# Understanding the Conversation about Farming: An Analysis of Media and Field Communications

September 2020

Theresa L. Miller, PhD, Senior Researcher
Daniel Busso, EdD, Director of Research
Andrew Volmert, PhD, Vice President of Research
Catasha Davis, PhD, Senior Researcher
Julie Sweetland, PhD, Senior Advisor



### **Contents**

Introduction ————————————————————————————————————	<b>3</b>
Research Goals and Approach	5
Challenges ————————————————————————————————————	<b>7</b>
Opportunities ————————————————————————————————————	16
Preliminary Recommendations	20
Conclusion	23
Appendix: Research Sample and Methods	24
Endnotes	31
About FrameWorks	34

### Introduction

Contemporary farming is, at once, integral to American society and removed from it. Our nation has the benefit of a food supply that is—for many, but not all—safe, abundant, and affordable. Yet very few Americans participate directly in producing crops for food or fibers. As most of us now lack direct experience of farming, we also lack ways to understand what farming involves, who it involves, and how it affects our health, our economy, and our environment.¹ This complicates efforts to communicate about the food and farming system and to build support for programs, policies, and practices that can promote a food production system that benefits everyone.

These systemic changes require public will. To effectively strategize about how to build this will, communicators talking about farming issues need to understand the current discourse around farmers and farming practices. This report is designed to address this goal.

The news media are one source of information about farming that has a powerful effect on what the public hears, thinks, and understands about the issue. The news media act as information gatekeepers, amplifying certain kinds of messages and muting others.<sup>2,3</sup> By repeating and recycling certain kinds of stories—a phenomenon referred to as the "drip, drip" effect<sup>4</sup>— the news media help to create and maintain stable patterns in the way people think about

To effectively strategize about how to build public will, communicators talking about farming issues need to understand the current discourse around farmers and farming practices.

social issues. Understanding patterns in media framing will enable communicators to develop strategies that can, over time, shift coverage in more productive directions.

While this analysis focuses on print and/or online news media, we acknowledge that other forms of media (including social media, television, film, radio, and literature) play an important role in shaping public attitudes towards various social issues,<sup>5</sup> including farming. However, research shows that written news media continue to be the primary source that shapes the national conversation about important public policy issues and influence other forms of media as well (e.g., social media).<sup>6</sup>

While the news media play an outsized role in shaping public thinking, they are not the only voices that people hear on farming issues. People who work within agriculture—farmers, advocacy organizations, trade groups, food businesses, and agricultural scientists—also shape the conversation. This "field" talks directly to the public, through advocacy, research, and trade group communications, as well as indirectly via the media. And while the field doesn't have the reach or power of news media, it does disseminate frames and stories that affect how the public thinks about and understands farming. Just as understanding the patterns in media coverage offers a strategic advantage, we need a clear picture of how organizations within the sector talk about farming. This picture can spark reflection and help to set priorities for change.

This report addresses a core goal: to identify the challenges and opportunities that frames and storytelling strategies used by the media and field pose for public thinking. The report provides farming communicators with a detailed understanding of the discursive environment in which they operate and offers preliminary recommendations about how to move it in more productive directions.

This study is part of a larger body of research that FrameWorks is conducting in partnership with the Farming and Food Narrative Project. The project aims to investigate how the US public thinks about the farming and food production system and to develop strategies to communicate more effectively about it. The present study builds off a prior report, *The Landscape of Public Thinking About Farming*, in which we outline how the public think about food and farming and pinpoint where these patterns of thinking are likely to impede efforts to advance an informed public conversation on these issues.

### Research Goals and Approach

This research identifies the storytelling and framing strategies the news media and organizations in the field use to communicate about farming. Our analysis explored three key questions:

- 1. How are farming and its impacts portrayed?
- 2. How are farmers portrayed?
- 3. How is pest management portrayed?

The media sample includes 118 articles taken from a diverse set of US-based news sources, including national and regional newspapers and news websites. We included these sources based on their circulation and geographical and ideological diversity, as well as the top one or two circulating newspapers from the top 10 agricultural states in the US.<sup>7</sup> FrameWorks researchers searched and downloaded articles from these sources using a search query designed to capture topics related to farming. Searches were limited to articles that appeared in these news sources between January 1, 2019, and December 31, 2019.

The field sample includes 113 materials selected from the websites of 26 field organizations belonging to three main categories: scientific/academic organizations, issue advocacy groups, and trade groups. Materials were selected because they contained information about how each organization describes its work and orientation toward key topics.

The analysis proceeded in three stages. First, researchers performed quantitative coding that enumerated important narrative components of each document, such as whether or not they mention key topics such as sustainability or pest management, the types of impacts that farming is described as having, and so on. Next, researchers used qualitative analysis to identify themes, trends, and patterns of meaning in the data. Finally, the findings from the first two steps were interpreted against the backdrop of the public's deep assumptions and implicit understandings about farming and food production systems identified in prior stages of research.<sup>9</sup>

Challenges and opportunities were identified based on whether media and field frames either (1) cue and reinforce existing ways of thinking among members of the public; (2) conflict with or challenge existing ways of thinking, or (3) fail to address a topic, leaving people to "fill in the blanks" with existing patterns of thinking.

More information on the sample, research methods, and analysis is available in the Appendix.

### **Challenges**

### Challenge #1: The media often portray farmers as victims struggling under the weight of macroeconomic forces outside their control.

The media portray farmers as powerless victims of macroeconomic forces, such as crop prices and trade policies. These portrayals make farming seem not just difficult, but inevitably so. These portrayals imply that farmers are somehow fated to struggle and have a hard life.

### **Evidence**

The economy was the primary topic of almost half (42.4 percent) of the articles in the sample. This consistent focus on the economy was, in large part, a reflection of extensive coverage of the Trump administration's trade war with China in 2019 and resulting low commodity prices. Trade policies were described as "hurting farmers more than they help," and positioned farmers as receiving collateral damage from trade disputes in which they had no voice:

"President Trump's trade war with China has hurt farmers more than it helped. Farm bankruptcies were up 13% from last June to this year, according to the American Farm Bureau. Delinquent agricultural loans are also up, reaching a six-year peak earlier this year." <sup>10</sup>

"[Midwestern state] farmers had a brutal year in 2018, with median income falling by 8% to \$26,055. Dairy farmers are in a long-term crisis and corn and soybean prices had been slumping for years, but the trade war with China took a specific toll on soybean prices. [Midwestern state farmers], who mostly grow their crop for export to China, were hit harder than soybean farmers in other parts of the country." 11

The tone of these stories is overwhelmingly negative and fatalistic. Readers are left with the understanding that there is little that farmers can do to avoid living a precarious existence amidst a constantly changing economy.

