

# «Forget how to till the soil and care the soil means forgetting themselves»

Mahatma Gandhi

## European Soil Charter 1972

«Soil is one humanity's most precious assets. It allows plant, animals and man to live on the heart's surface»

## ONU, 1994

«Desertification certainly depends on the variability of the climate, but the soil degradation and loss of fertility are also due to the intensive use of land and water resources, deforestation, improper agro-pastoral practices»

## European Parliament 2006

«Soil is a resource available to man characterized by great value but also by extreme fragility»

## European Parliament 2012

«Soil is essentially a non-renewable resource: the degradation rates can be rapid whereas the formation and regeneration processes are extremely slow»

**T**he soil is the most superficial layer of the earth's crust, composed of both mineral particles, more or less transformed, and organic matter.

Soil provides numerous services to humans, essential to its sustenance that are not just alimentary products. At the same time the soil is a frail resource that is often subjected to a careless use resulting in loss of its functions.

**T**he soil is similar to a living organism in continuous change, we do not realize it because the changes are very slow, not appreciable in the human timescale. It takes about 300 years for 1 cm of soil is formed and a period of **3,000 years** because it accumulates a quantity of substances to make it fertile. It is for this reason that the soil is considered a non-renewable resource: once destroyed, is lost. Soil is an **open and dynamic system**; it exchanges energy and materials with the other environmental media: atmosphere, water and living organisms. The soil

**A**The soil is linked to the agricultural and livestock production, by which depends the human nutrition: it is therefore necessary for the survival of our species! Soil is our **"memory"**: in its layers, more or less deep, are preserved the traces of an ancient past. The soil contains more than 95% of the biodiversity of the whole planet.



controls the flow of surface water and regulates the absorption, thus it has a key role in mitigating the erosion and flood.

But, despite all this...

The soil consumption is accompanied in our country to a more intensive use of land, with the loss large areas suitable for agriculture. In these cases, the transformation of the landscape is practically irreversible and often it goes to affect agricultural land putting at risk also biodiversity and reducing the availability of groundwater resources. The soil cemented favors erosion, accentuating the transport of large amounts of sediment with a number of direct effects on the hydrological cycle, resulting in an increased risk of flooding and indirect effects on the climate.



Progetto



finanziato da

**mipaaf**  
Ministero delle  
politiche agricole  
alimentari e forestali

