

Viewpoint: ‘Regenerative agriculture’ could reverse soil degradation and save our farmland along the way

New technologies and genetically modified crops are usually invoked as the key to feeding the world’s growing population. But a widely overlooked opportunity lies in reversing the [soil degradation](#) that has already taken something like [a third](#) of global farmland out of production. Simple changes in conventional farming practices offer opportunities to [return] health to the soil that grows our food.

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And while mechanization, agrochemicals, and the Green Revolution transformed agriculture and boosted crop yields in the 20th century...The combination of highly disruptive mechanized tillage and heavy fertilizer use took a toll on soil organic matter and beneficial soil life...So far, America’s farms have lost [about half](#) their soil organic matter since colonial days.

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Rebuilding fertility on the world’s degraded farmland is not only possible; we could do it remarkably fast—and profitably—with something called “regenerative agriculture.” I learned about this as I embarked on a six-month journey to visit small subsistence and large commodity farms while researching my book *Growing a Revolution*.

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The secret to success? Giving up on plowing so as to minimize disturbance of the soil; planting cover crops to both protect the ground from erosion and build up soil organic matter; and adopting complex crop rotation pattern to thwart pests and pathogens.

*Editor’s note: David R. Montgomery is a professor of geomorphology at the University of Washington. This article discusses his new book: *Growing a Revolution: Bringing Our Soil Back to Life*.*

Read full, original article: [To Feed the World Sustainably, Repair the Soil](#)