### **Implications**

This pattern of storytelling has mixed implications on public thinking about farming.

On the one hand, this pattern of storytelling highlights the structural factors that govern how the market operates, and the rules, regulations and incentives that affect farmers and their livelihoods. This kind of systemic context is often backgrounded in public thinking, which tends to focus more on the easier-to-picture micro-economics of farming—like individual farmers' choices about what to plant and where to sell their crops.

But on the other hand, a steady stream of stories connecting farming with larger economic forces channels attention in some unproductive directions. In general, the public tends to think about the economy as volatile, unpredictable, and difficult to manage. This understanding, in turn, sparks fatalistic attitudes: People assume that little can be done. When farming is framed as a primarily economic issue, readers can readily conclude there is little that can be done to buffer them from shifting economic trends. These assumptions will inevitably make it harder for the public to appreciate how the economy can be structured in ways that support farmers and the food production system over the long term.

### Challenge #2: The media oversimplify and romanticize what farmers do.

The media romanticize farming as an activity that farmers do out of love and passion. These portrayals focus on farmers as hard workers and oversimplify the practice of farming—reducing it to hands-on tasks like planting seeds and harvesting crops. There is little to no discussion of the complex skills involved in farming as a practice and business.

### **Evidence**

The media often talk about farming as a passion or way of life. While sometimes this "labor of love" is mentioned explicitly, farmers' intrinsic motivations are also evoked implicitly through references to the long hours they spend toiling in the fields and the intention to pass on their farm to future generations of their family. Farmers' connection to nature is also romanticized: portrayals of farm life center on the "natural" setting, relying on vivid details about wildlife and wonderful weather.

"It's not going to make you any money," Freeman said. "It's got to be a labor of love." 13

"On a recent sunny morning, the couple walked the orchard, checking for bindweed and new signs of gopher damage. A rabbit bounded through the rows with long hops, and hawks circled overhead [...] The Caporals' children are also pitching in and learning valuable lessons from the orchard, which one day they will inherit, Claudia Caporal said [...] "They see and enjoy the sense of community we've created both at home and in the orchard. Our rituals include having friends around the table when the work day is done." 14

"Now, under a postcard-perfect cerulean sky, Mr. Goplin was spending 16 to 18 hours a day getting corn into 2,000 acres of soil. After he completed a patch, he folded the retractable 20-foot-long planting tubes as if they were butterfly wings and got ready to drive to the next field." <sup>15</sup>

The romanticized portrayals of farm life also draw upon understandings of traditional gender roles in the family. The "hard labor" of farming is figured as an exclusively male activity and domestic labor a female activity. These separate spheres of activity are seen in the passage below, which describes farm owners as men who work together and "drink beer" after their long, hard days, while their wives are in the kitchen preparing food:

"Mr. Goplin talked about the tangle of trade and oversupply with his friend Joe Bragger, a sixth-generation dairy farmer in nearby Buffalo County. They sat at Mr. Bragger's kitchen table drinking bottles of Moon Man beer as Mr. Bragger's wife, Noel, prepared burgers and potato salad." <sup>16</sup>

### **Implications**

Romanticized portrayals of farming life, including the gendered description of farming as a male activity, evoke a nostalgia for our agrarian past—calling readers to imagine a simpler time when farmers tended to the land with the aid of their family, existed in harmony with nature, and worked toward self-sufficiency, not commercial gain. This nostalgia is not innocuous. By reinforcing narrow and outdated views of farmers, our views of what farmers do, and need, are likewise narrowed. If we see farmers as living in the past, we will see little reason for thinking about farming policy in the present.

The focus on farming as grueling—but ultimately simple—manual labor also reinforces unproductive patterns of thinking. Media coverage rarely discusses the complex scientific and business management skills that farmers employ on a daily basis. The lack of coverage of farming as a business or a skilled profession results in an underappreciation of the technical knowledge and skills that farming requires. These ways of thinking contribute to, and reinforce, the public's difficulty in understanding that farming is an applied science that involves

multiple complex decisions and a knowledge of technology, biology, chemistry, and business management. Without ways to connect farming to these complexities, it is difficult to see a role for scientific investments and innovative solutions.

## Challenge #3: The field talks about sustainability in ways that work for farmer-to-farmer exchange but leave the public out of the conversation.

The field talks in ways that often fail to define key concepts about farming or make them accessible for the public. In particular, when farming organizations, scientific organizations, and trade groups describe farming practices as "sustainable," they rarely describe what they mean, or do so in technical language that is well-known to farmers, usually in the spirit of peer-to-peer learning. Field communications in the sample were geared toward fellow insiders, using language that was not accessible for a general public audience.

### **Evidence**

Around one-quarter (25.7 percent) of articles in the field sample focus on the topic of sustainability—which should, in theory, help people understand what this concept means and its importance to the environment, the economy, and human health. However, in these articles, the field talks about sustainable farming practices using jargon-laden and inaccessible language that is difficult for ordinary members of the public to decipher. For example, in the following excerpts, organizations introduce concepts such as "no-till farming" and "adaptive soil health systems" in ways that don't explain *what* exactly they are and *why* they're important:

"A major source of new farm revenue will come from the sale of crop wastes as bioenergy feedstocks. Based on U.S. Department of Agriculture (USDA) estimates, 100 million dry tons of corn stover and other agricultural residues could be harvested sustainably on U.S. farms in the year 2020. At a market price of \$50 per dry ton, and with safeguards like no-till farming in place to manage the risk of increased soil erosion from crop waste removal, farmers could earn roughly \$4 billion in annual profits, once cost savings from reduced fuel and water use are factored in." 17

"The Nature Conservancy, in its report, "reThink Soil," estimates that for each one percent of cropland in the U.S. that adopt an adaptive soil health system, annual economic benefits translate into \$226 million of societal value through increased water capacity, reduced erosion and nutrient loss to the environment, and reduced GHG emissions, as well as \$37 million of on-farm value through greater productivity." <sup>18</sup>

Additionally, within the organizational materials that talk about sustainability as the primary topic, nearly half (44.8 percent) note that farming practices should be guided by the principles of "science," but don't explain what they mean by "science" or what a "scientific" approach entails. These articles use phrases like "evidence-based" and "credible, independent science" as a way of signaling that their practices are supported by scientific authority, but they don't clearly communicate what the science *is* that they're talking about:

"Our founders knew science and evidence-based decision making was critical to solving many of the biggest challenges facing humankind. To make progress we would need to work persistently in the face of often daunting odds. That's just what we've done." 19

"The Alliance for Food and Farming addresses important consumer concerns about the safety of fruits and vegetables. All information provided is based on credible, independent science and/or information from government regulatory bodies." <sup>20</sup>

### **Implications**

The field's inaccessible way of communicating about what "sustainability" means—steeped in scientific verbiage and lacking detailed explanation—is likely to be ineffective for messaging geared toward the public. If people aren't provided with clear explanations of what this concept refers to, they will struggle to understand why farming practices that promote the environment, economy, and human health are important and what should be done to promote them.

