

Soil cover refers to vegetation, including crops, and crop residues on the surface of the soil.

The various farming practices can be used in order to reduce soil degradation. Maintaining the cover of the soil during winter is one of such practices that reduce soil erosion and the loss of particulate pollutants (i.e. those attached to soil) including nutrients, plant protection products and faecal microbes. This practice also increases soil organic matter. Agricultural land with no plant cover or where there are just plant residues on the top is especially vulnerable to nutrient leakage.

In some [EU Member States](#) requirements to either have normal winter crops like winter wheat or cover crops are included in legislation or are part of the agri-environmental schemes farmers can adhere to. These crops should not be mistaken for normal winter green crops, such as winter wheat which is to be harvested or grassland. These are crops sown in the autumn with the sole aim to reduce nutrient leakage. Normally they are ploughed in during spring before sowing another crop, and are not harvested or used for grazing.

The following categories are defined under soil cover:

- **arable land covered with normal winter crop** - an area of [arable land](#) on which crops are sown in the autumn and growing during the winter (normal winter crops, such as winter wheat), normally harvested or used for grazing
- **arable land covered with cover crop or intermediate crop** - an area of arable land on which plants are sown specifically to reduce the loss of soil, nutrients and plant protection products during the winter or other periods when the land would otherwise be bare and susceptible to losses. The economic interest of these crops is low, and the main goal is soil and nutrient protection. Normally they are ploughed in during spring before sowing another crop, and are not harvested or used for grazing. Agricultural land with no plant cover or where there are just plant residues on the top is especially vulnerable to soil erosion and nutrient and pesticide loss. In efforts to reduce losses which are harmful both to the environment and to the economy one of the most efficient tools is keeping the land covered with plants at all times. These crops should not be mistaken for normal winter crops or grassland.
- **arable land covered with plant residues** - an area of arable land covered with the plant residues and stubble of the previous crop season during winter, intermediate and cover crops]are excluded. Plants residues can be straw, stubble or other plants parts leaving good mulch (for example sugar beet leaves) regardless if they remain from the previous harvest or have been added by the farmer. Potatoes are normally excluded because the stalks are degraded too quickly. The [tillage](#) operations are in this case normally carried out in the spring. Certain tillage operations can be carried out on in autumn, if they leave enough plant residues on the surface. Such tillage methods could be chisel or disk ploughing or similar. The straw can be removed for energy or other purposes, but an indicative threshold for remaining residue is minimum 10%. Self-grown cereals cover the soil following a tillage operation is included
- **arable land with bare soil** - an area of arable land that is ploughed or otherwise tilled in autumn and is not sown or covered during winter with any plant residues, remaining bare until the pre-seeding or seeding agro-technical operations in the following spring period. Arable land on which [tillage](#) methods leave more than 10% of plant residues on the surface are recorded under "plant residues"

Data on soil cover of arable land were collected in the [Farm structure survey \(FSS\) 2003](#) and in the [Survey on agricultural production methods \(SAPM\)](#).

Further information

[Structure of agricultural holdings](#) (ESMS metadata file — ef_esms)

- [Survey on agricultural production methods](#) (background article on the organisation and list of characteristics surveyed)

Related concepts

- [Agri-environmental indicators \(AEI\)](#)
- [Farm structure survey \(FSS\)](#)
- [Survey on agricultural production methods \(SAPM\)](#)

Statistical data

- [Agri-environmental indicator - soil cover](#)

Source

- [OECD Glossary of statistical terms - Soil cover](#)