



Farmers and ranchers must continually manage risk in their operations to be successful. But, the amount of risks and challenges they have faced over the past few months and years seems almost unprecedented. From financial challenges to production and market shocks to public health scares and policy developments, agriculture has had to respond and adapt to a wide range of issues.

Crop producers had already been dealing with a multi-year downturn in prices when the on-going trade conflict hammered demand and price levels in 2017. Add to that extreme weather and disaster losses in 2019 that have returned for some in 2020 and of course the COVID-19 pandemic and related market losses in 2020 and you have a plethora of challenges to overcome.

Livestock producers have experienced these challenges as well, from trade conflicts to extreme weather and disasters to on-going COVID-19 losses. In the case of the livestock sector, the COVID-19 losses came not just from the hit to trade, consumer demand, and supply chain disruptions, but also to the impact of COVID-19 on the ag workforce, particularly in meat processing. The market disruption led to record price spreads between farm and retail, even greater than the market shock following the beef processing plant fire in Kansas in August 2019.

Helping producers prepare for, adapt to, and overcome these challenges is part of the broad educational mission of the Extension Risk Management Education (ERME) program. The North Central ERME Center is funded through USDA's National Institute of Food and Agriculture to deliver programming and fund educational projects throughout the North Central region. The Center supports educational projects that address the five broad areas of agricultural risk from marketing to production, financial, legal, and human risk to help producers achieve real risk management results and improve farm profitability and business success. Identifying issues and needs is an important first step to understanding and addressing agricultural risk and is part of the Center's on-going mission. Recent surveys and listening sessions provide evidence of the issues currently on the minds of producers and the needs and challenges ahead.

Commercial Agricultural Producer Needs Assessment Input

Input collected from commercial agricultural producers at Extension educational meetings provides one source of input on risk management needs. Participants at Nebraska Extension and Farm Service Agency farm bill education programs in late 2019 and early 2020 across the state helped identify risk management issues as part of their program evaluation and feedback. From more than 2000 participants, we received more than 1200 evaluation responses. Included on the evaluation questionnaire were two open-ended questions, one asking the most crucial risk management education need for the coming year and one asking the biggest challenge to the success of the operation over the next 5-10 years. The questions generated approximately 250 responses and more than 500 responses respectively. Importantly, given the timing of the meetings, the responses did not contemplate either the COVID-19 pandemic or the partial agricultural trade progress made with China and other countries in early 2020.

The results of this needs assessment are shown in Figures 1-2 and Tables 1-2 based on text analysis of the responses using standardized words and word cloud tools available at wordclouds.com.

For the coming year, participants identified marketing (or hedging), farm programs, and crop insurance as the top three issues with price (levels) as a close fourth (see Figure 1 and Table 1). That is not surprising given the focus of the meetings and the related program, policy and marketing decisions that are part of a farm income safety net. The response of "marketing" or "hedging" or "pricing" was recorded as "marketing" and was mentioned more than twice as much as any other term. That shows up on the word cloud with "marketing" as the largest font, although the word sizes are relative (if they were shown in true proportionate size, the smallest responses would be unreadable).

Figure 1. Risk Management Education Needs for the Coming Year



Table 1. Risk Management Education Needs for the Coming Year

Word List	Frequency of Responses
marketing	94
farm program	36
crop insurance	27
price	10
cost control	7
finance	7
production	6
...	<4

Besides marketing, farm programs, and crop insurance, price was mentioned most often (“price” was interpreted as a focus on overall price level, distinguishing it from “pricing”, “hedging”, or other terms that implied “marketing” activities for purposes of analysis). Cost control, finance, and production followed closely behind price before a number of additional risk issues were identified.

Looking beyond the next year to the next 5-10 years, the biggest challenges identified by participants are shown in Figure 2 and Table 2. In the longer run, “price” becomes more important than “marketing”. While marketing tools and strategies help address price risk in the near term, they offer limited protection from overall price movements and levels over the long run. Similarly, farm programs were a critical part of this year’s management decisions (and the primary focus of the educational meetings), but they are less of a management factor over the long run. Other management challenges like profitability, cost control, weather, and production decisions move up the list, as does the longer-term issue of farm transition.

Figure 2. Biggest Challenge to the Success of Your Operation Over the Next 5-10 Years



Table 2. Biggest Challenge to the Success of Your Operation Over the Next 5-10 Years

Word List	Frequency of Responses
price	96
profitability	53
marketing	52
cost control	39
weather	31
farm transition	25
production	25
farm program	22
trade	18
tax	14
government	11
finance	10
land	10
...	<10

Institutional Listening Group Needs Assessment Input

As part of its needs assessment effort, the Center works with an Institutional Listening Group representing stakeholders from production agriculture as well as professionals, organizations, and institutions serving agriculture. A listening session in late April provided further input on current risk management education needs, including the impact of COVID-19 and trade prospects to that point.