In addition, appeals to scientific authority may backfire. As prior FrameWorks research has shown on issues such as climate change, members of the public are often skeptical of the claims and motives of scientific research. Rather than seeing it as a process of objective scientific inquiry, they sometimes assume that scientific claims are bogus or overstated or question the motives of scientists themselves. Further framing research is needed to determine whether appeals to science work on the topic of sustainable farming.

## Challenge #4: The media and the field say little about the experiences, inequities, and marginalization of farmers from historically oppressed groups.

In both the media and the field, communications rarely mention farmers of color, women and LGBTQ+ farmers, immigrant farmers, or farm workers from lower socioeconomic backgrounds. In most cases, race or ethnicity is not explicitly identified—leaving people to conclude that the discussion refers to white people. In those few cases in which farmers' identities *are* mentioned, there is no discussion of farmers' diverse experiences or of the inequalities faced by farmers from historically oppressed groups.

### **Evidence**

While 86.4 percent of media articles and 54.9 percent of field articles mention farmers and/or farm workers in general, the percentage of articles that mention farmers' specific identities—such as their race, gender, or immigration status—is very small:

Table 1. Farmers' identities in media and field articles

Identity	Percent of media articles	Percent of field materials
Race/ethnicity of farmers	0.8%	0%
Gender of farmers	0.8%	0%
Immigration status	3.4%	5.3%

### The media's "prototypical" white male farmer

Media coverage on farming issues often centers on the experiences and perspectives of white men. This is infrequently called out explicitly (i.e. through direct references to the gender or race of a farmer) and is much more often communicated *implicitly*—through cues such as names, imagery, and other associations made in the text. This "prototypical" farmer is a white man whose family has long-standing connections to the land. Stories often call attention to how many generations this male farmer can trace his family's land ownership, as illustrated by the following quotations:

"Freeman's family has been farming in the Valley since well before statehood.

He traces his family's Valley farms back to 1878—the Freemans have leased their current farm, off Center Street and Brown Road in Mesa, since the 1930s, he said."

[...]

"A plane roars overhead, passing over the two-story brown stucco homes on its way back to Luke Air Force Base and drowning out Selwyn Justice as he stands on the porch beside his family's 91-year-old citrus orchard." <sup>22</sup>

"It's the accumulation of many costs that are hurting farmers, added Erin Gil, a past president of the Farm Bureau and second-generation farmer in Coyote Valley." <sup>23</sup>

### **Implications**

The erasure of farmers of color and other underserved farmers from media and field discourse is both striking and important.<sup>24</sup> It reinforces the assumption that farming is solely a "white" issue, and this makes it harder to recognize the inequities and injustices that farmers of color have faced, both throughout history and into the present day (for example, Black farmers being denied loans and other supports in the past and present, which has resulted in dispossession of their land).<sup>25</sup> The centering of white farmers and their longstanding connection to the land also

The erasure of farmers of color and other underserved farmers from media and field discourse is both striking and important.

calls to mind an (imagined) homogenous past, where farming was unsophisticated, and farmers simply tended to the land. Finally, the lack of stories and information about farmers and farm workers of color and underserved farmers makes it hard to talk about human rights, social justice, and labor rights—because people cannot appreciate the need to improve the health and wellbeing of those involved in the production of crops if they don't have a sense of the diversity of the farming profession to begin with.

### Challenge #5: Neither the media nor the field offer clear explanations of the practice of pest management or its role in farming.

Neither the media nor the field provide members of the public with a detailed explanation of what pest management strategies are, how they're integral to farming practices, and what

they involve, including the use of pesticides. While the media hardly discuss pest management in relation to farming practices at all, the field does so in ways that are unlikely to foster productive understanding.

### **Evidence**

Only 4.2 percent of news stories in our sample include any mention of pesticides or pest management strategies. In instances in which these topics *are* covered by the media, they tend to be mentioned in passing without substantive discussion. The almost total absence of news stories that focus on pest management is significant— and is possibly a result of greater coverage of pesticides and other pest management strategies in the context of consumer health and food than in the context of farming.

Field organizations, on the other hand, discuss issues related to pest management much more often, in almost 40 percent of articles. However, they similarly fail to explain what pest management involves. The field tends to focus on pesticides over other pest management strategies and portrays them in different ways—more often as neutral or bad for food production and health, and occasionally as good, as the quotations below illustrate:

"What We Support: A global moratorium on genetically engineered foods and crops, and on the widespread use of pesticides in food production." <sup>26</sup>

"For nearly 50 years, we have protected endangered species and their habitats, produced ground-breaking publications, trained thousands of farmers and land managers to conserve habitat, and raised awareness about the importance and plights of invertebrates in forests, prairies, deserts, and oceans. Our key program areas are pollinator conservation, endangered species conservation, and reducing pesticide use and impact." <sup>27</sup>

"The fact is, however, that pesticides—from chlorine in tap water to agrochemicals sprayed on or inserted genetically into crops—mostly act to keep us alive, healthy, and well-fed." <sup>28</sup>

Moreover, in field portrayals of pest management strategies, including pesticides, there is little attention to the complex decision making that farmers employ to keep local ecosystems and crops healthy.

### **Implications**

Prior FrameWorks research has shown that the public views pesticides and pest management as necessarily disruptive and harmful to the natural environment, and that the use of chemical

pesticides is rarely warranted or acceptable. The media and the field's lack of productive messaging do little to challenge these assumptions. Without a clear explanation of the ways in which different pest management strategies are appropriate in different contexts and situations, the public will struggle to expand their thinking beyond chemical pesticides.

