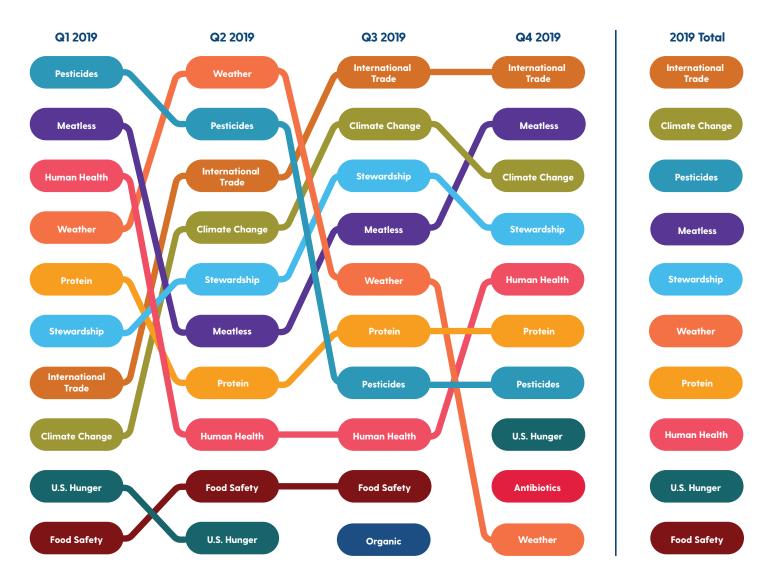
Changing Conversations:

Global and Domestic Concerns Cause Conflict



Top Ten Topics: 2019 in Review



In discussions between leading voices in food and agriculture production, an understanding of U.S. food system's global impacts united the two leading topics of 2019 — international trade and climate change — motivated in part by the Trump administration's efforts to reduce the United States' central role on the global stage. Prolonged trade negotiations punctuated by threats of tariffs moved international trade to the top of our Top Ten Topics. The administration spent the year negotiating deals with Canada, Mexico, China and Japan that included heavy emphasis on food and agriculture.

This year also marked the first time that climate change earned a spot near the top of our rankings, as conversations developed around food production and the environment. These conversations often blended with farm stewardship practices, where the bigger concepts of climate change meet with tactical efforts. Much of the debate centered around priorities for producing more food with less resources.

1. International Trade

Imports and exports of food and agricultural products



Trade deals led conversations throughout the year, earning the top spot for both the third and fourth quarters. While most attention focused on negotiations with Canada, Mexico and China, two other moves drew attention in October: the Trump administration prepared tariffs on food and wine

imports from the European Union and <u>signed</u> a trade deal with Japan.

As the Trump administration worked to secure the United States-Mexico-Canada Agreement (USMCA), dozens of industry groups <u>urged</u> the administration to reduce barriers to trade. On March 29, President Trump <u>threatened to close</u> the U.S.-Mexico border in an effort to "stop ALL illegal immigration" (Twitter). United Fresh Produce Association and other groups <u>warned</u> that the timing would disrupt fresh produce supplies. By April 2, USA Today reported that Trump had backed down from his earlier statements. The United States <u>lifted</u> tariffs on steel imports on May 17 and <u>settled</u> tomato import standards on August 21. By December 10, negotiations for USMCA concluded with endorsements from groups ranging from the <u>National Chicken Council</u> to the <u>Teamsters Union</u>.

The Trump administration's approach to negotiating with China took a more circuitous route. The United States and China <u>traded tariff</u> hikes in May and <u>again</u> in <u>August</u>. U.S. agricultural exports

particularly pork

and soybeans — took



President Trump <u>signs</u> trade agreement with China

the brunt of Chinese tariffs. American Soybean Association <u>questioned</u> the administration's tactics for effecting broader policy changes from China. Additionally, National Retail Federation <u>commented</u> that the constantly changing trade situation makes it "impossible for businesses to plan for the future." National Pork Board <u>predicted</u> how the interplay of the trade war and an outbreak of African swine fever would affect Chinese pork markets through 2025. It was not until December 13 that President Trump <u>announced</u> an official "Phase One" trade agreement with China that would lift tariffs on U.S. farm goods.

