Land-use practices can harm soil.

The way people use land can affect the levels of nutrients and pollution in soil. Any activity that exposes soil to wind and rain can lead to soil loss. Farming, construction and development, and mining are among the main activities that impact soil resources.

Farming

Farming is very important to society because almost all of the world’s food is grown on farms. Over the 10,000 years humans have been farming, people have continually improved their farming methods. However, farming has some harmful effects and can lead to soil loss.

Farmers often add nutrients to soil in the form of organic or artificial fertilizers to make their crops grow better. However, some fertilizers can make it difficult for microorganisms in the soil to produce nutrients naturally. Fertilizers also add to water pollution when rainwater draining from fields carries the excess nutrients to rivers, lakes, and oceans.

Over time, many farming practices lead to the loss of soil. All over the world, farmers clear trees and other plants and plow up the soil to plant crops. Without its natural plant cover, the soil is more exposed to rain and wind and is therefore more likely to get washed or blown away. American farmers lose about five metric tons of soil for each metric ton of grain they produce. In many other parts of the world, the losses are even higher.

Another problem is overgrazing. Overgrazing occurs when farm animals eat large amounts of the land cover. Overgrazing destroys natural vegetation and causes the soil to wash or blow away more easily. In many dry regions of the world, overgrazing and the clearing of land for farming have led to desertification. Desertification (dih-ZUR-tuh-fih-KAY-shuhn) is the expansion of desert conditions in areas where the natural plant cover has been destroyed.