### **Opportunities**

## Opportunity #1: The field depicts farmers and farmer-led organizations as strategic decision-makers and agents of change.

In contrast with media depictions of farmers as passive and powerless, field organizations situate farmers and farmer-led organizations in a highly *active* role. The field talks about farmers as strategic decision-makers, leaders, and problem-solvers, poised to address challenges facing their businesses, human health and wellbeing, and the environment.

### **Evidence**

Qualitative analysis revealed two types of stories in the data:

— A "farmer as changemaker" narrative. The field often profiles farmers and farmer-led organizations and their efforts to make change. These stories typically describe farmers working collaboratively to address shared problems (e.g., through coalitions or other formal partnerships), and advocating for farming practices and policies that can secure their livelihoods and promote environmental health. Farmers' insights and expertise are described as an important resource for lawmakers as they consider how to promote sustainability and reduce agriculture's environmental footprint. For example:

"The US Farmers & Ranchers Alliance (USFRA) has unveiled a new film that highlights the urgency needed in the fight against climate change. Despite uncertain economic times, farmers are front and center as the agents for change in '30 Harvests.'"<sup>29</sup>

"Young farmers are poised to create the change our food system so desperately needs,' said Lemos. 'Across the country, these farmer leaders have launched a movement, and they are demanding that we fundamentally shift the way our country values agriculture. They are investing in their communities, fighting for policy that supports them at the state and federal level, and stewarding the land and natural resources for the future."

The verbs in these passages depict farmers as active, and perhaps even activist: They are *launching* movements and *demanding* fundamental shifts. The actions they take are powerful and public-minded—these stories are about setting and leading a national agenda for environmental conservation and sustainability.

— A "farmer as strategic decision-maker" narrative. A second (but related) narrative centers on farmers' roles as strategic decision-makers. These describe farmers as making complex choices about selecting, growing, selling, and marketing crops. As shown in the following excerpt, farmers are described as using their vision and technological expertise and applying it to make decisions about an uncertain future:

"[iPiPE] maps allow growers to see where a disease has been found and track the disease as it shows up in more growers' fields. Since the website allows you to view data collected from previous years, the grower can easily view which diseases were in a field and which crop they were affecting and make better decisions for the next year." <sup>31</sup>

### **Implications**

Overall, the field's narratives about farmers' collective action and strategic decision making are promising and productive. These challenge the public's existing perceptions that farming is hard but simple work, and that farmers do little beyond the production of food. By framing farmers as changemakers, they are positioned as leaders—as a source of ideas, a key resource for policymakers, and actors positioned to make social change. Similarly, the focus on their strategic decision making helps people see farming as a science, and farmers as versed in different areas of expertise and complex knowledge.

### Opportunity #2: The value of Innovation is highlighted as a characteristic of farming by the field and, in places, the media.

In both the field and (to a lesser extent) the media, there is an emphasis on the ways in which farming is driven by the innovation and ingenuity of farmers.

### **Evidence**

Field organizations consistently draw on the language of innovation to speak about what farming involves and what challenges it can address. There is a focus on the important role of technology in developing farming practices that are better for the environment and for human health and wellbeing. Organizations also portray farmers as incorporating new and modern technology into their farming techniques:

"30 Harvests is just one story. There are hundreds—thousands—of other stories about how farmers are continually innovating and evolving with climate smart agricultural practices, even in a tough economic environment,' said Kaiser." 32

"Fortunately, we know how to do this. Farmers can use science-based innovations—such as rotating multiple crops instead of just one or two, planting cover crops rather than leaving soil bare, and integrating plants and animals like natural ecosystems do—to bring their soils back to life and make their farms more sustainable and resilient." 33

In the media, the value of innovation is more often seen in op-ed articles authored by farmers or representatives from agricultural interest groups. In these cases, the field is influencing coverage of farming issues in the news more directly through its placement of editorials or spokespeople:

"Now is the time for Congress to take inspiration from the innovation that has long defined American agriculture and to take action to help people, nature, and agriculture prosper in a changing climate." <sup>34</sup>

"We and other farmers here are constantly experimenting with new approaches to keep soils healthy. We're part of a work group at the University of California, Davis, Cooperative Extension, where we learn about the science and share successes and failures with other farmers. Research and education like this are essential for farmers who are too busy growing food to keep up with the latest science and technologies." 35

### **Implications**

The value of *Innovation*—used primarily by the field but also reinforced and amplified by the media—can help shift people's thinking away from farming as hard but simple labor and toward an understanding of farming as a complex, expert practice. It also presupposes that there are problems to be solved and things to balance and weigh when making decisions about farming. If people understand that farmers are innovators, it helps them recognize that farming is an applied science and that farmers benefit from policies and funding that enable them to engage in scientific innovation.

## Opportunity #3: The media and the field describe the potential for farming to address environmental challenges, particularly climate change.

Promisingly, both the media and the field connect the concept of sustainable farming to the larger issues of climate change, including warmer temperatures and more erratic weather. There is a recognition that while agriculture can exacerbate climate change (through contributing to heat-trapping greenhouse gas emissions), it can also mitigate its effects via "sustainable" farming practices.

### **Evidence**

Compared to the dominant storylines, a relatively small percentage of articles discussed sustainability in the media (15.3 percent) and the field (25.7 percent). That said, they tended to be linked to broader environmental issues, particularly climate change. Both the media and the field frequently discussed farming practices as both a way to mitigate (slow or reverse) climate change and a way to adapt to the effects of a disrupted climate system. There are discussions of specific strategies that farmers can adopt, such as carbon sequestration, reduced plowing, and crop rotation, as well as sustainable approaches that are climate-friendly, including carbon-focused farming, regenerative agriculture, and integrated organic production. (These articles also used overly technical and inaccessible language; see Challenge #3).

### **Implications**

Earlier research on this project showed that the public tends to assume that farming practices only matter insofar as they affect human health. Highlighting the *environmental* effects has the potential to broaden this understanding in productive ways. It provides a basis to talk about the relevance and necessity of farming that positively impacts the environment, economy, and human health to today's world.

### Preliminary Recommendations

The public currently lacks ways to understand what farming involves, who it involves, and how it affects our health, our economy, and our environment. Communicators talking about farming issues need to take specific steps to address these challenges and take advantage of the opportunities presented by current discourse in the media and by the field. The following preliminary recommendations, informed by findings from this research and from earlier phases of this project, offer initial strategies for shifting communications practice. More research is needed to identify specific framing strategies to address the challenges and opportunities outlined in this report.

