

WORKSHOP DATA SUMMARY

Climate Ready Midwest | Lincoln University Extension | March 5, 2024

Executive Summary

This report presents the interview questions, key findings, and detailed explanations of key findings of stakeholder engagement meeting that took place with Lincoln University Extension and research partners on March 5, 2024.

The purpose of this report is to seek stakeholders' validation of the findings and adjust or make recommendations in areas perceived to misrepresent the views and perspectives captured during the engagement.

KEY FINDINGS

1. Extension professionals implicitly integrate climate related issues in their programming.
2. Extension has to be aware of existing resentment and mistrust of information and communication related to climate change.
3. Extension personnel expressed a diversity of priorities and needs of climate informed resources and tools.
4. Extension is seeing increasing awareness of climate change and climate-related practices.

These findings will be central in developing a theory of change as a road of map to address the challenges facing Extension climate change programming.

Detailed Summary

Theme 1

Extension professionals implicitly integrate climate issues in their programming.

Detailed description

During our engagement with Extension professionals, many indicated they were integrating climate smart agriculture practices into their programming. Farmers are not always receptive to the conversation, however Extension staff noted that when they talk about issues of temperature, drought, variable rainfall, and pests without connecting the topics to climate change, they are receptive to learning and finding solutions to the challenges imposed by the climate change factors. Some of the questions that clients ask are too broad for the Extension agent to respond to directly. However, they try to contextualize the issues to the local environment to enable the clients to understand the information. For example, “Sometimes the questions are too broad for us so we try to relate to local needs.”

However, despite indicating that they are integrating some climate-informed agriculture into their programming, they expressed limited skills and knowledge in articulating issues related to climate-informed agriculture. Some indicated they would be willing to attend some training on integration of climate change programming and a need for resources and tools extension staff and clients can access.

Illustrative Quotes

- Talking about reduced water availability and temperature of the water, farmers will have direct questions about this.
- In the context of established, multi-generational farms, conservative constituents. Don't trust resources that speak explicitly about climate change, resistant to the information. Still, vulnerable to climate change, water dynamics, but don't see climate change as an issue.
- Participant avoids talking about climate change
- It's difficult to talk about climate change without being labeled a 'leftist'.
- We get questions about whether things are related to climate change. Sometimes the questions are too broad for us so we try to relate to local needs. Get questions about policy into climate change.
- We talk about climate change's effect on mental health, food security, general climate hazards (heat, cold wave integration). While it might not be their primary concern, it's important for stakeholders to have an understanding of weather and climate.

Theme 2

Extension has to be aware of existing resentment and mistrust of information and communication related to climate change.

Detailed description

Workshop participants noted there is a high sense of resentment and mistrust of information or resources related to climate change. One extension staff emphasized that some of the resentment comes from clients who have high school diplomas and language of climate change may be beyond their level of understanding . For example “farmers often have high school or below high school education.” This highlights the necessity of using language that farmers can easily comprehend.

Another view shared by a participant is that understanding culture is crucial in effective communication of climate change information. One of the communities where he/she works consists of immigrant populations struggling with cultural challenges.

These communities have high respect for those perceived to have authority, so they may not be able to express themselves to the extension agent of their needs and priorities.

For example, one participant noted experiencing “Cultural challenges in that Latino customers tend not to contradict experts/authority directly, so tell extension agent what they think they want to hear.” Such communities need extension staff with a deep understanding of culture and communication approaches that would present climate change information in easy format for the members to understand.

Furthermore, extension staff emphasized the need for localization of language and information regarding climate issues. Even with improved language concerning climate, additional steps are necessary to contextualize climate-related issues to local areas, ensuring that the information addresses the needs and priorities of the community. Suggestions included presenting information in the form of infographics and pictures of successful practices. Others recommended climate change education to elementary schools and university students as a better conduit of climate change information to their parents, stating, “Teaching university students about climate change and climate-smart age helps disseminate info back to their homes/parents.” Therefore, providing climate-informed agriculture resources in various formats and diversity of avenues is essential to meet the diverse needs of clientele.

Illustrative Quotes

- Don't trust resources that speak explicitly about climate change, resistant to the information. Still, vulnerable to climate change, water dynamics, but don't see climate change as an issue."
- We still need resources/manpower for spanning any language barriers.
- Soybeans are experiencing issues with drought and reducing overall profit. Helps aid the discussion about alternative crops that are drought-resilient, eg other varieties, or quinoa"
- "Don't talk about future conditions or projections because don't have access to that information....and projections of water availability might be inaccurate if landowners start putting more wells in.
- "Not everyone talks about climate change directly, but some stakeholders are in poultry programs because of issues like food security that may be triggered by climate change.....These are more small farm poultry programs."
- "The conversation should be shifted from the effects of climate change to a rewards system so that they are able to differentiate from things that are mitigating climate change".
- Some farmers might talk about climate change if they're one-on-one, but not if they are in a group of other farmers.
- Would like to learn how to communicate with people and be more effective. Modes of communication as well (technology). University needs help being more efficient producing publications, fact sheets, online resources.
- Community members/individuals and nutrition/mental health. Talk to them about their everyday life, what issues are they facing. If they can't afford to go to farmers markets, grocery stores, etc. Ask them what they eat.
- The topic pulls itself into discussions, because the farmers and landowners are living climate change in their everyday life. That's how extension aims to talk about climate change, through the lived experiences.
- The conversation should be shifted from the effects of climate change to a rewards system so that they are able to difficult from things that are mitigating climate change. Sometimes this can be done without the stakeholder knowing they are implementing a climate change solution.
- Teaching university students about climate change and climate-smart ag helps disseminate info back to their homes/parents. Aims to provide a global perspective (e.g. Himalayas are melting).

