Healthy soils for a healthy life

Our soils are in danger from expanding cities, deforestation, unsustainable land use, pollution, overgrazing and climate change, all of which compromise sustainable agriculture, food security and the provision of ecosystem services. To draw attention to their plight, the United Nations has declared 2015 the International Year of Soils, and 5 December World Soil Day*. Discover the work of ISO’s technical committees to improve the quality of soils.

Healthy soils are the basis for healthy food production

- 95% of our food is directly or indirectly produced on our soils

ISO/TC 34, Food products
- 826 standards published

Soils support our planet’s biodiversity and they host a quarter of the total

- Over 1000 species of invertebrates can be found in 1 m² of forest soil

ISO/TC 190, Soil quality
ISO/TC 23, Tractors and machinery for agriculture and forestry
- 515 standards published

Soils are the foundation for vegetation which is cultivated or managed for feed, fibre, fuel and medicinal products

- 26% of the earth’s terrestrial surface is occupied by grazing

ISO/TC 134, Fertilizers and soil conditioners
ISO/TC 238, Solid biofuels
ISO/TC 255, Biogas
- 52 standards published or under development

Soils store and filter water, improving our resilience to floods and droughts

- Of the estimated 1.4 billion hectares of crop land worldwide, ≈ 80% are rain-fed and account for about 60% of global agricultural output.

ISO/TC 147, Water quality
ISO/TC 282, Water re-use
ISO/TC 275, Sludge recovery, recycling, treatment and disposal
- 293 standards published or in development

Soils help combat and adapt to climate change by playing a key role in the carbon cycle

- Global emissions from agriculture (crops & livestock) continue to increase.

ISO/TC 146, Air quality
- 155 standards published

Soil is a non-renewable resource. Its preservation is essential for food security and our sustainable future

- Sustainable soil management could produce up to 58% more food

ISO/TC 207, Environmental management
ISO/TC 81, Common names for pesticides and other agrochemicals
- 44 standards published

* Declared by the United Nations (UN) and implemented by the UN Food and Agriculture Organization (FAO). FAO has 39 liaisons with ISO technical committees and subcommittees.