







## Timeline: Human Impacts on Soil Erosion

**Directions:** Read the information about each human impact below.

Human Impact	Explanation	Audio Script	Image
<p><b>1</b> <b>Agriculture</b></p>	<p>Agriculture is the development of the land to grow food or support livestock animals.</p>	<p>Agriculture is the most significant human action that accelerates soil erosion. Plowing the land to plant fields of crops takes away the natural vegetative cover of an area and replace it with rows of crop plants mixed with bare areas. It also creates an area where there may not be anything growing in the winter, because in most areas, food crops only grow in the spring and summer. The bare areas of a field are most susceptible to erosion. In addition, farmers sometimes make deep grooves in the land with their tractor tires. These grooves act like small rivers and give running water a path--leading to rill and gully erosion.</p>	
<p><b>2</b> <b>Slash and Burn Practices</b></p>	<p>Slash and burn is an agricultural practice common in less developed countries. It involves cutting and burning a forest to make fields for growing crops.</p>	<p>Slash and burn is an agricultural practice common in less developed countries. It involves cutting and burning a forest to make fields for growing crops. The exposed soil left behind by slash and burn agriculture is especially susceptible to erosion. It almost always has widespread harmful environmental effects and is used most commonly in vulnerable tropical rainforest areas.</p>	

<p><b>3</b> <b>Grazing Animals</b></p>	<p>Grazing animals are those that are kept in pastures and raised for food.</p>	<p>Grazing animals are animals that live on large areas of grassland. They wander over the area and eat grasses and shrubs. They can remove large amounts of the plant cover for an area. The plants that grow over the soil act as a protector against erosion, because plant roots anchor the soil down. When animals overgraze an area, erosion is quick to follow. The land on the right side of this picture has been overgrazed and you can see how the soil is left vulnerable to erosion.</p>	
<p><b>4</b> <b>Logging</b></p>	<p>Logging is the large-scale removal of trees from a forest.</p>	<p>Logging is a commercial activity that cuts down large areas of forests to get timber wood. Deforestation is a worldwide major contributing factor to soil erosion, because it leaves behind bare and exposed soil.</p>	
<p><b>5</b> <b>Construction</b></p>	<p>Construction removes the natural vegetation of an area and exposes the soil to erosion.</p>	<p>Construction involves changing forest and grassland into cities, buildings, roads, neighborhoods, and other human-made features. Any time we remove natural vegetation, we make the soil more susceptible to erosion. In addition, features like roads, sidewalks, and parking lots do not let water run through them into the ground because they are hard and impermeable. Since the water cannot enter the ground, it then runs over the ground faster than usual. This can speed up water erosion.</p>	

<b>6 Recreational Activities</b>	Recreational activities that contribute to soil erosion include hiking and riding off-road vehicles.	A large amount of erosion occurs when people drive off-road vehicles over an area; the area eventually develops bare spots where no plants can grow—leaving the soil prone to erosion.	
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