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## Soil Conservation Service Underpins Sustainable Development Goals

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Soil conservation service (SCS), one of the vital ecosystem services, represents the ecosystem's capacity to conserve soil and control erosion. Achieving the Sustainable Development Goals (SDGs) requires multidisciplinary efforts in which SCS plays a key role. However, the coupling analysis of SCS and the SDGs is lacking. We analysed SCS's contribution to the SDGs by a case study in China and a global expert questionnaire and explored systematic strategies to improve SCS implementation. The results showed that i) SCS ensures the SDG achievement by mitigating soil erosion; ii) SCS showed a significant and positive relationship (coef. = 0.41,  $p < 0.01$ ) with SDG 15 (Life on land) in China. Moreover, SCS supports multiple SDGs by regulating ecological processes, producing food and products, and providing social and cultural values. More than 50% of respondents recognised that SCS benefits SDG 15, SDG 13 (Climate Action), and SDG 6 (Clean water and sanitation). Finally, to be goal-oriented, we presented an SDG-holistic guiding framework to promote SCS for the SDG achievement, thus harnessing the SCS's roles in social, economic, and eco-environmental sustainability. Altogether, our work highlights the associations between the SDGs and SCS, which is key to recognising the contribution of soils and ESs to sustainable development.