

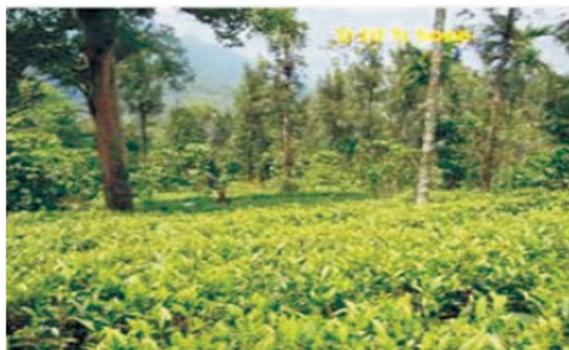


NATURAL RESOURCE MANAGEMENT

Effect of slope and land use on soil carbon stock and soil quality in Nilgiris

Plantation crops (tea and coffee) occupy 25% of the area in the Nilgiri district (Udhagamandalam). In the tea plantation, soils under slope class 11-33% recorded highest soil organic- carbon stock content (16.01 kg/ m²),

(10.42 kg/m²) was in slope class 11-33%. On an average, among plantation crops, soils under tea plantations recorded 14.41 kg/m² of mean soil organic carbon stock, which was 32% higher over coffee plantations.



0-10% slope



11-33% slope



>33% slope

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followed by <10% slope (14.02 kg/ m²), and the lowest (13.20 kg/ m²) was in the slope class >33%.

Under coffee plantation in the slope class <10%, highest soil organic carbon stock (11.50 kg/m²) was recorded, followed by >33% slopes (10.89 kg/m²) and the lowest

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