

Drought



Both water and air are important for life on Earth. Imagine having no air to breath. Having no water may not be as immediately drastic but, before long, the same result occurs—death! If there is a lack of rainfall, this can mean there is not enough water to supply all those who need it, including animals and plants. When little or no rain falls over a long period of time in an area, it is said to be suffering from drought.



Hunger and famine

You may think, 'Don't waste precious water on plants—humans and animals are much more important!' But did you know that plants are the foundation of all food webs? If they die because they are deprived of water, everything else in the food web will also suffer. When food crops fail because of lack of water, people and animals are left hungry. If a drought continues, famine will occur and people may die.





Loss of fresh drinking water

The human body is between 55% and 65% water. When you start to feel thirsty, you are already starting to dehydrate. Your body is functioning at much less than 100% capacity because your organs are struggling to work efficiently. They need water. It is possible to survive a few weeks without food but a person can only survive a few days without water.

Spread of disease

Drought means a lack of water for personal hygiene and sanitation. These can create unhygienic conditions in which disease-carrying organisms can multiply rapidly. Droughts usually occur in hot regions and the high temperatures can also help the microbe population to soar. Famine-affected people may be even more susceptible to disease, as they are already weakened by hunger.



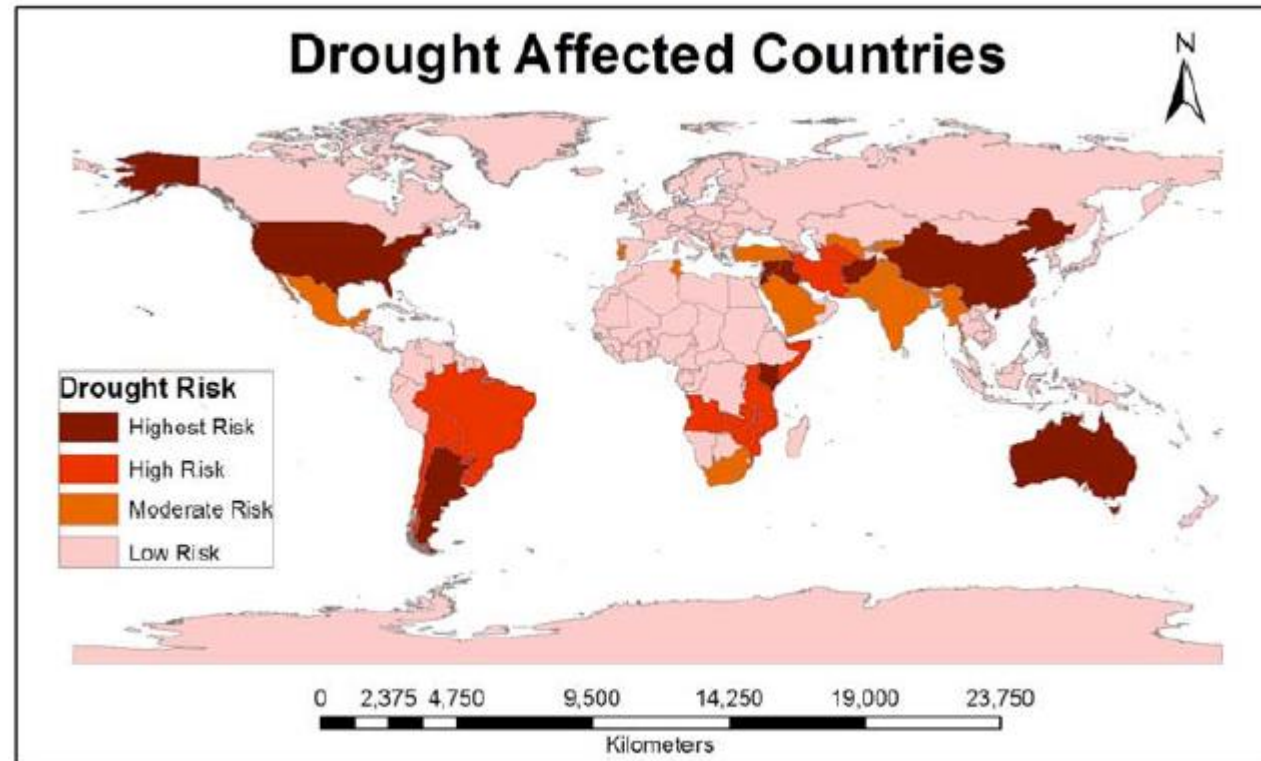
Suffering environment

When a drought occurs, it is not just the living that are badly affected. The environment also suffers and this has consequences for its ability to sustain life:



- Fires increase in frequency and severity, fuelled by the tinder-dry plant life.
- The loss of plant life and the roots that hold soil in place can leave the soil susceptible to erosion by wind and, when rains finally do fall, by water. This means the soil will no longer be able to sustain healthy plant life.
- Animal habitats are also lost and this leads to a reduction in biodiversity, which can affect the balance of food webs as well as seed dispersal and pollination.

Many of the countries where droughts are more likely are underdeveloped and politically unstable. This means that when a natural disaster such as a drought occurs, the victims may have to rely on help from other countries.



IN YOUR OWN WORDS

1. Describe what drought is.
2. How does famine occur?
3. Why is it important to keep your body hydrated?
4. Why can disease spread easily in drought stricken areas?
5. Draw a flow chart to show the main effects of drought.
6. Do you really think that scientist or other people can make rain fall? Type 'cloud seeding' into a search engine and learn about this amazing technology!

NOTE – Please rewrite and answer questions in your science books.

Drought

Droughts occur when there is a period of below-average rainfall in a particular area. This can cause top soil to dry out, groundwater to sink and streams and rivers to dry up.

A drought can last for weeks, months or even years. In severe cases, droughts may be declared after as few as 15 days.

Living organisms need water to survive. Because of this, droughts are one of the worst natural disasters that can occur. Prolonged drought can cause plants and animals to die and crops to fail. This can lead to famine for the human population.

In areas where there aren't many trees, droughts can cause erosion. Hot winds blow away the dry topsoil, which creates terrible dust storms.

There are three main categories of drought: meteorological (a reduction in rain), agricultural (a reduction in crop irrigation) and hydrological (a reduction in lake and reservoir levels).

What features of a drought can you see on the diagram?

