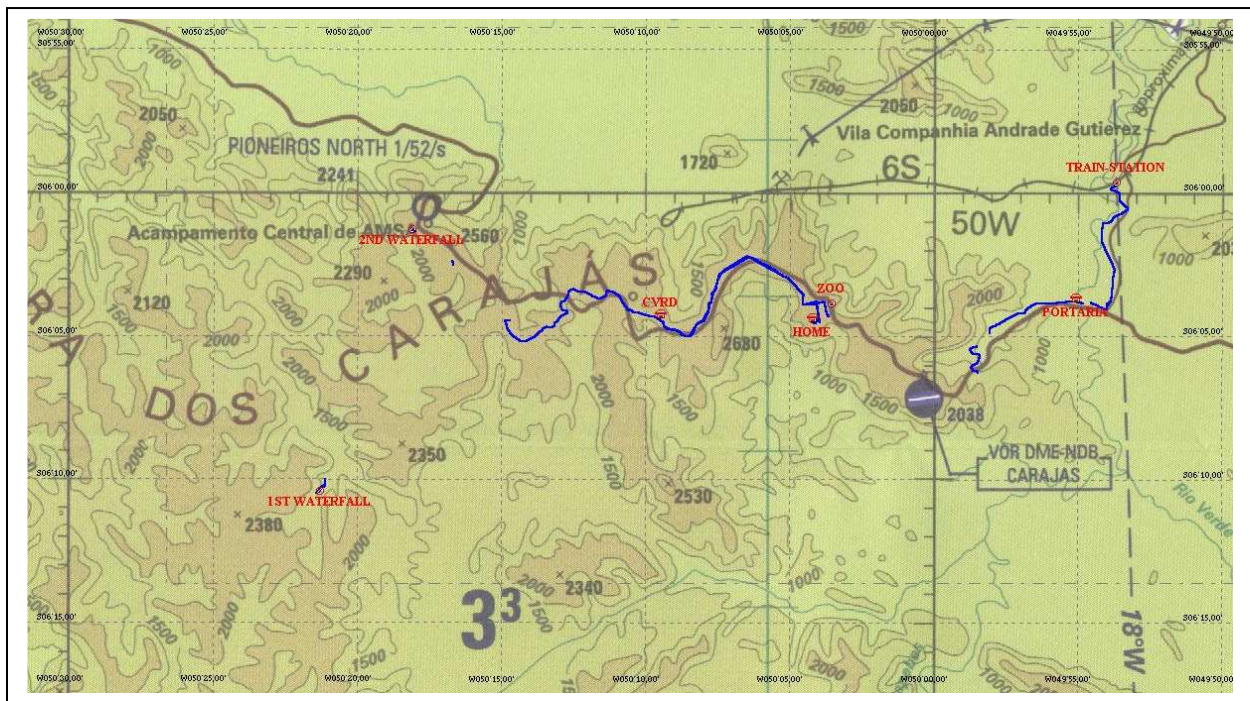


Will the Grand Carajás project Help Brazil?

The Grand Carajás is in Pará State, part of the Amazon basin in the North region of Brazil. The main purpose of it is to provide cheap raw materials to the world. It covers an area of 900,000 sq Kilometers. The Brazilian government is running this program which includes ranching, forestry and settlement projects however the main type of mining is the iron ore. The mine is on Serra do Carajás.

Mineral extraction sites are served by the Carajás railroad, which connects Maraba in the State of Para, to Sao Luiz, capital of the State of Maranhao (Northeastern region) and the Itaqui and Ponta de Madeira ports. This new railway takes twelve trains a day to export 8% of the world's iron ore through to the port of São Luis. The 890km Carajás railroad was originally constructed to transport millions of tonnes of iron ore from the Carajás mine to the Ponta da Madeira sea terminal. In 1995, it carried an extra 4 million tonnes of other materials apart from the 44 million tonnes of iron ore. The other products were mainly steel, fuel, timber, vehicles and fertilizers. It is very likely this railway would expand rapidly over the years as there is a high demand of infrastructural facilities in Brazil.



There are many different raw materials available from the Carajás region of Brazil. These raw materials include Tin, Iron ore, Gold, Silver, Manganese, Nickel and Copper. There are 18 billion tonnes of reserve of iron ore and 150 tonnes of gold. Most of the iron ore is sent to Japan & Germany. They both buy, approximately, a third each. The other third is split into the U.S.A, England, Italy, Spain and others.

There is also a great deal of tin in the area, and Brazil is the 5th largest producer of tin. In 1995, Brazil produced 15, 400 tonnes, which was 7.5% of the world total. This tin is mainly exported into U.S.A and Europe and Brazil has currently 602,000 tonnes of tin reserves. These significant numbers make the Carajás region a perfect investment opportunity for the Brazilian government. The main Carajás iron ore mining is a massive excavation 4.1km long, 300m wide and 400m

deep. The mining method is state of the art open pit benching with all operations computer guided from high technology control rooms.

