Decline of organic carbon stock in the soil affects its fertility status and climate change regulation capacity.

Approximately 1.417 billion tonnes of SOC are stored in the first meter of soil and about 2.500 billion tonnes at two meters soil depth. The global loss of the SOC pool since 1850 is estimated at about 66 billion tonnes (±12), mainly caused by land use change.

There is more organic carbon in the soil than there is in the vegetation and atmosphere combined.

Sustainable soil management fosters CO₂ sequestration, boosts soil health and contributes to achieving the SDGs, especially climate change adaptation and mitigation.
Soil organic carbon loss

Condition

Very poor
Poor
Fair
Good

Trend

Improving
Deteriorating
Variable
Stable

SOIL THREATS

SOIL THREATS

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Good

Fair

Poor

Very poor

Condition Trend

Improving
Deteriorating
Variable
Stable

Soil organic carbon loss

NA
North America

LAC
Latin America and the Caribbean

NENA
Near East and North Africa

SSA
Sub-Saharan Africa

SP
Southwest Pacific

E
Europe and Eurasia

A
Asia

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