

Scientific Basis

Stock, Dynamics of Soil Organic Carbon of China and the Role in Climate Change Mitigation

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摘要 This paper synthesizes the studies on China's soil organic carbon (SOC) stock and the dynamics, especially of croplands and discusses the significance in climate change mitigation of the state. The status of SOC stock and its role in climate mitigation of China are overviewed as: a relatively lower SOC storage with greater regional variability; an existing SOC stock increase trend with significant SOC sequestration capacity; technology and climate policy required for enhancing SOC stock and the climate change mitigation capacity building for China. It is proposed that investments in research and development for enhancing SOC stock, development of climate policy and incentives should be pursued in the near future to develop climate friendly agriculture favoring SOC sequestration and ensuring double win effects with food production and climate change mitigation in agriculture of China.

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