## Recommendation #1: Continue to show farmers as skilled problem-solvers that do more than just plant seeds and harvest crops.

People tend to think of farming as a simple process (plant—tend—harvest) and therefore, of farmers as simple people. When we tell stories that focus on the *process* of how farming happens and how farmers deploy their knowledge and skills, we build understanding of farming as a process of solving complex problems. This, in turn, invites the public to consider farming as a profession that needs and deserves more nuanced and effective regulations, robust funding, and other supports. Building on the findings of this report (particularly Opportunity #1), communicators should continue to present farmers and farmer-led organizations as highly skilled and positioned to expertly manage complex problems.

### Recommendation #2: Spotlight farmers from historically oppressed groups and talk about their needs.

Neither the media nor the field talk about the diversity of the farming profession and who owns, accesses, and benefits from farmland (as seen in Challenge #4). To address this gap, communicators should make farmers from diverse backgrounds a consistent part of the story by including a variety of spokespeople and spotlighting farmers of various ages, social classes, genders, and racial, ethnic, and linguistic backgrounds. In addition to portraying more diversity, communicators should center equity by highlighting the particular challenges that farmers from historically disadvantaged groups face and make them part of the overall challenge of building a better approach to the farming and food production system that benefits everyone. This will help open space for understanding and inclusive dialogue.

## Recommendation #3: Explain what it takes to manage pests on a farm—and how it can be done in ways that minimize risks to the environment and human health.

Neither the media nor the field provide clear, accessible explanations for what pest management involves, or how it can be done sustainably (as seen in Challenges #3 and #5). Communicators should therefore describe what farming practices *are*, including pest management strategies such as planting cover crops and reducing tillage, and *how* they work together to promote environmental and human health. This can help expand public understanding of what pest management involves and can help people understand the role of some pesticide use in diverse pest management strategies.

Additionally, communicators should explain the barriers that farmers face to adopting pest management strategies, such as current economic incentives (insurance, lending guidelines, lobbying of agrochemical companies, lack of funding for research into alternatives) that favor chemical pesticides over other pest management strategies. This will help build public understanding of the policies and programs that are necessary to support farmers' adoption of pest management strategies that promote the environment, economy, and human health.

## Recommendation #4: Emphasize stories of innovation and creativity to talk about how farming practices can address environmental, social, and economic challenges.

Communicators should continue to frame farmers as innovators that can address challenges that face society (as seen in Opportunity #2). They should continue to talk about the things farmers do to find creative solutions to sustain their livelihoods, their communities, and positively impact human health. This includes showing how modern farmers are incorporating new technologies as integral parts of their farming practices. By shifting public understanding away from thinking farmers live in the past, communicators can set up a frame that allows people to think about what we need to do as a society to give farming a better future.

### **Conclusion**

To build support for a farming and food production system that benefits everyone in society, communicators need to build people's understanding of *what* farming involves, *who* it involves, and *how* it affects our health, our economy, and our environment. This includes not only the public but farmers themselves, who receive and interpret and act upon the messages disseminated by the media and the field.

In order to build this understanding, communicators need to first understand the discursive landscape in which they operate, identifying the opportunities they can leverage and the challenges they need to address. In documenting media and field storytelling practices, this report takes an important step toward this goal.

The analysis reveals that the media portray farmers as living in the past and as passive victims of macroeconomic forces. This pattern of storytelling oversimplifies and romanticizes farming practices and the skills involved and can lead to fatalism about what can be done to support farmers today. Both the field and the media lack stories about farmers from historically oppressed groups, which reinforces a narrow understanding of who farmers are. The field and the media lack a coherent story about pest management, which the public needs to understand what it involves and how pesticides play a role in broader farming strategies.

There are, also, some more promising findings. The field, in particular, talks about farmers as leaders, spearheading efforts to solve complex problems facing society. Farmers are spoken about as innovators, incorporating modern technology into their farming practices. And communicators describe how farming practices can mitigate the effects of climate change (although this connection should be explained further to build a fuller understanding of how this works).

This report highlights the need for new frames that can reshape the public's dominant ways of thinking about farming and food production systems. In upcoming research, FrameWorks will develop and test narrative strategies that can help experts and communicators move the public discourse in productive directions.

### **Appendix: Research Sample and Methods**

### **Media Sample**

The media sample includes 118 articles taken from a diverse set of US-based news sources, including national and regional newspapers and news websites. The sources include (in alphabetical order): the *Argus Leader* (SD), *Arizona Republic*, the *Boston Globe*, the *Boston Herald*, the *Cedar Rapids Gazette* (IA), the *Charlotte Observer* (NC), the *Chicago Tribune*, the *Chicago Sun-Times*, the *Cincinnati Enquirer*, CNN, the *Columbus Dispatch*, the *Dallas Morning News*, the *Denver Post*, the *Des Moines Register* (IA), the *Detroit Free Press*, Fox News, the *Houston Chronicle*, the *Indianapolis Star*, the *Lincoln Journal Star* (NE), the *Los Angeles Times*, the *Mercury News* (TX), the *Milwaukee Journal Sentinel*, MSNBC, the *News and Observer* (NC), the *New York Post*, the *New York Times*, the *Omaha World-Herald* (NE), the *South Bend Tribune* (IN), the *Star Tribune* (MN), the *St. Cloud Times* (MN), the *Tampa Tribune*, the *Topeka Capital-Journal* (KS), the *Washington Post*, and the *Wichita Eagle* (KS). We selected sources based on their circulation, geographic and ideological diversity (as measured by their endorsements in the 2008 and 2012 presidential elections), and location in the top 10 agricultural states (as defined by the USDA).

Using LexisNexis, FrameWorks researchers searched and downloaded articles from these sources using a search query designed to capture topics related to farming: title(farm!) OR title(agri!) OR title(horti!). Searches were limited to articles that appeared between January 1, 2019, and December 31, 2019, and had a limit of under 2,500 words. Researchers downloaded every fifth article from this search, each of which were carefully reviewed by researchers. Those that did not deal substantively with farming or that duplicated other articles (e.g., the same article appearing in multiple outlets) were removed from the analytic sample. This process resulted in a final sample of 118 articles, each of which were coded and analyzed.

