



Generating electricity through water: dams

dams have been built since old times to store water for agriculture and to control flooding. More recently they have been used to generate electricity. As the water stored behind a dam is released at high pressure, its kinetic energy is transferred onto turbine blades and used to generate electricity.

One of the best examples of dams in the world is the Aswan High Dam, in Egypt. It was built in the 1960s to control the floods of the Nile River, store the water from the floods, and generate hydroelectric power.

The hydroelectric equipment produces almost half of all Egypt's electric power. For many centuries, people in Egypt suffered from either too little or too much water. They needed to find a system to manage the water from the Nile so that they had just the right amount all the time. The answer to these problems was the dam which was built south of the city of Aswan, on the border between Egypt and Sudan. It took ten years to complete its construction and it began operating in 1970. The dam created Lake Nasser, one of the largest artificially-made lakes in the world. This lake has also created more land to farm on, as the water of the lake can be used for irrigation. When the dam was built, the Temple of Abu Simbel was relocated, so it wouldn't be flooded and destroyed when Lake Nasser filled up. The Temple is now located on the edge of Lake Nasser.



ACTIVITIES

1 Answer the following questions.

- 1 What are the main functions of dams?
- 2 How is hydroelectricity generated?
- 3 When and where was the Aswan High Dam built?
- 4 How much power does it produce?
- 5 Why was the construction of the dam important for agriculture too?
- 6 Why was the Temple of Abu Simbel moved during the construction of the dam?