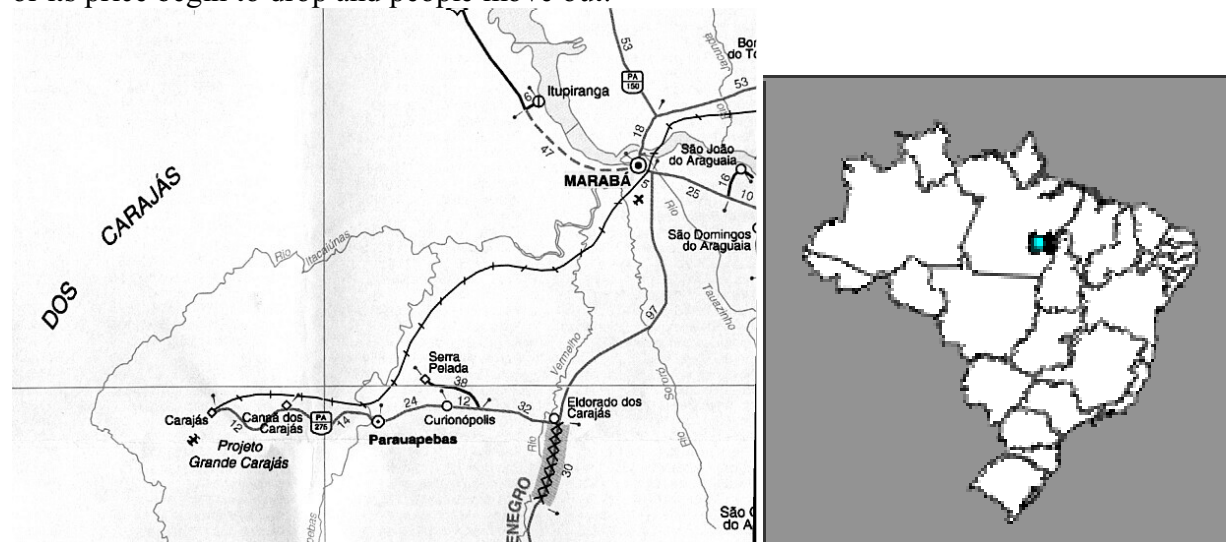
The main purpose of the Grand Carajás project is to increase Brazil's financial stability and pay off all its debts. The government intends to do this by trading the raw materials to the rest of the world. This is encouraged by the World Bank, so the LEDCs can develop quicker. The CVRD, one of the world's largest mining conglomerates in the world borrowed \$3 billion from the World Bank to construct the mine and a 890 km railroad from the Carajás range to the sea.

The European Union has loaned out US \$600 million to the CVRD in return for 50% of the iron at a guaranteed low price. The U.S.A has also loaned a further US \$300 million, which includes US \$70 million on environmental projects and the indigenous people.

There has been a massive growth in population of that area due to this project. This project has led more and more people to live in Carajás. There were 25,000 people employed as a result of this project just from 1983 to 1985. That was when it was at its climax. The Carajás residential township houses 7000 people. They are mostly key employees and their direct families. The area is located 20 minutes away from the mines. The settlement has been very well planned and the plans for infrastructure are good for the local Brazilian standards. There are many facilities in the area such as a fully equipped sports centre, a 2000 seat theatre, two fully air-conditioned hotels and a zoo.

Outside of this "company town," there is a town called parauapebas. By 1991, the population of this town had raised over 30,000, more than 4 times the size of the "company town." However the population has unbalanced the ratio of women to men, and as a result of this increase of women there is an increase in prostitution.

Natural resource boomtowns tend to go through 4 phases: Discovery, rapid growth, maturation when resources are concentrated in fewer hands, and a bust phase when reserves of the mineral or its price begin to drop and people move out.



There are many benefits and drawback to this project, and as this is a very controversial issue there have been many protests in the Carajás region by the indigenous people who have even blocked off the main road at Carajás to express their view on the issue. This is because a massive area of the rainforest, where many inhabitants used to live, and this area has now been converted into a huge enormous industrial park which covers over 900,000 sq km. Also, the local community did not want the new railway line to be built but it was and it was built through the Gavioes Indian reserve. There is also a health concern, which as been raised after many foreigners has come into the Carajás region for development and they brought disease with them,

which is spreading across the indigenous people. In the Xikrin Indian reserve independent miners have invaded and polluted local rivers with mercury, and this contributes to all the other problems caused by this problem. Deforestation is also another factor which needs to be considered, as not only would this contribute to the raising level of carbon dioxide in the world and the greenhouse effect but this would damage the habitats for the animals that live in the rainforest. This will also affect the medical research which is increasingly successful in rainforests due to the biodiversity in these places, and if this is being destroyed vital plants are being lost. Another consequence of this project is that Air pollution has increased rapidly as the scale of economic activity has expanded. However, the mine has provided many people with permanent jobs, and this resulted in a better economy and also benefited the people. There have also been many homes built for the employees and their families, and this is another big stage in the development of the region. By building the railway, passenger transport has risen sharply from 495,000 in 1991 to 840,000 in 1995. This has also provided an extra 1540 jobs. However the most important benefit of this project is that by selling the raw materials produced, the project can help pay back some of the money owed to the other countries and the World Bank



The Grand Carajás Project

There are many different views on this controversial project. The Indigenous people are people who have lived in the rain forest all their lives. Many of these indigenous people are against this project as their homeland has been destroyed. The place would have had many sentimental values for them and also their language and culture is different from the rest of Brazil and so they would find it difficult fitting in elsewhere. Most environmentalists are against this project as this project is only the beginning to the mass deforestation and environment disasters in the Amazon.

The ordinary working class citizen in a town in Brazil is benefiting from this project as it has created many jobs and will probably create lots more, and also the facilities in the “Company town” allow employees to live comfortably in the area. People for the project are probably the Brazilian government as it boosts their income and helps pay off the debts to the EU, the U.S.A and the World Bank. However, there is a varied view on countries which have lent money to Brazil. They would not want Brazil to be developed enough to repay the debts, as they are losing out on the interest payments. This is one of the biggest issues in the world today, as the difference between the MEDCs and LEDCs in this world is increasing rapidly. However many of these countries will benefit from cheap raw materials from Brazil.

After taking all these points into consideration, I think that this project is vital to the growth of Brazil, and a project like this had to be carried out in Brazil to get it out of its debt. I think that even though there are many environmental damages caused by this project other countries such as the USA had developed similar projects in the past for economic reasons.



Carajás Iron Mines



Carajás Zoo