An external evaluator (Brett Wolff, University of Kentucky Department of Ag Economics) provided comments on the activities offered by the project and conducted semi-structured interviews with project team members and with key participants identified through their participation in multiple parts of the project.

General Project Evaluation Feedback

This project overlapped with a considerable portion of the COVID-19 global pandemic and included a 11 virtual presentations. Webinar organizers did an excellent job of drawing in local experts and experienced voices in the Kentucky sustainable agriculture community to share their knowledge and to make others in the community of practice aware of the services they offer.

Future efforts might consider adapting the traditional lecture format to something more structurally interactive. Opening up a lecture to a Q&A session is often insufficient for inspiring conversation and a blend of techniques such as breakout rooms, small group activities or some other similar plan might bolster the interactive and community-building goals of these projects. See structured interview summaries below for some other ways to improve attendance and interactions in the webinar format.

The webinar series covers a good range of sustainable ag topics. Its biggest strengths are in discussing production and farm planning issues related to the environmental and economic components of sustainability. Part of this strength is highlighting governmental and NGO support organizations and programs available to support producers in planning for enhanced sustainability.

While it is woven throughout other considerations discussed here, the programming does not have any explicit discussion of economic sustainability via market development, marketing at the farm level, business planning, etc. There is also not much discussion of the community and social considerations of sustainability. Any successful project must put boundaries around what it hopes to achieve so this is not a shortcoming, but future projects might consider including these kinds of topics more explicitly.

The project team also developed several more "durable" resources that will exist beyond the end of the project. A publication that summarizes the resources and practices covered in the project was developed and published and serves as a helpful, digestible summary document and reference for ag professionals moving forward. A cover crops calculator tool was also developed to help professionals and producers calculate application rates for common species of cover crop seeding. These resources supplement the recordings of all webinar presentations which are important as reference materials for Sustainable Agriculture Professionals.

Project Team Members: Semi-Structured Interviews

What are your reflections on the event and resource types offered through this project?

Project partners noted a newfound appreciation for webinars both as a flexible, synchronous delivery method and perhaps even moreso as an asynchronous repository and reference for ag professionals and producers. Several partners noted that asynchronous materials are particularly important for agriculture outreach providers. There was still an acknowledgement of the importance and value of in-person activities, particularly when there is a networking or hands-on component to them. There was also acknowledgement that not all topics work well in the webinar format. Project partners affirmed that one of the strengths of the project is the mixed delivery modes used to support different schedules and learning styles. Future work might specify other kinds of concrete non-presentation tools or publications might be useful. A project partner noted that a strength was having different voices than the typical extension people saying the same things.

How would you rate the communication strategy for getting the word out about the project and its activities?

Opinions on the communication strategy varied with some project partners feeling that the team struggled and could have implemented a more structured communication strategy while others noted that the network of partners was beneficial in getting the word out. It was noted that specifically targeting Ag Professionals and exclusively ag professionals is difficult as many available communication methods (social media, email lists) are designed to go out to broad audiences. On the other hand the extension agent listserv sees so much traffic that it can be a challenging way to get information seen by target groups. The team felt that direct emails were effective, and that recordings were particularly important for agricultural professionals. One concrete suggestion was to have boilerplate language on each partner organization's website that led back to a central repository for the resources and additional information. This would allow for a more static indicator for the project to supplement the newsletter and other more dynamic and ephemeral forms of advertisement. Other thoughts included creating a social media or other kind of "group" or email list that sent periodic updates on "what has happened" and "what will be happening" with the project to help convey a sense of continutity and project identity. Another thought for the future development of a "community of practice" in sustainability is to have a more clear singular leader or coordinator who has a strong reputation and sense of trust in the technical assistance communities. This could be an agent or other technical assistance person who could act as a conduit for project activities or could take a different shape.

What educational approaches did the team not use that you might consider for future projects like this one?

Interviewees suggested that if the "checklist" publication or something similar had been developed toward the beginning of the project, it could have been helpful for outlining and contextualizing the rest of the project. Partners indicated that technical service providers often want a resource rather than wanting to attend a more formalized "course." It was also noted that future projects might include more hands-on workshops of some sort that allowed participants to apply the tools or knowledge they were receiving in real-time and that they could potentially Walk away with something physical (completed binder, examples, etc.) Another suggestion was to consider doing a multi-method event including a field day with farm tours, workshops and short presentations on a variety of topics.

What are the highest priorities for Sustainable Agriculture in Kentucky?

Much of the prioritization within this group focused on Soil Health and sustainable pest management via IPM, beneficial insect promotion, biological controls, etc. given that these are more "mainstream" ideas and that they are topics that touch lots of different kinds of farming systems and approaches. It was noted that the economic implications of implementation needs to be a major part of the discussion. Another topic suggested was discussion of quality of life and equity among farm workers (including owner operators) with a focus on protecting the people we depend on for agriculture. This could include discussions of issues like burnout, stress, and farm transition. Participants noted a big issue is making sure farmers know what resources are out there for them (cost-share, grants, production & business assistance, support for answering logistical questions) and how we can provide better support on soil health and water quality assessment and intervention. Interviewees emphasized the importance of market channels and outlets and a encouraged deeper discussion of how sustainability practices contribute to value, and demand premiums or incentives. Interviewees indicated the ongoing need for specific and concrete producer-support resources like information on crop rotations, cover crops, crop planning and identifying affordable inputs

General Comments

The team was overall very positive about the work done in the course of this project. They emphasized that the content and the quality of speakers was very good and that there was a lot of good information provided to target audiences. It also built upon and strengthened the existing relationships between the partner organizations. Partner organizations were positioned differently within the organizational ecosystems—some more extension-oriented, others more directly producer facing, and all with connections to other organizations—and this was crucial to the project.

