

<https://www.bloomberg.com/news/articles/2019-08-15/u-s-farmers-plant-crops-you-won-t-eat-in-climate-change-fight>

Climate Changed

U.S. Farmers Plant Crops You Won't Eat in Climate Change Fight

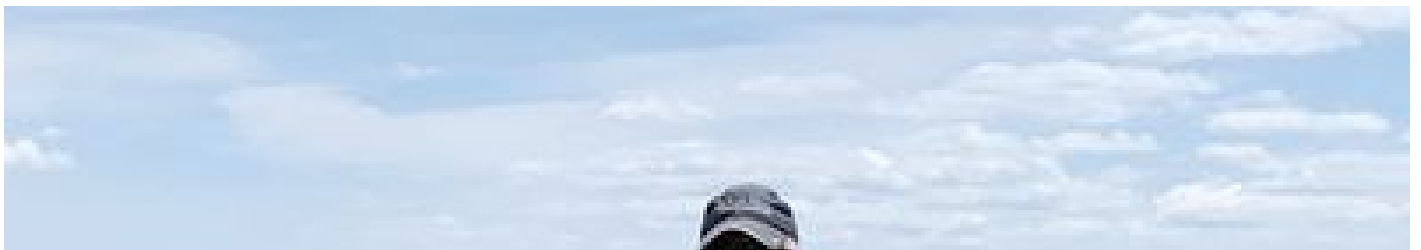
By [Denitsa Tsekova](#) and [Michael Hirtzer](#)

August 15, 2019, 2:00 AM PDT

-
- ▶ Cover crops increasingly used to help survive floods, drought
 - ▶ And the plantings also pull greenhouse gases from the air
-

In a tough year for farmers, North Dakota's Dennis Haugen is a standout. And he may have climate change to thank for it.

Haugen planted more radishes than ever this year on his Hannaford fields, he said by telephone. But not a single one will ever grace a dinner table. Instead, the radishes will remain as roots buried in the soil while Haugen harvests seeds from the delicate white flowers that grow above ground.





Dennis Haugen *Source: Michael Hirtzer*

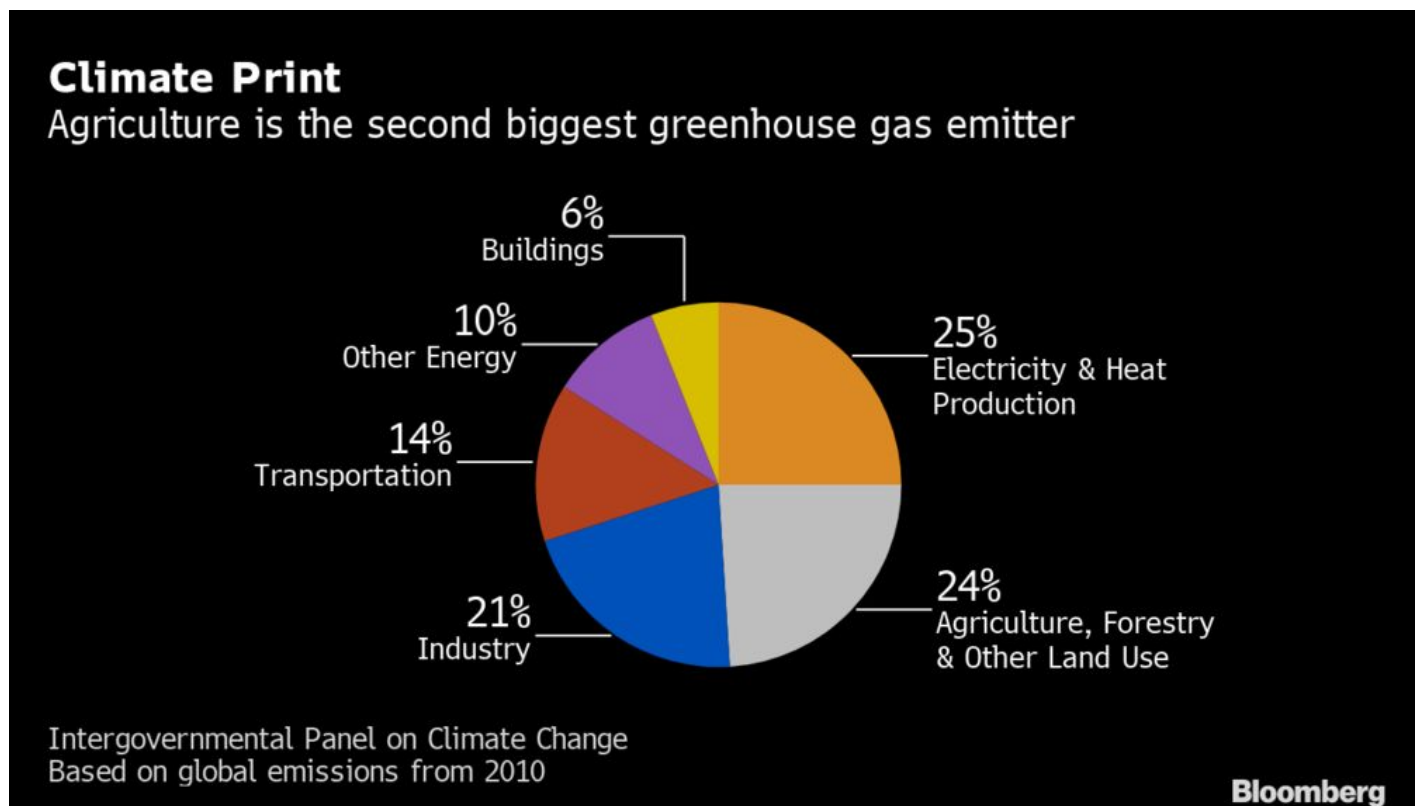
After non-stop rains and floods limited spring plantings across the nation's farm belt, Haugen scored his best year ever for his cover crop seeds, getting five times more for his efforts than in 2018. "I've hit my own personal home run," he said.