### **Field Sample**

The field/advocacy sample includes 113 articles selected from the websites of 26 organizations that project partners selected from three main areas of the field: scientific/academic organizations, issue advocacy groups, and trade groups (see below). Around 4–5 pieces of public-facing content with a word limit of between 250 and 2,500 words were selected from each organization's website, including, for example, "About Us" or mission statement pages; press releases; issue briefs; and/or other outward-facing communications. These materials were selected because they contained information about how each organization describes its work and orientation toward key topics. Researchers coded and analyzed each of these articles.

The field organization websites included the following:

### **Scientific/Academic Organizations**

- 1. Johns Hopkins University Center for a Livable Future: https://clf.jhsph.edu
- 2. North Central IPM Center: www.ncipmc.org
- 3. Northeastern IPM Center: www.northeastipm.org

### **Issue Advocacy Groups**

- 4. Environmental Working Group: www.ewg.org
- 5. Natural Resources Defense Council: www.nrdc.org
- 6. Union of Concerned Scientists: www.ucsusa.org
- 7. Pesticide Action Network: www.panna.org
- 8. National Sustainable Agriculture Coalition: https://sustainableagriculture.net
- 9. National Young Farmers Coalition: www.youngfarmers.org
- 10. Xerces Society: https://xerces.org
- 11. Center for Science in the Public Interest: https://cspinet.org
- 12. Organic Consumers Association: www.organicconsumers.org/usa
- 13. Genetic Literacy Project: https://geneticliteracyproject.org
- 14. Farm Aid: www.farmaid.org
- 15. CropLife America: www.croplifeamerica.org
- 16. American Public Health Association: www.apha.org

### **Trade Groups**

- 17. American Farm Bureau Federation: www.fb.org
- 18. National Farmers Union: https://nfu.org
- 19. United Farm Workers of America: https://ufw.org
- 20. National Council of Agricultural Employers: www.ncaeonline.org
- 21. National Corn Growers Association: www.ncga.com/home
- 22. United Fresh Produce Association: www.unitedfresh.org
- 23. U.S. Farmers and Ranchers Alliance: https://usfarmersandranchers.org
- 24. USApple: http://usapple.org
- 25. Organic Trade Association: https://ota.com
- 26. Alliance for Food and Farming: www.foodandfarming.info

### **Analysis of Media and Field Materials**

The analysis was designed to identify the dominant narratives circulating about farming, farmers, and pest management. FrameWorks researchers used a version of the codebook below to perform quantitative coding that enumerated important narrative components of each document. This codebook was developed based on standard coding categories used in prior FrameWorks research, as well as in the framing literature more generally,<sup>36</sup> and was informed by research conducted as part of prior phases of this project.

**Table 2. Example of quantitative codes** 

Narrative component	Brief description	Examples of codes
Primary issue or topic	On what kind(s) of issues or topics related to farming does the content primarily focus?	<ul> <li>Pest management (e.g., use of pesticides, other technologies and practices to manage pests—e.g., genetic modification, cover crops, intercropping)</li> <li>Soil health (e.g., condition of soil as related to crop production; agricultural runoff)</li> <li>Food security—supply/production (e.g., food shortages/surpluses)</li> <li>Food security—cost/affordability (e.g., rising/ lowering costs of food)</li> <li>Environmental health, weather, and/or climate-related issues (e.g., air and water pollution, wildfires, drought)</li> <li>Labor availability (e.g., farmworkers being hired/fired)</li> <li>Land access/availability (e.g., farms being bought/sold)</li> <li>Economy—general (e.g., trade deals, policies; energy-related economic issues—e.g., ethanol, biofuels)</li> <li>Politics—general (e.g., legislation, laws about farms/farming)</li> <li>Technology—general (e.g., technological advancements in farms/farming)</li> <li>Public or consumer health and wellbeing (e.g., nutrition, benefits/threats to human health)</li> <li>Farmer/farmworkers health and wellbeing (e.g., nutrition, benefits/threats to human health)</li> <li>Demographics of the agricultural workforce (e.g., quantity, age, racial/ethnic, gender, etc. composition of agricultural workforce)  — Youth/young farmers (if age is mentioned; e.g., students, younger generations)</li> <li>Equity or social justice-related issues (e.g., discrimination)</li> <li>Environmental sustainability (e.g., practices that are less harmful to and/or enhance the health of the environment; e.g., includes discussion of climate adaptation, drought resistance, etc. of food/farming systems)</li> <li>Other (specify in text box)</li> </ul>

Narrative component	Brief description	Examples of codes
Primary type of crop(s)	On what kind(s) of crops does the content primarily focus? Check any that apply.	<ul> <li>Field/agronomic crops (i.e., generally dry, non-perishables, such as grains—e.g., wheat, corn, rice; dry legumes—e.g., soybeans, other types of beans; oilseeds—e.g., flax; also includes non-food crops such as hemp, hay)</li> <li>Specialty/horticultural crops (i.e., fruits and vegetables—e.g.,: apples, oranges, tomatoes, avocados, broccoli, onions; tree nuts—e.g.,: almonds; fungi; also flowers and/or medicinal plants—e.g., cannabis)</li> <li>Not specified</li> </ul>
Primary type of farm practices	On what general kind of crop farming practices does the content primarily focus? Check any that apply.	<ul> <li>Conventional (e.g., use of pesticides, non-organic, monocropping)</li> <li>Organic (e.g., specifically includes organic as concept or organic certification; and/or includes biodiversity, intercropping—more than one species per field)</li> <li>Integrated Pest Management (IPM): (e.g., specifically includes this phrase and/or acronym)</li> <li>Ecological farming (e.g., includes term "ecological" and/or mentions biodiversity management, intercropping)</li> <li>Sustainable (general) (e.g., includes term "sustainable;" and/or includes mention of practices that support environmental health, e.g., biodiversity management, use of cover crops, intercropping)</li> <li>Industrial (general) (e.g., includes term "industrial;" and/or includes monocropping, use of pesticides, large-scale farming)</li> <li>Not specified</li> </ul>
Primary ownership— type of farm	On what ownership type(s) of farms does the content primarily focus?	<ul> <li>Corporate-owned farms (e.g., owned by companies and/or corporations rather than individuals—e.g., Cargill)</li> <li>Family-owned farms (e.g., owned by individuals and/or families)</li> <li>Other—specify (e.g., cooperatives—owned by collective and/or workers)</li> </ul>
Geography	On or at what level of geography is the content focused (i.e., does the article talk about farming/farming-related issues as being in and/or having an impact on these different levels)? Check any that apply.	<ul> <li>National</li> <li>Regional (e.g., Northwest, Midwest, Southwest)</li> <li>State</li> <li>Local (e.g., county, specific town/city)</li> </ul>

