DAMS

A dam is a man made structure which blocks a river causing a reservoir of water to form behind it. Dams can be small, for a stream on your farm, huge like Kariba in Zimbabwe, or anything in-between. Dams can be used to make electricity. Turbines are placed inside and as water passes through holes in the dam, it turns the turbines to generate electricity. More than 45,000 large dams have been built around the world to generate electricity, to supply water to crops and people, control floods and help ships and boats move around. Big dams are very expensive to build. They can be extremely useful, but can also have horrific side effects and some people now believe that the costs outweigh the benefits.

When a large dam is built much of the land upstream is lost under water. Rivers and riversides can be the most fertile places for agriculture. The river carries rich sediments from dissolved rocks and fallen leaves and other organic matter. These are deposited on floodplains along its journey. As all of life depends on water, rivers are also very rich in wildlife. Fish which travel between the sea and the river to complete their life cycles are unable to do so when a large dam is built. They may even go extinct. One third of the world's freshwater fish are threatened with extinction.

People who used to live alongside the river are also affected. Their entire community may be flooded out, and their way of life and livelihood lost. The Kainji Dam in Nigeria, for example, displaced 50,000 people. The loss of annual floodwater downstream reduces crop yields and water availability for many thousands more. During the 20th century an estimated US$20 trillion has been spent on dams. Among many other projects, a big new dam was built on the Komati River in Swaziland in 2001, the Mphanda Nkuwa Dam in Mozambique was commissioned in 2015 and the Grand Inga Dam in DRC in 2016. However, the Renaissance dam in Guba Ethiopia will bring electricity to millions of poor, in Ethiopia and beyond.