2. Climate Change

Current and predicted effects of climate change on food production



Activists, academics, legislators and manufacturers debated the possible effects of a changing climate, as well as steps to take that might reduce food production's impact on the environment. On February 7, Rep. Alexandria Ocasio-Cortez (D-N.Y.) and Sen. Ed Markey

(D-Mass.) introduced the Green New Deal to Congress. *Mother Jones'* Tom Philpott <u>criticized</u> the deal's language around food and agriculture for being vague. A coalition of more than 300 special interest organizations <u>signed</u> a letter urging Congress "to advance a Green New Deal that reflects the central role of food and agriculture in our climate crisis and its solutions."

On August 8, the United Nations' Intergovernmental Panel on Climate Change (IPCC) <u>published</u> a report titled "Climate Change and Land." The report addressed climate change's impact on food production and food production's impact on the environment. *The New York* *Times* warned "floods, drought, storms and other types of extreme weather threaten to disrupt, and over time shrink, the global food supply." Mainstream media sources, such as *The Guardian*, <u>presented</u> vegetarianism as a solution to the issues posed by the report. In *Real Agriculture*, UC Davis professor Frank Mitloehner <u>clarified</u>, "by no means did [IPCC] indicate that we should become a society of vegetarians and vegans." Meanwhile, *Triple Pundit* <u>compiled</u> a list of companies that had responded with policy changes on sustainable land use.

On November 4, Secretary of State Mike Pompeo announced on Twitter that the United States formally began the withdrawal process from the Paris Climate Agreement. However, CEOs of 80 major corporations joined the We Are Still In coalition to oppose the withdrawal and sign the "United For The Paris Agreement." Danone, one of the more notable members of the coalition, <u>committed</u> to "supporting public policy to: promote energy efficiency and renewable energy; increase investment in a clean energy economy; support climate change adaptation, or put a price on carbon."

3. Pesticides

Herbicides, fungicides, insecticides and other forms of pest management



The herbicide glyphosate accounted for the bulk of conversations about pesticides in food and food production. On March 27 and May 13, two California juries <u>ruled</u> against Bayer, owner of Monsanto Company and its Roundup

brand, in lawsuits claiming that the herbicide caused non-Hodgkin's lymphoma (*The New York Times*). Bayer <u>responded</u>, "Glyphosate-based Roundup products have been used safely and successfully for over four decades worldwide and are a valuable tool to help farmers." Between the lawsuits, the EPA <u>reaffirmed</u> that glyphosate poses "no risks to public health when ... used in accordance with its current label." The agency also <u>blocked</u> California from labeling glyphosate-based products as "known to the State of California to cause cancer" and <u>submitted</u> an opinion supporting Bayer's appeal (*The Wall Street Journal*). Bayer still faces more than 42,000 additional lawsuits.

Activist groups played off the publicity generated by the trials by associating pesticide use directly with food. Environmental Working Group <u>tested</u> cereals for glyphosate residues. The Associated Press featured marketers of niche food products that <u>adopted</u> the "glyphosate residue free" label. And Friends of the Earth <u>funded</u> a study that found "organic diet can reduce urinary pesticide metabolite excretion." Journalist Tamar Haspel <u>called out</u> the study for not checking pesticides used on organic farms.

4. Meatless

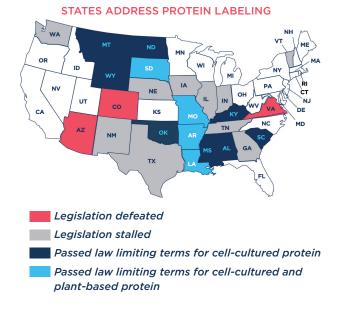
Vegetarianism, veganism and substitutes for animal products



2019 ushered in a bevy of new alternative protein products that debuted in restaurants and on grocery store shelves. The influx of new products matched up with a report from the Eat-Lancet Commission that <u>suggested</u> drastically reducing red meat consumption as part of

its recommendations for "healthy diets from sustainable food systems." North American Meat Institute <u>countered</u>, "[These] recommendations differ dramatically from consensus nutrition science and U.S. dietary guidance."

