



## Importance of soil conservation

### Method

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Soil protection refers to preventing erosion of the soil's surface layer, as well as decreased fertility due to overuse, acidification, salinization, or other chemical soil pollution. Farmers may use soil management practises to avoid soil erosion and increase organic matter levels. Crop rotation, reduced tillage, mulching, cover cropping, and cross-slope planting are examples of these methods. Organic matter content, soil composition, and rooting depth should all be increased by farmers. Crop rotation, cover crops, conservation tillage, and cultivated windbreaks are examples of soil conservation techniques that influence both erosion and fertility. Plants decompose and become part of the soil when they die. Soil provides plants with a place to stand and retains the nutrients they need to grow; it filters rainwater and controls the discharge of excess rainwater, preventing flooding; it can store vast quantities of organic carbon; and it buffers contaminants, protecting groundwater. Our life support system is soil. Soils act as anchors for roots and as reservoirs for water and nutrients. Myriad microorganisms fix nitrogen and decompose organic matter in soils, as well as armies of microscopic animals including earthworms and termites. We build on, in, and on top of soil. It's important to restore soil health! We must strive to protect soil as a natural resource for future generations. Reduced tillage and cover cropping are two methods for increasing organic matter and improving soil quality. Producers can boost the health of their soil in a number of ways. Conservation cropping systems rely heavily on soil conservation. Producers who want to use soil management methods on their farms reap multiple benefits. Soil is the source of food for 7 billion people. It protects clean water and aids in climate management. Soil depletion lowers crop yields and jeopardises the livelihoods of farmers. Producers who want to use soil management methods on their farms reap multiple benefits. Soil is the source of food for 7 billion people.

It protects clean water and aids in climate management. Soil depletion lowers crop yields and jeopardises the livelihoods of farmers. Conservation agriculture systems use soils to grow crops with the aim of minimising soil mixing and keeping crop residues on the soil surface to reduce environmental harm. CA is based on three principles: limited tillage, soil disturbance, and water conservation. To avoid soil erosion and improve water quality, use best management practises such as terracing, cover cropping, strip cropping, no-till planting, sodding streams, drainage, water impoundments, and other similar techniques. Soil erosion decreases soil quality and productivity by exposing the residual soil and removing the highly productive topsoil. It lowers agricultural productivity, degrades ecosystem functions, and increases hydrogeological risks including landslides and floods. Reduced crop production capacity, lower surface water quality, and degraded drainage networks can all be consequences of soil loss on farmland. Sinkholes may also be caused by soil erosion. Human activities have risen at a pace 10–50 times faster than global erosion. Soil conservation seeks to preserve and increase soil performance so that you can farm profitably while also maintaining environmental quality for future generations. It is typically caused by the removal of vegetation or some other operation that causes the field to become dry. Soil erosion is caused by farming, grazing, mining, building, and recreational activities, to name a few. Soil erosion has far-reaching implications that go beyond land loss. The ultimate goal of soil conservation is to get the most sustainable amount of output from a given piece of land while keeping soil loss below a certain degree. Soil management has been practised by farmers for centuries. We must protect soil as a natural resource since it takes hundreds of years to form a 1 cm layer of soil. If we do not preserve the soil, the number of trees will decrease because a lack of soil means the tree will receive less nutrients and will suffer harm. The most important prerequisite for good agriculture is a soil rich in plant food. It is important for plants to have as a support.

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