

Environmental Disasters





Clearing of a forest
can lead to an
environmental disaster.

What Causes Environmental Disasters?

When an environmental disaster occurs, large numbers of plants and animals, and even Earth itself, are damaged. Sometimes one event, like a ship spilling oil into the ocean, causes the damage. At other times, the damage can be caused by activities that happen over many years.

Currently, Haiti is suffering from environmental damage caused by years of forest clearing. In 1950, about 2 of every 5 square miles of Haiti were covered with forest. Since that time, people have cut down millions of trees to make space for farmland and get firewood to burn. Today, only about 1 of every 100 square miles of Haiti is covered with forest.

Clearing so much forest has led to many environmental problems. With few trees to hold the soil in place, heavy rains create floods that kill people and wash away the topsoil that is needed to grow food.

Key Notes:

What can cause an environmental disaster?



Killer Smog

On Tuesday, October 26, 1948, heavy fog settled into a narrow river valley in Pennsylvania. For years, people in the valley had lived with smoke from a factory that smelted, or separated, metal from ore. Usually, the smoke was carried away into the air. On this day, though, the fog held the smoke near the ground. Because no fresh air could get in to blow the smoke away, the fog and smoke formed a thick smog.

The smog stayed in the Pennsylvania valley for almost a week. During this time, although many people had trouble breathing, the smelting factory kept producing smoke.

Finally, on Sunday, the smelting factory was shut down, and rain arrived and began to break up the smog. By that time, however, 7,000 people had become sick and 20 people had died. The environmental disaster led to the first state and federal laws that control the quality of air.

Key Notes:

What is smog?

Smog can make
people sick.



Mercury affects fish,
animals, and people.

Deadly Substances

In the 1940s, people living in a seaside town in Japan noticed that cats and other animals were acting strangely. Some cats seemed to dance into the sea, where they drowned. By the 1950s, some people in the town were also acting strangely. By 1956, many of the people were very ill and others had died. Finally, it was found that a local company had been spilling mercury compounds into the bay near the town for more than 20 years.

The people and the animals of the town had been eating fish from the bay for many years. Scientists found that the fish had deposits of mercury compounds in their bodies. As people and animals ate the fish, deposits of mercury compounds built up inside them and made them sick. This environmental disaster showed that deadly substances can get into the food chain and can harm many species.

Key Notes:

How did people know something was wrong in the Japanese town?



The Three Mile Island nuclear reactors are near a river.

Nuclear Accidents

Nuclear power plants can provide large amounts of cheap energy. However, accidents at nuclear power plants can be costly to people, animals, and the environment. A nuclear explosion throws radiation into the air that can be very harmful to all living things. Radiation in the soil affects plants for years. Radioactive particles in the air or in food can cause serious health problems for people and animals.

In 1986, the world's biggest nuclear accident happened near Chernobyl, a small city in eastern Europe. Several large explosions at a nuclear power plant were followed by fires. Almost 9 tons of radioactive material escaped into the air and seeped into the soil. More than 100,000 people were moved from Chernobyl to escape the danger. For several years afterward, hundreds of thousands of workers tried to clean up the radioactive material. Even so, many people became ill from high levels of radiation.

Key Notes:

What caused the environmental disaster in Chernobyl?

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