As of October 7, more than 27 states had introduced bills to limit labeling of plant-based and cell-cultured protein alternatives (*The Wall Street Journal*). But not all rules stood for the full year. Mississippi's department of agriculture proposed a law in March that stipulated: "A plant-based or insect-based food product shall not be labeled as meat or a meat food product." In September, the state <u>updated</u> the rule to allow the word "meat" to be used along with clear, prominent "plant-based" labels on packaging. On December 11, Plant Based Food Association <u>released</u> a set of voluntary labeling standards for plant-based meat alternatives "to promote consistency across the category."



5. Stewardship

Environmental management of the land, water and air quality on and around farms and ranches



Democratic presidential candidates' policy suggestions drove discussions of farm stewardship practices. Carbon sequestration <u>emerged</u> as the most common farm policy from the *CNN*-hosted "climate crisis town hall." *Grist* writer Nathanael Johnson <u>explained</u> the basics of the practice and pointed out the limits of

such practices. Beyond this policy, Sen. Cory Booker (D-N.J.) established the most concrete farm stewardship platform. He <u>introduced</u> the Farm System Reform Act in the U.S. Senate, which would place a "moratorium on large ... concentrated animal feeding operations" under the premise that they "are harmful to rural communities, public health, and the environment." Environmentalist group Food & Water Watch <u>praised</u> Booker's proposal, while *DTN/The Progressive Farmer* policy editor Chris Clayton <u>called</u> the bill dead on arrival. [Note: Cory Booker withdrew his presidential candidacy January 13.]

To deliver on corporate sustainability commitments, many food manufacturers updated supply chain policies. *Civil Eats* and *NBC News* <u>partnered</u> to publicize how major brands, including General Mills and Danone, have emphasized regenerative agriculture practices. Smithfield Foods <u>expanded</u> its "manure to energy" program for hog farms. And Cargill <u>reinforced</u> its commitment to prevent deforestation in the Amazon rainforest.

6. Weather

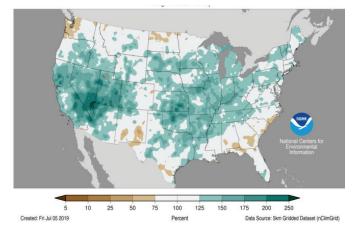
Weather conditions and their effect on farming



Farmers across the Midwest started the year with a combination of snowmelt and heavy rainfall that led to prolonged flooding and a delayed planting season. The USDA <u>confirmed</u> what many farmers already knew: "One realworld impact from the nation's wettest 12-month period has been

a painfully slow 2019 planting pace for many major U.S. row crops." On March 21, the agency <u>committed</u> to providing disaster aid "to help residents, farmers, and ranchers affected by the devastation caused by recent flooding." A delayed planting season took its toll on the year's harvest. *Agri-Pulse* <u>noted</u> that only 20% of corn and 44% of soybeans had been harvested through October 25, making 2019 "the slowest harvest since USDA began keeping track in 1985.

SPRING PRECIPITATION (PERCENT OF AVERAGE)



The majority of the country saw above-average rainfall in the spring. (NOAA)

7. Protein

Protein as a nutrient and its role in human diets



Protein maintained its status as the macronutrient of choice in leading diet trends. Trend analysts at Nielsen <u>positioned</u> the ketogenic diet as the top diet of 2019 due to its focus on high-protein and low-carbohydrate foods. *New York Times* health reporter Anahad O'Connor broke down the

scientific backing of the diet. In November, an editorial in *Oxford Academic* <u>addressed</u> pressures to consume high levels of proteins, arguing that overconsumption could damage kidney function.

In a bid to streamline regulatory oversight of an emerging technology, USDA and FDA <u>outlined</u> each agency's

responsibilities for regulation of cell-cultured food products - generally proteins grown from animal cells. With a baseline established for safety, industry groups and legislators turned their attention to labeling of cell-cultured and plant-based proteins. Good Food Institute asserted the coordination between USDA and FDA means "there is no need for states to pass legislation that would censor ... labels." However, a swath of states passed laws preventing cell-cultured foods from being labeled as "meat." And, on October 28, Reps. Roger Marshall (R-Kan.) and Anthony Brindisi (D-N.Y.) introduced a national bill that would require alternative proteins to be labeled as "imitation." Beef industry organizations supported the moves. Several states' labeling laws have faced lawsuits, forcing Mississippi and Arkansas to accept label claims such as "meatless" to appear alongside "meat," "beef" or "burger."

