, and not leaving litter or start fires. Plus avoid interfering with wildlife and should not scare or feed the animals. Protecting resources is also very important.

Another reason it is better is because tourists can learn more important facts about the rainforest, for instance that there are 30 million known species on earth, and that's 28 million are found in the rainforests (9% being insects). A typical patch of 10km² could contain as many as 1500 species of flowering plant, 750 species of trees and 400 types of birds. This means that they will understand why more and more animal species are being extinct because of deforestation, their habitats are being destroyed.

On top of that they can be taught about the different things people do that damage the tropical rainforest for example, deforestation, logging, roads being made, mining, cattle ranching and farming. The water cycle is when much of the rainfall is intercepted, (which means that the leaves of the trees block the rain and stop it from hitting the ground) by the vegetation, and then the next day, the rain evaporates into the atmosphere to provide the following days rainfall. The clearance of trees means that there is no canopy to protect the soil from the heavy rain, or roots to bind together. The result is less interception and infiltration and more surface runoff and also, soil erosion. Tourists can also learn about another cycle called the nutrient cycle. Rapid decomposition takes place in hot, wet conditions. This provides minerals for future plant growth. If there is no canopy, then more rain will hit the ground, washing the nutrients out of the soil. We call this loss of soil fertility. Without these two cycles the tropical rainforest cannot function as all the parts in the ecosystem rely and depend on each other.

Ecotourism is good because people who live in the rainforest can also teach tourists and other people about traditional crafts and life skills to survive in the tropical rainforest. It can be a very good sustainable way to make money because the tourists staying in the rainforests will not survive very well because there are wild animals that can attack you, so it is vital to be able to defend yourselves. Another reason is to eat the local food and drink, so tourists can see how and what they cook because there are no restaurants or shops in the rainforest, local people have to hunt for their own food. But all of this could result in tourists offending the way local people live because they do not have ovens, cookers, stoves or fridges. So local people have their own way which is not at standard tourists expected e.g. hygiene.

Ecotourism is not only important for Brazil. It is important for people all around the world. Ecotourism can benefit the global community, for example, ecotourism can help to prevent global warming by not building hotels in the middle of forests. When trees are left behind they help absorb an important gas called carbon dioxide which helps to prevent global warming / maintain global climate as it is. This helps global warming because if

there is too much carbon dioxide stored in the vegetation, it would release back into the atmosphere, increasing the warming effect.

Ecotourism can also benefit the global community because 75% of the world medicine comes from the rainforest. It does not harm the rainforest because people are making money out of natural resources which are found only in rainforests. According to the World Health Organization (WHO), eighty percent of the world's population use plants to treat. Natural extracts from the Pacific Yew in the rainforests of North America, for example, have proven effective against cancer. The rainforest is slowly being destroyed and there will soon be a shortage in medicine and cures as medicine trees and plants are being cut down. This will eventually lead to more people becoming ill and dieing because there is a lack of medicine.