## An evaluation of the impact of glaciation on human activity

## **Introduction:**

In this essay I will talk about the impact of glaciation on human activity and whether this is a negative effect or a positive effect. I will explain why it is positive or a negative effect by using some examples such as ,hydro electric power plants (hep) (fig 1) tourism, transport on valley glaciers, the impact on water sources and farming in east Anglia. Some of the areas I will talk about that have had the impact of glaciation on their human activity will be the fox glacier village in New Zealand, the sima hep plant in Norway (fig 2).

## Research and examples and explanation:

Sima hep plant has both positive and negative effects from the glaciation the first one I will say is a positive. This positive is tourism. Tourism has been improved since the hep plant has been built because the biggest tourist attraction in the area is the Vøringsfossen water fall. The development of Sima has affected the flow of water that flows to the falls. In the summer the discharge of water was 12 meters per second so it is a spectacular site.

This second example is a negative. This negative is to do with the increasing and improved roads that had to be built. The transport rout have been increased and improved because when Sima was being built you can't just have one single road you have to have lots of roads connected to each other like the a and b roads we have in Norfolk. They also have to be improved because they may have to have a lot of weight put on them. But the amount of pollution this is causing and the amount of money the government have to pay for the roads is a huge amount and because of the improved routs will increase the tourism this will increase both the income and the pollution will rise steadily.

In villages or towns that have been built near or around glaciers they can rely on the glaciers melt water to provide them with the water they need to sustain a nice environment, but the problem is that if the rate of ablation is greater than the rate of accumulation then the glacier will retreat from the towns. this will affect the human activity in this area because the melt water would have travelled away from the towns so you would have to travel a very long way to find a water source and because the glacier has retreated lakes and river would not be able to have access to the melt water businesses that are linked to the river will have less and less income every year and because the water has disappeared from the area around there would have to be a force migration.

A positive for a glacier is making communications better, thanks to glaciation; glaciers can make travelling through mountainous places easier because when the glacier travelled through a mountainous place it could have carved a valley perfect for building (fig 4) roads and train tracks.

When the rate of ablation is higher than the rate of accumulation the glacier starts to retreat and when the glacier retreats it leaves lots of sandy and stony soil, this is very useful because it can be used in many ways such as masonry, cement sea defences road building glass and also for levelling out railways.

The fox glacier new, New Zealand is an excellent place for tourists it is full of tourist attractions from restaurants and bed and breakfasts to rock climbing and helicopter tours. Most of the tourist that come here are walkers artists photographers and adrenalin junkies. The walkers would come here because there would be a lot of "non polluted" air and there is also a large range of mountains big of small the artists and photographers would come here for the peaceful landscapes and the adrenaline junkies would come here for the skydiving and there is also the people who would like a nice relaxing stay.

## **Argument and conclusion:**

I think that all of these are important but on balance the positive take over from the negative. The negative of pollution is a big problem now since the south sea has stopped absorbing carbon dioxide but the positives have changed the ways of life. When the glaciers retreat it is a new place to explore and find fossils, ways to get around the landscape is easier because the glaciers have carved through mountains there is now a cheap energy source that increases tourism and trade as well so small business's can expand, farming can be made better because of the boulder clay left behind from the last glaciation this left a nutritious place to grow crops and again increase trade so small business's can expand. The problem is that the negative could count them all out for the reason I stated above about the south sea, and if we can cut the carbon emissions from building new roads or to improve roads so big lorries can travel on them

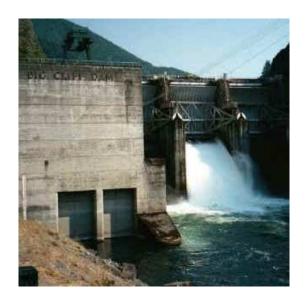


Fig 1 A hydro electric power plant



Fig 2 Sima I found in western Norway

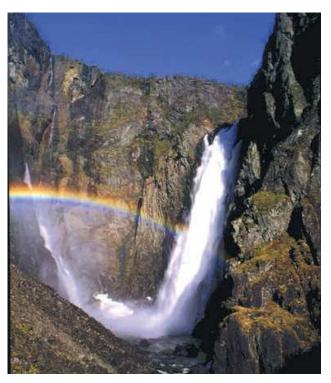


Fig 3 Vøringsfossen water fall



Fig 4. Where a glacier has carved through a valley