8. Human Health & Nutrition

Diet-related health conditions, including obesity, diabetes and hypertension



Sugary beverages, ultraprocessed foods, and red and processed meat consumption led conversations when it came to food and health in 2019. Trendy diets — ranging from carnivorous and ketogenic to intermittent fasting and hormone diets —

gained steam for claims to address specific health issues. *Politico*'s Helena Bottemiller Evich <u>wrote</u> that the July 11 Dietary Guidelines Advisory Committee meeting looked like "the 2020 diet wars" as special interest groups and industry organizations weighed in on plant-based, low-fat and low-carb diets. Food policy expert Marion Nestle <u>linked</u> readers to a controlled diet study that supports reducing processed-food consumption. A pair of studies

published in *BMJ* linked "Ultra-processed food and adverse health outcomes." In a *New York Times* opinion piece, Tufts University nutrition school dean Dariush Mozaffarian and former secretary of agriculture Dan Glickman <u>warned</u> of a national nutrition crisis: "Poor diet is the leading cause of mortality in the United States."

On October 1, Nutritional Recommendations Consortium (NutriRECS) <u>published</u> dietary guideline recommendations in the *Annals of Internal Medicine* that suggest "adults continue current unprocessed red meat consumption ... and processed meat consumption." Harvard T.H. Chan School of Public Health staff <u>rejected</u> the guidelines "as they contradict the evidence ... and erode public trust in scientific research." But Tamar Haspel of *The Washington Post* <u>pointed out</u> that nutrition research is often weak the very point made by NutriRECS.

9. U.S. Hunger

Food-related welfare policy and food insecurity in the United States



The Supplemental Nutrition Assistance Program (SNAP, aka "food stamps") stirred debate in 2019. When the federal government shut down for much of January, Food Research & Action Center President James Weill <u>spoke out</u> against the risk of inadequate

funds for SNAP. Similarly, anti-hunger groups <u>objected</u> to President Trump's 2020 budget plan that <u>proposed</u> an <u>estimated</u> cut of \$220 billion from SNAP programs. On December 5, the Trump administration <u>confirmed</u> changes to SNAP that tightened work requirements for able-bodied adults without dependents by limiting states' ability to create waivers for areas with high unemployment. Rep. Marcia Fudge (D-Ohio) <u>rebuked</u> the administration for "jeopardizing the food security of nearly 2 million of our poorest and most vulnerable citizens the week following Thanksgiving" while going against measures agreed to in the 2018 Farm Bill. Meanwhile, Rep. Garret Graves (R-La.) <u>argued</u> that work requirements offer a bipartisan solution to "folks who simply need a hand up ... not a handout."

10. Food Safety

Foodborne illness, related recalls and regulation



The federal government shut down for most of January — the longest budget lapse in U.S. history. Center for Science in the Public interest <u>raised</u> concerns that food safety inspections would not occur during the shutdown. NPR's Dan Charles <u>reassured</u> listeners that a lapse in

FDA inspections would have a relatively small impact, but also cited food safety consultant David Acheson, who commented that the possibility of inspection keeps producers honest. *Food Safety News* editor Dan Flynn <u>speculated</u> that the fragmented nature of food safety and foodborne illness regulation — with responsibilities split between FDA, USDA and CDC — may have led to better coverage due to individual parts deemed "essential" functions.