Narrative component	Brief description	Examples of codes
Effects—kind	Does the content mention that farming has effects on any of the following types of outcomes, or the kind of effect it has?	<ul> <li>Environmental/environmental health or climate (e.g., effects on air and/or water quality, weather, etc.)         <ul> <li>Negative impact</li> <li>Positive impact</li> </ul> </li> <li>Economy/economic outcomes (e.g., effects on trade, income of individuals/families, corporate profits, affordability of food, etc.)         <ul> <li>Negative impact</li> <li>Positive impact</li> </ul> </li> <li>Human health and wellbeing outcomes (e.g., effects regarding quality of life in terms of physical, mental, and/or emotional health)         <ul> <li>Negative impact</li> <li>Positive impact</li> </ul> </li> <li>Social or cultural outcomes (e.g., effects on community quality of life and wellbeing, e.g., community celebrations, activities, heritage, etc.)         <ul> <li>Negative impact</li> <li>Positive impact</li> <li>Positive impact</li> <li>None/unclear</li> </ul> </li> </ul>
Effects—who	Does the content mention any of the following as being affected by farming/farming- related issues?	<ul> <li>Members of the public, or country as a whole</li> <li>Farmers and farmworkers, as a whole</li> <li>Subgroup among farmers and farmworkers (e.g. men, women, people of a specific race/ ethnicity, immigrants or migrants)</li> </ul>
Farmers and farmworkers focus	To what extent are farmers a focus of the material?	<ul> <li>Primary focus</li> <li>Mentions/discusses farmers and/or farmworkers, but not primary focus</li> <li>Not mentioned anywhere in content</li> </ul>
Farmers and farmworkers— category	How are farmers and/or farmworkers described?	<ul><li>As managers of farms</li><li>As owners of land</li><li>As laborers on farms</li></ul>
Pest management— pesticide usage	Does the article mention whether the farms use pesticides?	<ul><li>Pesticides are used</li><li>Pesticides are not used</li><li>Not specified/unclear</li></ul>

Narrative component	Brief description	Examples of codes
Pest management—effects	Does the content mention that pest management strategies have effects on any of the following types of outcomes, or the kind of effect they have?	<ul> <li>Environmental/environmental health or climate (e.g., effects on air and/or water quality, weather, etc.)         <ul> <li>Negative impact</li> <li>Positive impact</li> </ul> </li> <li>Economy/economic outcomes (e.g., effects on trade, income of individuals/families, corporate profits, affordability of food, etc.)         <ul> <li>Negative impact</li> <li>Positive impact</li> </ul> </li> <li>Human health and wellbeing outcomes (e.g., effects regarding quality of life in terms of physical, mental, and/or emotional health)         <ul> <li>Negative impact</li> <li>Positive impact</li> </ul> </li> <li>Social or cultural outcomes (e.g., effects on community quality of life and wellbeing, e.g., community celebrations, activities, heritage, etc.)         <ul> <li>Negative impact</li> <li>Positive impact</li> <li>Positive impact</li> <li>None/unclear</li> </ul> </li> </ul>

After coding the data, the analysis proceeded in three stages:

- Frequency analysis. To begin, researchers examined how often each code appeared in media and field documents and calculated the percentage of materials within each sample that contained each individual code.
- Qualitative frame analysis. Next, researchers identified themes, trends, and patterns of meaning in the data. Informed by the frequency analysis, FrameWorks researchers identified codes of interest for qualitative analysis (e.g., researchers explored how farmers are described and how sustainability is portrayed). A random subsample of articles was selected for each code or code category and analyzed to identify dominant narratives (either the entire code category, or between 15 and 25 percent of the code category). This analysis discerned patterns in what was said (documents' explicit language or content) and what was implied (ideas derived via interpretation and inference).
- Cognitive analysis. Finally, the findings from the steps above were interpreted against the backdrop of the public's deep assumptions and implicit understandings about farming and food production systems identified in prior stages of research. This analysis explores how media and field frames (1) cue and reinforce existing ways of thinking among members of the public; (2) conflict with or challenge existing ways of thinking (i.e., cultural models), or (3) fail to address a topic, leaving people to "fill in the blanks" with existing patterns of thinking. This final analysis enables us to identify how frames embedded within materials are likely to affect public understanding of farming.

### **Endnotes**

- 1. Levay, K., Hendricks, R., & Volmert, A. (2019). *The landscape of public thinking about farming: Mapping the gaps between expert and public understandings*. Washington, DC: FrameWorks Institute.
- 2. McCombs, M.E., Shaw, D.L., & Weaver, D.H. (2014). New Directions in Agenda-Setting Theory and Research. *Mass Communication and Society*, 17, 781–802.
- 3. Russell Neuman, W., Guggenheim, L., Mo Jang, S., & Bae, S.Y. (2014). The Dynamics of Public attention: Agenda-setting theory meets big data. *Journal of Communication* 64 (2014) 193–214.
- 4. Gerbner, G., Gross, L., Morgan, M., & Signorielli, N. (1994). Growing up with Television: The Cultivation Perspective. In J. Bryant & D. Zillmann (Eds.). *Media Effects: Advances in Theory and Research*. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- 5. Fu, J.S., & Shumate, M. (2017). News Media, Social Media, and Hyperlink Networks: An Examination of Integrated Media Effects, *The Information Society*, 33(2), 53–63.
- 6. King, G., Scheer, B., & White, A. (2017). How the News Media Activate Public Expression and Influence National Agendas. *Science*, 358(6364), 776–780.
- 7. Since these sources were selected based on circulation and a general public readership, we did not include news sources that are intended for farmers specifically (e.g., Civil Eats, The Counter, FERN, Modern Farmer).
- 8. The groups were selected to capture a range of groups in this space, some of which work with farmers directly. They have different perspectives and agendas.
- 9. Levay, K., Hendricks, R., & Volmert, A. (2019). *The landscape of public thinking about farming: Mapping the gaps between expert and public understandings*. Washington, DC: FrameWorks Institute.

