

Theme Overview: Soil Health Policy in the United States and Abroad

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JEL Classifications: O13, Q15, Q18, Q28

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Recently, farmers, ranchers, environmentalists, researchers, and policy makers have become increasingly concerned with soil health. Recognizing this interest, the Food and Agriculture Organization of the United Nations named 2015 the “International Year of Soils.” Since then, according to Google Trends data, interest in soil health has roughly doubled in the United States and roughly tripled worldwide (Google Trends, 2019). As researchers and stakeholders, we are deepening our understanding of how soil health—broadly defined—is intertwined with agriculture, the environment, and human wellbeing. Perhaps equally as important, we are also deepening our understanding of how human activity affects the health of our soils.

This *Choices* theme tackles the issue of soil health from a number of angles, with an eye toward informing future research and public policy. For producers, soil scientists, environmentalists, and policy makers, these articles are intended as an accessible introduction to how economists think about soils. For economists, these articles are intended as an introduction to the existing literature with an emphasis on soil complexity. Our hope is that these articles prompt further research and interdisciplinary collaboration as well as evidence-based policy making in years to come.

In the first article, Stevens takes a broad, theoretical approach to modeling the economics of soil health. He emphasizes that soils are multidimensional and dynamic, necessitating a model that captures both elements. His proposal: a model of optimal control. After discussing the various components of such an approach, Stevens highlights the policy implications of thinking of soil as a dynamic resource. Specifically, he notes that soil policy can reduce information frictions by helping farmers learn about their soils’ health and better understand how today’s production practices will affect soil health tomorrow.

In the second article, Bowman and Lynch take a closer look at federal- and state-level soil health policies in the United States. Using Maryland’s cover crop program as a case study, the authors discuss the specific opportunities and challenges of implementing these policies. In practice, because policy makers are unable to easily measure the health of individual soils, policies are often organized around specific production practices. This approach raises concerns about cost-effectiveness and targeting. Bowman and Lynch provide useful insights for navigating such concerns in program design and implementation.

Articles in this Theme:

[Economic Theory Provides Insights for Soil Health Policy](#)

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[Government Programs that Support Farmer Adoption of Soil Health Practices: A Focus on Maryland’s Agricultural Water Quality Cost-Share Program](#)

Maria Bowman and Lori Lynch

[Soil Fertility and Poverty in Developing Countries](#)

Kichan Kim and Leah Bevis

[Soil Management for Smallholders: Lessons from Kenya and Nepal](#)

Julia Berazneva and David Güereña

In the third article, Kim and Bevis shift the focus to soil health in developing countries, where the agricultural, economic, and policy landscape is starkly different than that in the United States. Drawing on recent research, the authors draw convincing and significant connections between soil health and human welfare in countries where households' wellbeing is more closely tied to agricultural production. Encouragingly, there is increasing evidence that policies targeting soils in poor countries can have meaningful impacts on poverty and health.

In the fourth article, Berazneva and Güereña use several case studies from Kenya and Nepal to inform future soil health policies in the context of poor countries. Similar to Bowman and Lynch, the authors note that the devil is in the details. They write, "The technologies needed to create healthy, resilient soil systems were developed decades or millennia ago. What has proven more difficult is delivering proven soil health solutions to the last mile, at scale." Berazneva and Güereña provide readers a list of lessons from past soil health projects that will be valuable to researchers and policy makers alike.

For More Information

Google Trends, 2019. Accessed June 28, 2019. <https://www.google.com/trends>.

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