

# Africa's Environmental Issues

When Americans think about environmental problems, they generally focus on global warming and climate change, smog from cars, or pollution from factories. But most of the environmental problems in Africa are the result of **climate** and **poverty** (*being poor*), not businesses and factories. Soil is worn-out by slash-and-burn agriculture, which also results in deforestation and desertification. The lack of clean water remains an immense problem as well.

## Desertification

More than one-third (1/3) of Africa is threatened by **desertification**, which is the transformation of fertile, useful land into **desert**. On the southern corner of the Sahara, an area the size of California and Oregon has become desert over the past 50 years. In semi-arid (*somewhat dry*) areas of West Africa, it is estimated that the desert is expanding by more than three miles per year! This is extremely troubling since it is very difficult to reverse the effects of desertification.



The worse case of desertification occurs in the **Sahel** region, which stretches along the southern part of the Sahara Desert. As the land is overused by grazing animals and farming, the soil becomes poor and powdery. The winds coming from the Sahara gradually blow the dry topsoil away, leaving a barren and rocky land. Periods of drought (*little rain*) in recent years have made this situation worse. As the desert expands, people are less able to grow enough food to feed them. People living in areas going through desertification face hunger and hardship.

Unfortunately in the Sahel, desertification is mostly the result of the actions of people rather than the climate. Land is being cleared for logging and space for farming. Trees and shrubs are being cut down for firewood. While survival needs of the people living there are important, they are destroying major parts of their environment in the process.

## Deforestation & Poor Soil



Africa has the highest rate of deforestation in the world. **Deforestation** is the destruction of trees and other vegetation. Much like desertification, the cause of Africa's deforestation can be traced back to humans. It occurs when forests are cut to clear space for agriculture (*farming*), grazing, or settlement. It can also occur when firewood or building materials are needed. For thousands of years, humans and their livestock have stripped Africa's soil of its vegetation leading to erosion and poor soil. Today, most of Africa's soil is less fertile than the soil found in other continent.

Deforestation continues to be a particular problem in the Sahel. Animals have been allowed to graze too heavily in an area and strip all the vegetation from the soil. People who need firewood or new farmland cut down the trees that help hold the soil in place. Droughts, or periods of little rainfall, hurt the Sahel further. As a result of deforestation, Africans are left with dry unfertile soil and often face starvation and poverty. Many move into urban (*city*) areas hoping to find work but most find only more poverty.

Deforestation is also a problem in Africa's tropical rainforest. Most deforestation here is caused by **slash-and-burn agriculture**. Farmers cut down trees and burn them for fertilizer, creating fields for farming or raising livestock. Unfortunately in this type of farming, poor farmers have to continually clear new land once they

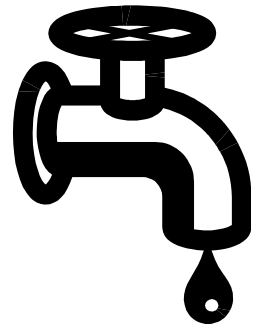
have used up the soil's fertility. As they move to more fertile lands, farmers cut down more forest and rarely replant their old fields. This speeds up erosion and desertification, further robbing people and animals of a much needed resource. For forests and trees make an essential contribution to rural (*country*) life by providing firewood, dyes, fruits, nuts, and building materials. In fact, firewood provides over half the energy needed in sub-Saharan Africa. African animals depend on trees too. Deforestation robs animals of food and shelter.



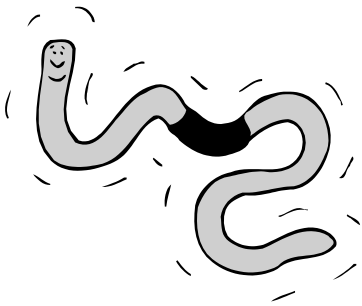
The Sahel and Tropical Rainforest are an example of how deforestation can lead to poor soil and eventually an expanding desert. Most historians believe that the Sahel was once rich farmland. Centuries of farming and grazing along with less rainfall have gradually damaged land in the Sahel. Millions of people struggle to farm in its poor soil. Similarly, many of the rainforests that once ran from the Atlantic Ocean to Cameroon are already gone. Obviously, the fight against deforestation is being lost in some countries. In Côte d'Ivoire, 90% of trees have disappeared. Hope comes from such countries as Ghana and Kenya, where African researchers are working to replenish the soil and slow or stop deforestation.

## Unequal Distribution of Water

Much of Africa has trouble getting enough water for people to live. In fact, only 47% of sub-Saharan Africans (*people who live south of the Sahara*) have access to safe drinking water. Parts of Africa are arid (*dry*) desert, others are semi-arid, some are rolling grassland, and still others are humid and tropical. While countries with large rivers systems have enough water for farming and sanitation, others do not.



Rivers like the Nile, Congo, and Niger serve as vital **transportation** routes for those who need to go from the interior of Africa to the coast. Much of the timber from the rainforest is transported down the rivers, and people travel the rivers in search of work. Dams along the major rivers, like the **High Aswan Dam** on the Nile, allow countries to have year-round **irrigation**. Drawing on the lakes behind the dams, farmers can bring water to their plants and grow three crops a year instead of just one. They no longer have to depend on the annual flooding of the river to bring water to the fields.



## Water Pollution

However, people are now concerned about the water's contamination with human and industrial waste. **Overpopulation** and **poor sanitation** laws have made life close to rivers and lakes more difficult. The primary cause of water pollution in Africa is **natural phenomena**, such as human waste, animal waste, snails, worms, insect larvae, and other parasites. These organisms cause waterborne **diseases** which reduce life expectancy, lessen the quality of life, and slow down economic development. A smaller environmental issue

affecting Africa's water quality is the disposal of **industrial waste** from factories. Although the continent has limited industrialization (*businesses & factories*), few states are able to convince industry owners they have to safely dispose of toxic waste. Often, chemicals and other wastes leak into water resources, contaminating water, soil, and food.

Due to the lack of safe water, some countries have poor harvests, little grazing for farm animals, and even little clean water for drinking and washing. Each year deserts claim more and more land. The tension between the needs of a growing population and limited supply of water is a serious issue for most of Africa.