Areas of potential improvement included more strategically and cohesively launching the project and branding the project more cohesively and potentially spreading the content more evenly across the project timeline. Interviewees felt like agents wanted more and expressed an interest in moving these conversations toward mainstream audiences. One noted that there is a core "sustainable ag choir" that already attends events. Partners also hoped that future work

would reflect on how to build confidence in these professionals to help out with sustainability related questions.

Key Participants: Semi-Structured Interviews

Were the event and resource types a good way of getting information to you?

Webinars were the outreach efforts that most respondents recalled and associated with the project. Feedback on the webinars was mixed, but mostly positive focusing on the convenience and flexibility that the webinar platform allows for statewide participants to receive synchronous training. Participants voiced appreciation for recordings of webinars to go back and review content. Some participants acknowledged that the webinar format is overused and sometimes not used effectively. Some specific suggestions that could improve future applications of webinar include:

- 1. Provide supplementary materials that ag professionals can use for future programs including:
 - Powerpoints
 - Worksheets
 - Handouts
 - Fact Sheets
 - Graphics
- 2. More time for conversation between participants vs. the lecture-focused format. This may include small breakout rooms or some other method for encouraging participant engagement.
- 3. Future promotion might include some more initial details about what the presentation will cover.

Many participants indicated that a field day is an ideal format for demonstration and hands-on learning, but that the format is also considerably less convenient and more costly.

Do you feel that project activities were communicated to you effectively?

Participants indicated that communication of individual events was usually good with a particular appreciation for reminders sent out on the day of the event or shortly before it. Participants indicated that it was not clear to them that the individual webinars and events of the project were part of a cohesive whole—they felt like individual training events. A more whole-project branding with all dates planned and announced and reinforced would likely help avoid this and may increase attendance in future events. Participants mentioned that if the goal

of the project is creating a community of practice sharing information, then something more collaborative like a google or facebook group or listserv might be helpful for announcements and discussion. If using email, creating a consistent program header/aesthetic or format of email may help to communicate that.

Were you able to share anything you learned in this project with the producers you serve?

Overall participants indicated that the webinar on crop insurance was the most helpful of the webinar series. Of particular note was information on the microfarm policy and other specific niche strategies for insuring small farms. Participants also indicated they have used IPM, Cover Crops, Organic Certification, Soil Health, and Soil Health in serving their clientele. Field days were mentioned as good opportunities for producers and ag professionals to learn from each other and together.

What educational or communication delivery methods did the project team *not* use that they might consider for future projects like this?

As indicated before, participants voiced a desire for supplemental materials including Powerpoints, Worksheets, Handouts, Graphics and other materials that are designed for them to carry forward and use when training and educating their clientele. Even for their own use participants would see value in a 1-2 page summary of the information presented during the webinars to use as a "quick reference" once returning to their offices. For the project as a whole, the notion of a fact sheet of "basic steps for starting your sustainable journey" was mentioned. They voiced a desire for even more field days and on-site tours to help encourage both professionals and producers to attend events. Comments from earlier were echoed about the value of creating more opportunities for intentional conversation, feedback, sharing of approaches and challenges, etc. as part of a project like this. This could take place in a social media space or through a simple listserv. Topically, there was a recommendation to include more content on branding, marketing, and storytelling.

What are the highest priorities for Sustainable Agriculture in Kentucky?

(Parenthetical numbers indicate how many interviewees mentioned that practice)

- Soil health (4)
 - Must address profitability too
 - Mulching. Lots of producers till heavily, then have delayed crop declines.
 Maintaining soil organic matter
 - Long-term investments in soil health can pay off—how to demonstrate that and help farmers understand the benefit
 - Inter-generational considerations, how can these practices connect back to that vision or goal
- Water conservation and water management
- Sustainability and profitability for small operation (3)
 - Profitability and affordability
 - Having realistic expectations about the economic implications of what they are doing
- Crop selection—reliable production and market
- Supporting Rural Communities
- Reducing Environmental impacts of large-scale cropping practices
 - no-till
 - Reducing overgrazing and improving rotational grazing
- Improving access to local meat processing
- Climate resiliency (3)
 - spend a lot of time recovering from major flooding events
- Policy changes
 - fair competition
 - stronger anti-trust enforcement
 - subsidy adjustments
 - Broad systemic support for sustainable agriculture, policy, funding, research focus
 - Farmer education
 - Beginning farmer resources for how to start smart re: soil health/amendments/etc.
 - Research based sus ag for more experienced producers
 - Interest to attend on-farm events/online stuff from beginning farmers. More experience folks get their stuff running and stop paying as close attention. More experienced folks could contribute and gain from more advanced exploration.
 - Agriculture professional education

General Comments

- Sustainable ag professional networks are needed across the state (5)
 - Connections between different ag service providers still weak
 - "If people come to me, I have a hard time telling them what is available from other organizations"
 - "As a professional, I don't work much with my NRCS agent"
- Climate Change, Climate Resilience (4)
 - Climate-smart agriculture
 - Ag professionals feel underequipped to answer questions—can I keep doing this farming if climate change impacts are going to keep happening with this frequency?
 - Viable strategies to help farmers mitigate effects
 - Flood mitigation
 - Crop selection for climate resilience
 - More developed climate-focused conversations happening at OEFFA
- In WKY hardest challenges are getting started and finding best management practices. Smaller population centers can make marketing challenging.
- Important this sector of agriculture not leave out minority farmers and make intentional efforts to include diverse producers.