Participants discussed the overwhelming impact that COVID-19 has had (and continues to have) on daily life, the economy, trade, agriculture, and policy. One of the biggest questions to the future of agriculture (and the economy in general) was when and how quickly economic recovery could occur. While it is still too soon to conclude whether a recovery will be sharp or whether it will be long and drawn out, it is important to note that the current economic downturn was the product of a public health crisis, not the result of underlying economic conditions or challenges. That suggests a recovery can happen more quickly, but the challenges have already gone on long enough to have lasting impacts on consumer demand, market structure, business viability, financial well-being, and personal well-being.

Producers are dealing with market losses resulting from shocks to consumer demand, trade, and energy (and bioenergy) consumption as well as shocks to market structure, supply chains, and ag labor, particularly for meat processing. As they look to rebound, they may look to alternative marketing opportunities such as local processing as well as increased automation.

Stakeholders noted that COVID-19 is only the latest in a number of shocks and challenges over the past 5-6 years (as alluded to in the introduction above). Those lingering and deepening challenges have stressed the financial position of operations and have stressed the well-being of farmers and ranchers and their families, putting a critical importance on tools, programs, and efforts to manage financial and human/personal stress.

Whether from the multiple-year downturn in prices or from the market losses of the last few months, producers are now facing production decisions under very different price conditions. Those price changes should change input and management decisions based on good economic analysis, whether that involves fertilizer, seed, and pesticide decisions or lease negotiations. That need places more importance on management and analysis tools such as long-range and contingency planning as well as scenario or sensitivity analysis. That need also highlights the potential role of consultants or other outside sources and expertise as part of the management group for an operation.

Policy risk was also a concern, with tremendous uncertainty at present. There are many perspectives that the appreciation of agriculture has grown during the pandemic as an essential industry. That may be a benefit to agriculture in general, but it can also bring with it more public attention and awareness of agricultural practices as well as increased calls for transparency and traceability in the food system in line with longer-term consumer trends and public policy pressure.

The overall role of government was also a major policy question. Recent ad hoc emergency assistance from the federal government, first for trade and then in response to COVID-19 has dwarfed the traditional

farm income safety net contained in the farm bill. Both farm programs and emergency supports have been a substantial part of cash flow for agriculture in the past two years, but the future of federal farm policy is uncertain amidst unprecedented federal spending and the accompanying budget pressure and federal debt. What kind of a federal farm safety net, if any will remain after the current farm bill expires in 2023 and how will farmers adjust are both critical questions to address in the coming years.

Educational Program and Delivery Considerations

Additional discussion with the Institutional Listening Group stakeholders provided input on educational programming and delivery. While how to work with a management group was an identified educational need, a related element that affect educational programming is how producers make decisions. Programs that address understanding or analysis may not be sufficient if they do not also address the motivation or the process that producers use to make management decisions.

Stakeholders also addressed the critical challenge of financial and human/personal stress as not just a topic, but as an important consideration for all educators and all programs to recognize, incorporate, and provide direction or assistance.

In addition to reaching producer risk management education needs, the discussion highlighted the importance of agriculture listening to others that think and talk about agriculture. While producer-focused risk management education programs may not necessarily address the topic of building producer-consumer dialogue, producers and educators do need to understand the risks and the potential of what individuals and groups outside of agriculture say, think, and expect of agriculture.

Developing educational materials is also a foundational part of many educational projects. With nearly 20 years of educational projects completed to date, there are numerous examples and resources available on the web for review at the ERME website (extensionrme.org) or the Ag Risk and Farm Management Library (agrisk.umn.edu). Building on previous projects and materials can help projects succeed and can support potential collaborative while recognizing that many good projects come from the motivation and creativity to build new projects and materials.

With the current, continuing challenges from COVID-19 and the uncertainty over program delivery, stakeholders also discussed a focus on groups and projects that can deliver in multiple ways, recognizing that traditional programs and delivery may or may not be feasible and also recognizing that producer learning styles and preferences have changed over time as well. That may be a reason to ensure there are online educational opportunities embedded into every program, including webinars, podcasts, publications, etc. that can reach producers in multiple ways, including on the go.

Additional Risk Management Needs Assessment Input

Two other sources of information also provide a perspective on risk management education needs and delivery. A recent report from USDA's Agricultural Marketing Service analyzing market disruptions in the beef sector and concerns over price spreads between farm and retail pointed to the need for improved education and utilization of price risk management tools among other recommendations (www.ams.usda.gov/reports/boxed-beef-and-fed-cattle-price-spread-investigation-report).

Finally, the July survey for the Purdue University/CME Group Ag Economy Barometer included questions on program delivery related to current COVID-19 conditions and limitations. In the survey report of large-scale ag producers (ag.purdue.edu/commercialag/ageconomybarometer/ag-economy-barometer-stable-but-farmers-less-optimistic-about-future/), four out of 10 respondents said they are conducting more business online and over half said they were less likely to attend in-person educational programs. The survey also asked about preferred educational methods in lieu of in-person educational events. The top choice of those responding was farm magazines (36%) while online seminars/webinars/videos (19%), farm radio broadcasts (17%), and websites (17%) followed behind. E-mail and podcasts were less preferred at less than 10% each. The results may not necessarily suggest a single best approach, but may suggest a multi-faceted approach is needed to reach producers through the channels they most prefer, whether or not face-to-face educational meetings can occur.