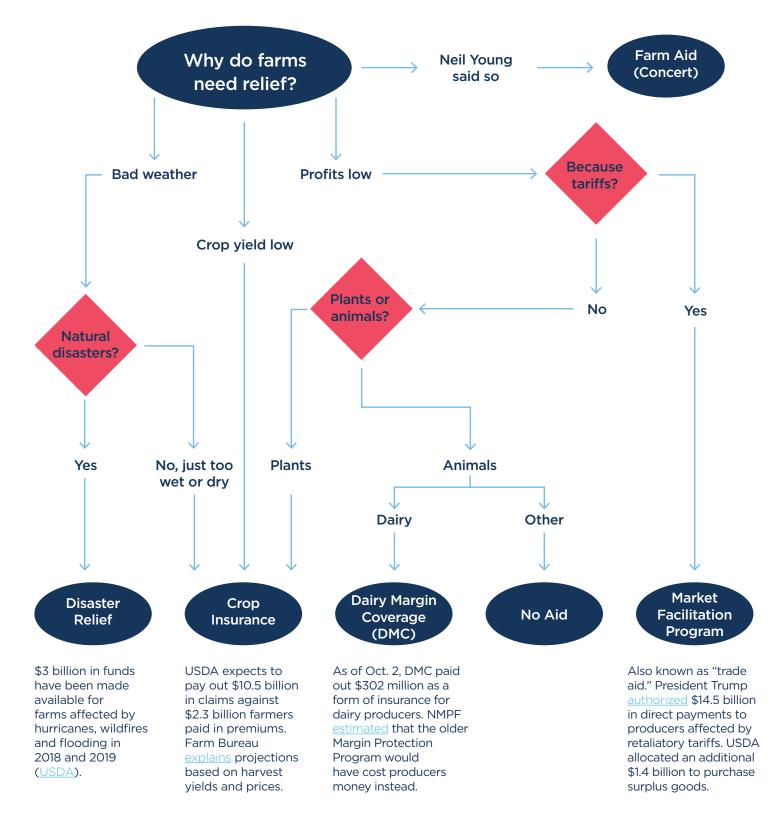


A handful of other events sparked conversations, though none as prominently as the shutdown. On June 7, FDA <u>settled</u> a lawsuit with activist group Center for Food Safety, requiring the agency to publish a list of "high-risk" foods. In August, FDA leaders Ned Sharpless, MD, and Frank Yiannas <u>chastised</u> the papaya industry for repeated

outbreaks of *Salmonella*. And food safety lawyer Bill Marler <u>urged</u> "the leafy green industry to put the health, safety and lives of consumers first" after authorities linked a fifth outbreak of *E. coli* in three years to romaine lettuce.

Following Farm Aid Funds

2019 was defined by erratic weather, trade tensions and disruption in the dairy sector. We thought it was fitting to illustrate how and why the U.S. government makes certain payments to farms. Whether it's disaster relief, crop insurance or tide-over funds from money lost over tariffs, farmers across the country had good reason to use the protections in place to stabilize their incomes. Despite the availability of aid, farm bankruptcies <u>rose</u> 24% between 2018 and 2019 (American Farm Bureau Federation).



Looking Back Looking Forward

A look back at the stories that drove conversation in 2019 and the trends that influential figures expect to see in 2020.

	Looking Back	Looking Forward
Eating Habits	Most Popular Diets of 2019 U.S. News & World Report	What Will We Eat in 2020? Something Toasted, Something Blue The New York Times
Menu Trends	<u>A look at the most successful LTOs</u> <u>of the year — so far</u> Nation's Restaurant News	<u>10 Trailblazing Chefs Cook the Food</u> <u>of the Future</u> <i>Grub Street</i>
Delivery	Taste of 2019 See America's favorite orders <i>Grubhub</i>	2020 Could See Food Delivery Buyouts Bloomberg
On the Farm	This Year in Farming and Food Modern Farmer	Economic headwinds to persist in 2020 <i>Feedstuffs</i>
Trade Deals	Farm Bureau Reflects on Challenging 2019 American Farm Bureau Federation	What If Trade War Lasts Through 2020 Presidential Election? AgProfessional
Tech & Innovation	Why Food Tech Became The Hottest Trend of 2019, and How It Can Help Us Thrive <i>Medium</i>	What we'll be eating in 2021, according to robots Food Business News
Corporate Sustainability	<u>10 Corporate Sustainability Commitments</u> <u>That Flew Under the Radar This Month</u> <i>Triple Pundit</i>	<u>The ESG Trends You Need to Know</u> <u>About for 2020</u> <i>Triple Pundit</i>
Meat	Year of the Chicken Sandwich: How Popeyes, Chick-fil-A and McDonald's went to war in 2019 The Washington Post	<u>As beef producers look toward 2020,</u> <u>all eyes are on China</u> Beef Magazine
Meatless	<u>The hottest food trend right now</u> <u>isn't 'vegan'. It's 'plant-based'</u> South China Morning Post	Veganuary Expects More Than 350,000 Participants Worldwide in 2020 Mercy For Animals
From the Top	Secretary Perdue Applauds USDA's 2019 Accomplishments USDA	A 2020 Dining Resolution from Eater's Editor-in-Chief <i>Eater</i>

For more food and ag insights, visit TheIntelDistillery.com.