- 10. Bouscher, D. (2019, Sep. 6). Trump's Trade War Hurts California Farmers. *The Mercury News* (California).
- 11. Belz, A. (2019, Jul. 14). Big Farms in State Reap Big Bailouts. *Star Tribune* (Minneapolis, MN).
- 12. Volmert, A., O'Neil, M., Kendall-Taylor, N. & Sweetland J. (2016). *Mixing it up: Reframing neighborhood socioeconomic diversity*. Washington, DC: FrameWorks Institute.
- 13. Bowling, J. (2019, Feb. 23). Family Farms Made Phoenix Livable, So Why Are So Many Going Away? *The Arizona Republic* (Phoenix, AZ).
- 14. Kirkwood, K. (2019, Jun. 13). Alameda Family's New Truffle Farm Said to Be California's Largest. *The Mercury News* (California).
- 15. Cohen, P. (2019, May 25). Pain of Price Cuts Tests Farmers' Faith in Trump. *The New York Times*.
- 16. Cohen, P. (2019, May 25). Pain of Price Cuts Tests Farmers' Faith in Trump. *The New York Times*.
- 17. National Resources Defense Council. (2009). Opportunities for Agriculture: How Energy and Climate Legislation Will Help Farmers Cut Energy Costs and Raise Farm Income. Washington, DC: NRDC.
- 18. U.S. Farmers & Ranchers Alliance. (2019). 30 Harvests: Creating the 2050 Food Systems for Future Generations. https://usfarmersandranchers.org/30-harvests
- 19. Union of Concerned Scientists. (2019). *About Us.* https://ucsusa.org/about
- 20. Alliance for Food and Farming. (2019). *What is Happening in the World of Food Safety?* www.foodandfarming.info/food-safety-topics/
- 21. Volmert, A., Baran, M., Kendall-Taylor, N., Lindland, E., Haydon, A., Arvizu, S., & Bunten, A. (2013). "Just the earth doing its own thing:"

  Mapping the gaps between expert and public understandings of oceans and climate change. Washington, DC: FrameWorks Institute.
- 22. Bowling, J. (2019, Feb. 23). Family Farms Made Phoenix Livable, So Why Are So Many Going Away? *The Arizona Republic* (Phoenix, AZ).
- 23. Vo, T. (2019, May 12). Are Santa Clara Valley Farmers Paying Too Little for Precious Water? *The Mercury News* (California).
- 24. The almost total absence of information about migrant farm workers is unexpected and may result from the particular search string we used to identify articles. This focused on gathering articles that are primarily about "farming" and "agriculture," rather than other topics in which discussions of migrant farmers may appear (such as stories about immigration).

- Newkirk, Van R. II. (2019). The Great Land Robbery: The Shameful Story
  of How 1 Million Black Families Have Been Ripped from Their Farms.

  The Atlantic. www.theatlantic.com/magazine/archive/2019/09/this-landwas-our-land/594742/
- 26. Organic Consumers Association. (2019). *About OCA*. www.organicconsumers.org/about-oca
- 27. Xerces Society. (2019). *About the Xerces Society*. https://xerces.org/about-xerces
- 28. Cumber, John. (2019). "Pesticides Endanger Humans, Animals, Beneficial Insects? Rethinking Simplistic Notions, Understanding Tradeoffs in Sustainability and Health." *Genetic Literacy Project*.
- 29. Levay, K., Hendricks, R., & Volmert, A. (2019). *The landscape of public thinking about farming: Mapping the gaps between expert and public understandings*. Washington, DC: FrameWorks Institute.
- 30. U.S. Farmers & Ranchers Alliance. (2019, Aug. 15). *The Challenge of a Generation: "30 Harvests" Takes a Look at Farmers' Role in Combatting Climate Change.*
- 31. National Young Farmers Coalition. (2019). New leadership and progressive vision for the future of young farmers. Press release. www.youngfarmers.org/2019/09/new-leadership-and-progressive-vision-for-the-future-of-young-farmers
- 32. Northeastern IPM Center. (2019, Aug. 15). *iPiPE Supports Positive Outcomes for Agricultural Producers*. www.northeastipm.org/about-us/publications/ipm-insights/ipipe-supports-positive-outcomes-for-agricultural-producers
- 33. U.S. Farmers & Ranchers Alliance. (2019, Aug. 15). *The Challenge of a Generation: "30 Harvests" Takes a Look at Farmers' Role in Combatting Climate Change.*
- 34. Union of Concerned Scientists. (2019). *Protecting Farmland and the Future of Our Food*. https://ucsusa.org/food
- 35. Couser, B., & Henry, S. (2019, May 26). Congress Should Support Climate-Smart Agriculture. *Des Moines Register* (Iowa). Opinion section.
- 36. Sano, A. (2019, Aug. 12). Farmers Live Climate Change. *The New York Times*. Opinion section.
- 37. Iyengar, S. (1991). *Is Anyone Responsible? How Television Frames Political Issues*. Chicago, IL: University of Chicago Press.
- 38. Levay, K., Hendricks, R., & Volmert, A. (2019). *The landscape of public thinking about farming: Mapping the gaps between expert and public understandings*. Washington, DC: FrameWorks Institute.

### **About FrameWorks**

The FrameWorks Institute is a nonprofit think tank that advances the mission-driven sector's capacity to frame the public discourse about social and scientific issues. The organization's signature approach, Strategic Frame Analysis®, offers empirical guidance on what to say, how to say it, and what to leave unsaid. FrameWorks designs, conducts, and publishes multi-method, multi-disciplinary framing research to prepare experts and advocates to expand their constituencies, to build public will, and to further public understanding. To make sure this research drives social change, FrameWorks supports partners in reframing, through strategic consultation, campaign design, FrameChecks®, toolkits, online courses, and in-depth learning engagements known as FrameLabs. In 2015, FrameWorks was named one of nine organizations worldwide to receive the MacArthur Award for Creative and Effective Institutions.

Learn more at www.frameworksinstitute.org

### Understanding the Conversation about Farming: An Analysis of Media and Field Communications

September 2020

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior permission of the FrameWorks Institute.

Please follow standard APA rules for citation, with the FrameWorks Institute as publisher.

Miller, T.L., Busso, D., Volmert, A., Davis, C., & Sweetland, J. (2020). Understanding the conversation about farming: An analysis of media and field communications (a FrameWorks Research Report).

Washington, DC: FrameWorks Institute.

© FrameWorks Institute 2020