Cover crops have always been a part of agriculture. But recently they've gained a fancy new name, regenerative farming, and increasingly they're being marketed as a low-tech, but effective weapon against an aggressive and unpredictable foe: climate change. They reduce soil runoff from heavy rains and flooding, retain water during stubborn periods of drought and -- looking to the future -- they suck up greenhouse gases.

“Farmers can potentially perform a service for all of us, that service is to sequester carbon and reverse climate change,” said David Perry, chief executive officer of Boston-based Indigo Ag, a closely held maker of microbial and digital farm technologies.

Like most plants, cover crops convert carbon dioxide into organic material within the soil through the process of photosynthesis. Indigo is offering a payback program for farmers who regularly put land under cover crops, or use no-tillage and other regenerative practices. They’re measuring the carbon content of fields for growers, and paying them \$15 to \$20 a ton for the carbon they can identify.

“Whether we’re consumers or governments, we should be willing to pay farmers to do that,” Perry said.



From 2012 to 2017, cover crop acreage increased 50% nationally, according to the latest U.S. Department of Agriculture census. “The biggest yield differences were reported after the drought year of 2012, with average reported yield increases of 9.6% in corn and 11.6% in soybeans,” according to the USDA report.

That could be helpful at a time when “increased weather variability in the Midwest is expected to alter soil water availability and temperature, which could decrease yield between 15-20%,” according to a report by the USDA’s Regional Climate Hubs. Flooding this spring prevented farmers from planting corn on a record 11.21 million acres, USDA data showed Monday.

Soil ‘Armor’

Illinois farmer Steve Stierwalt started using cover crops four years ago. Last year, they were about half the crops he planted. He hasn’t seen higher yields yet, he said, but he sees the crop primarily as "armor" for the soil, protecting it “against more intense weather -- either too much rain or not enough rain. Cover crops have made a difference that way,” he said.

While buying the seeds, and spending the time to put cover plants in the ground is an additional expense, it reduces the need to add chemicals like nitrogen into the soil, and helps protect croplands against wild weather, according to Stierwalt. That can lead to higher revenue per acre for farmers, he said.

While some companies are supporting regenerative farming, the initiatives from government are limited. The five-year, \$867 billion U.S. farm bill passed by Congress and signed by President Trump last year has a \$25 million climate-friendly soil pilot program rewarding farmers using different methods of carbon farming.

Winter Temperatures

There’s also been questions raised about exactly how cover crops should be used. A study by the National Center for Atmospheric Research suggests that despite their ecological benefits, cover crops may contribute to raising winter temperatures in North America.

Karen Stillerman, a senior analyst at the Union of Concerned Scientists, says that there’s still a lot to learn on the topic so future research and technical assistance for farmers should “seek to minimize any negative localized effects with strategies such as planting shorter cover crops and mowing or grazing cover crops before snowfall.”

The farm belt focus on individual commodity crops like corn is leading to lower prices and limiting grower options, Stillerman said. It’s one of the reasons behind a 33% decrease in the net farm income from 2013 to 2018, she said.

A 2018 survey by the Union of Concerned Scientists finds that 75% of the surveyed farmers believe it's important for farm policies to offer incentives for reducing runoff and soil loss, improving water quality, and increasing resilience to floods and droughts.

Incentives Needed

"We are looking for action at the federal level," Stillerman said in a telephone interview. Growers need incentives to help them "farm in ways that builds a healthy soil and regenerates resources," she said.

California was the first state to implement a healthy soil program in 2017 which incentivizes farmers to adopt regenerative farming practices. The program offers funding for farmers worth \$28 million for 2019/2020, which nearly doubled from the prior year.

"It's critical to be able to address a climate crisis to have state investment in agricultural solutions," Jeanne Merrill, policy director at the California Climate & Agriculture Network, said by phone. "Healthy soil is one important strategy for farmers to be able to become more resilient in the face of greater weather extremes and to be part of the reducing of greenhouse gas emissions."

In this article

1469455D

CALIFORNIA CLIMATE & AGRICUL
Private Company

[Terms of Service](#)

[Trademarks](#) [Privacy Policy](#)

©2019 Bloomberg L.P. All Rights Reserved

[Careers](#) [Made in NYC](#) [Advertise](#) [Ad Choices](#) [Contact Us](#) [Help](#)