

Introduction

Almost every time you watch the news on television, or hear news on the radio, or pick up a newspaper, you'll hear about some kind of impact on the environment. It might be a bushfire, a flood or an earthquake. It could be a story about the damage caused by an introduced animal or plant pest, or pollution in a creek or river.

Some of these events are entirely natural, like volcanic eruptions, **tsunamis**, earthquakes, droughts, some floods and some bush and forest fires. Others have been caused by the actions of humans, such as pollution, the introduction of **exotic** plants and animals, some fires and some flooding.

In some cases, these natural or human-made events have a limited effect. You might have seen some in your local area. Perhaps nearby bushland and fields have been cleared for new houses to be built.

Earthquake devastates Sichuan province in China

Another bushfire season approaches

Flooding fears in Bangladesh

Farmers flee volcano



In other cases, the results of the event are much more far-reaching. A small fire might spread until it burns large areas of bushland, destroys homes and kills animals and people.

And some events are huge. An event like an undersea earthquake, or the eruption of a volcano, or a nuclear accident, can affect not only the area where it occurs, but countries all around the world.

In this book you'll read about some events which have affected the environment, what caused them and the impact they had. You will also learn what people are doing in an effort to reduce the damage they cause.

Nuclear Explosion

It's been called the worst nuclear accident in history.

On 25 April 1986, engineers at the Chernobyl nuclear power plant, near Kiev in the former Soviet Union, were conducting an experiment. They wanted to see if their cooling system could work using power generated from the nuclear **reactor**.

Things went very wrong. Power surged to a hundred times the normal level and the core of the reactor began to explode.

Chernobyl after the explosion ▼



What Happened?

At 1.24 a.m. on 26 April, the nuclear reactor blew up. Its dome-shaped roof was blown apart. In the massive blast, the contents of the reactor flew out into the sky. A fire began, and raged for nine days.

The main danger was not the fire. It was the radioactive dust that had spewed into the atmosphere. Scientists have estimated that the explosion released one hundred times more harmful **radiation** than the two **atomic bombs** that destroyed the cities of Hiroshima and Nagasaki in Japan at the end of the Second World War.

It was not just the area around Chernobyl that was affected. Winds picked up the poisonous dust and spread it far away. The former Soviet government did not report the accident at once. It was not until Sweden, Finland and Norway began noticing high levels of radioactivity in the atmosphere, two days later, that the story came out. Sweden, 1609 kilometres away from Chernobyl, reported twice the normal level of radioactivity in its air.



▲ Many countries in Europe were affected by radioactivity in the atmosphere.