

The benefits and disadvantages of an Open cast mine (Quarry to a village in Derbyshire.

Introduction

Geography is the study of places, the physical and human processes that shape them, and the people who live in them. This essay is going to be about the benefits and disadvantages of an open cast mine (quarry) to a village in Derbyshire. Derbyshire situated in the north Midlands, (Look at page 6) Derbyshire is an upland area incorporating part (842 square kilometers) of the Peak District National Park. Of all the English counties, it is probably one of the most traditional. It has always been a mining and manufacturing county, with the lead mines having been worked in Roman times. Iron was produced at an early date, and coalmines were worked at Alfreton as early as the 14th Century. Today there is a variety of industries including textiles and engineering. Primary industry is one that extracts natural resources from the environment. Quarries are places from which rock is extracted, in this case coal. Coal is still our main source of energy and most of it is used to produce electricity in power stations. There are several advantages and disadvantages of building a mine in Derbyshire. E.g. Jobs, money and loss of farmland. These will be covered in more depth throughout the course of this essay. I hope you enjoy reading my essay.

Primary industry (Look at page 7) is when people collect and use natural resources. These natural resources are called raw materials. We get raw materials from the physical environment of the earth and sea. There are four main types of primary industry. They are: farming, forestry, mining and fishing. In this case we will be looking at mining. Building a mine in Derbyshire has lots of advantages and disadvantages. Lets first look at the advantages:

- PROVIDING NEW JOBS IN AN AREA - DIRECTLY IN THE QUARRY AND INDIRECTLY IN TRANSPORT.

If a new quarry is built, it will offer a lot of mining jobs to people living in the village. Not only that, it will also offer some transport

jobs. You will need drivers to transport coal from the mine to the power stations. This provides a bit more jobs.

- IT IS LIKELY THAT INFRASTRUCTURE (ROADS, RAILWAYS, ELECTRICITY AND WATER SUPPLIES) SERVING THE AREA WILL BE IMPROVED TOO.

When they start to mine, they may meet up with pipelines. If the pipelines aren't in good condition, they might clear it up so there is good water supply in the village. The village people might have not improved the roads and railways because it would be too much hassle but if they are going to do a big thing like mining, they might consider doing up the roads and railways too.

- THE MONEY EARNED IS LIKELY TO BOOST THE LOCAL ECONOMY WITH MONEY BEING SPENT IN LOCAL SHOPS AND INVESTMENT BEING LIKELY IN SERVICE PROVISION SUCH AS SCHOOLS AND HOSPITALS.

If you want to mine in a specific place, you will need to see whom the land belongs to and pay them for it. The council usually owns most land. If you do decide to mine on council property, you will have to pay them a fair good amount of money. If the council earns some money, they can use it to improve the state of schools and hospitals. If the schools and hospitals don't need improving (very unlikely!) they might have enough money to build another school or hospital. They might even decide to improve public transport with it. There are many ways in which this money could make life better for the villages.

- WHEN THE QUARRY EVENTUALLY CLOSES IT MIGHT LEAVE A BIG HOLE, WHICH CAN FILL WITH WATER AND BE USED FOR LEISURE. SOME OLD QUARRIES ARE VERY POPULAR FOR ROCK CLIMBING.

After the quarry closes down, the miners could either refill it with the soil they originally took out, or use it for leisure. If you fill the hole up with water, then you could use it for boating. This will attract a lot of tourists. There is a mine in Essex (I think or maybe its somewhere else, you mentioned it in class once but I can't remember the place), which was filled up with water and used for boating. (Look

at page 10) Now it is a very famous tourist attraction. Old quarries are also famous for rock climbing. (Look at page 10)

Disadvantages

There are equal amounts of disadvantages to advantages of coal mining:

- **THE MINE WOULD DAMAGE THE ENVIRONMENT AND CREATE A VISUAL POLLUTION.**
The quarry would create an eyesore. If anyone looks at the village, it will look really ugly with a great big hole in the middle. No-body would want to go to the village.
- **QUARRIES CREAT NOISE AND DUST.**
Often it is necessary to use explosives to break up the rocks. This would cause dust pollution and noise pollution, which would be a disturbance to the village people. There will also be lorries to transport the coal from the mines to the power station. The lorries coming in and out could be a disturbance to the local village people.
- **QUARRIES WILL DAMAGE THE SCENARY.**
Derbyshire is in the countryside. It has lots of farmland and greenery. It is a rural area. By building a coal mine, you aren't exactly urbanizing the area but it will look really industrialized. This would really spoil the scenery.
- **IT WOULD PREVENT TOURISTS FROM COMING TO DERBYSHIRE.**
Imagine you go on a holiday to the countryside. Would you like it if all the green grass is gone and replaced by a big hole? There is noise everywhere and lorries coming in and out. You can't breath in the countryside air because when you do try to, all you are breathing in is dust and pollution. If you don't like this, who do you think would? If there were a big hole in the middle of the countryside, tourists would not come to Derbyshire.

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- **MIGHT DESTROY HOME OF WILDLIFE.**

If a quarry was built in the countryside, it might be built on grass and trees where wildlife used to live. There are lots of insects and small animals, living in the countryside. If a quarry were built over there homes, where would they live? If they get thrown out of their homes they will have to wander around dangerous places such as roads. A lorry might just easily run them over and kill them. Most people don't think of tiny insects as much, but they are living things like us. It might also damage plants. There are new species of plants growing everyday. We should let them grow where they are.

- **SCHOOLS MAY HAVE TO CLOSE DOWN, AND IT IS DANGEROUS FOR CHILDREN.**

If there is a school near where the mine is going to be built, (Look at page 8) it may have to close down. How can teachers teach with all the noise? Obviously the council will have to build a new school to give the village children an education, but why waste money. If they didn't have to close the school, they could use the money to improve the school. It will also be very dangerous for the village children because children have very curious minds. Imagine yourself as a child or even a teenager (an immature one); if there were a big hole in the middle of the village, wouldn't you want to jump in it. Even if there is a fence, children would want to climb over the fence and have a go on the things that go up and down (Well.... I would certainly want to). Even if they had a **KEEP OUT** sign, any kid would want to see, why they have to be kept out. You have to understand that kids have curious minds.

People have used coal for cooking and heating for thousands of years. During the 19th century, coal was the world's most important fuel. Today coal is still used in vast amounts. Most coal is burned at power stations to produce electricity, and burning coal meets much of the world's energy needs. A few steam powered trains still burn coal, and some homes have open fires or coal-fired heating systems. The main use for coal is in the production of electricity. To generate electricity other sources can be used, but they are a lot more expensive. There are also several other ways to generate electricity e.g. hydroelectric power, solar power, and wind power, waterpower etc. This is all well

but there is an old saying which is "The English weather is like a Englishman's man". Without having to dig mines they could use two different powers. They could use solar power on sunny days and when it is not sunny, they could use hydroelectric power. Why else have the government built reservoirs to collect water (Well.... maybe for water supply!).

Digging a mine is environmentally affecting the environment. It is damaging all the wildlife, farmland etc.

Many people will have different views to whether a mine should be built. If you asked one of the resident, whose house would have to be knocked down, he would certainly not agree to it. If you ask a schoolteacher, she wouldn't agree to it either. But on the other hand, if you ask a villager who has to travel far to work, he would definitely agree with it. This is because he could work in the mine. Most people think of the short-term cause but never the long-term cause. You may say it will offer jobs but for how long. After some time the quarry will have to close down and the villagers will again travel far to work. By that time they might have lost the job that they were originally working in. It causes too much hassle.

Conclusion

Overall I don't think a mine should be built because there are lots of other ways of generating electricity. It will also affect Derbyshire a lot because the people in the village: it will be dangerous for children; the village will suffer from pollution etc. Although there are several advantages, the disadvantages outnumber them. I thoroughly enjoyed writing this essay. But I think we had a short period of time, compared to the 'River Tees' essay, plus we had a history essay. Having a longer period of time would help us to research more and know exactly what we are writing about. Despite all these things, I still enjoyed writing this essay. It taught me a lot of things. Although essay writing is fun, I prefer doing projects so I hope we do a project very soon.