Theme 3

Extension personnel expressed a diversity of priorities and needs of climate informed resources and tools.

Detailed description

During the engagement meeting extension professionals shared that they are in need of training on climate agriculture smart practices. The training should focus on various issues such as soil conservation, fertilization, cover crops, and livestock paddocks. One extension staff shared what one client told him, “future hands-on explanations are best....visit farms to talk about erosion,” while another observed the value of “bring the theory down to a practical level.” These statements underscore preference for pragmatic programs where participants learn by actively engaging in practical activities rather than being passive recipients of information.

Additionally, respondents suggested that extension training on climate-informed agriculture should incorporate visits to demonstration sites or farms that have implemented relevant practices. One stating, “holding field days to show what researchers are doing with [specific crop] and other crops/varieties in high tunnels.” By learning from the experiences of others and seeing firsthand what has worked well and what has not, farmers can make more informed decisions regarding mitigation and adaptation actions.

The extension staff expressed the need for climate change training as many are not climate experts. However, they receive a barrage of questions related to climate change; given their limited scope of climate science and its impacts they find it to respond to client questions appropriately. As one stated, “need knowledge and training for integrating climate programming in Extension.” When extension staff get climate change training, they would be in a better position to integrate climate smart agriculture in their programming. Another staff member offered a perspective, “close connection between researchers and extension for delivering programs is very helpful.” The close relationships and connections between climate science researchers and extension staff will be vital for each of them to understand the objective of each field and how best to work as a team to offer holistic climate smart agriculture programming.

The participants also noted that there is high demand for urban agriculture and training, and there has been limited focus on small-scale farmers operating in urban environments. Yet they face the same challenges like any other farm. For example one stated, “financial/urban farm is not well known among extension/leadership” and another one noted, “Connect producers to EQIP for urban ag and high tunnels.” Therefore, there is a need to include urban farmers' priorities in the climate smart agriculture agenda in terms of

financial support, resources, and tools to accelerate mitigation, and adaptation of best practices to increase resilience.

This highlights the importance of establishing strong collaboration and partnerships between Cooperative Extension and Climate Hub to develop resources that offer experiential learning opportunities and support adult learning principles. There is a need to identify farmers within the region who can be model farmers or interested in being mentors to other farmers who may be interested in implementing climate smart agriculture practices.

Illustrative Quotes

- “Future hands-on explanations are best. Visit farms to talk about erosion, climate change, grass, production for beef, water availability. Bring the theory down to a practical level”.
- "Don't trust resources that speak explicitly about climate change, resistant to the information. Still, vulnerable to climate change, water dynamics, but don't see climate change as an issue".
- We still need resources for reaching stakeholders through programs (stretched thin currently) – for example Hispanic farmers need a translator when applying for USDA/NRCS programs
- Rivalries in extension could prevent communication. Some long-term extension professionals might be resistant to new programs
- Training, understanding, and information of climate change. Sustainable ag workshops. Practices for soil conservation, amendments, fertilization, cover crops, livestock paddocks
- "Need knowledge and training for integrating climate programming in Extension".
- Sustainable agriculture initiative for business development—farmers markets and other markets for products.
- Connect producers to EQIP for urban ag and high tunnels.
- Holding field days to show what researchers are doing with quinoa and other crops/varieties in high tunnels.
- Close connection between researchers and extension for delivering programs is very helpful.
- Alternative venues for delivering info, e.g. salvation army
- Need knowledge and training for integrating climate programming in Extension.
- Most of the climate change discussions would be approached by supporting practices that would benefit stakeholders financially
- Finca/urban farm is not well known among extension/leadership.

- Partnerships between institutions. We can learn from other extensions, work together on barriers.
- Financial incentives for supporting farmers.
- Finding programs for beef owners during drought...livestock insurance program (eg. \$60/head). Connecting them to appropriate funding opportunities, financial relief, financial support.

Theme 4

Extension is seeing increasing awareness of climate change and climate-related practices.

Detailed description

During the engagement meeting, numerous staff noted some farmers are beginning to show some keen interest in climate-related agriculture information. Some farmers who believe climate change is happening are willing to engage in honest conversation to find lasting solutions to the challenges they face. One staff member stated, “audience brings their issues/experiences to the workshop, and that drives the discussion about the climate.” Another staff member shared that some farmers will talk about climate change when you meet them one-on-one. Since climate change is a controversial issue in many rural areas of the United States of America, farmers distance themselves from public discussions related to climate because of the fear of their neighbors to label them leftist. As one extension shared, the clients said, “It’s difficult to talk about climate change without being labeled a ‘leftist’.”

Other extension staff shared farmers need training sessions focused on proposal development related to climate change, such as “native plant workshops.”; “advise small farmers to grow several crops.” These workshops would equip farmers with the necessary skills and knowledge to implement best climate smart agriculture practices. Additionally, extension staff suggested the importance of quarterly workshops to stay updated on the latest information and developments in climate change. As one stated, “Training, understanding, and information of climate changesustainable ag workshops.” The workshops will be vital for extension staff to get the latest climate change trends and new practices on the horizon.

Illustrative Quotes

- Climate change has led to unpredictability (rainfall, snowfall, heat), uncertainty”

- Atmospheric rivers are bringing heavy, heavy rains, which leads to runoff without topsoil moisture regeneration. These issues were not on people's radars"
- "farmers are gaining this information little by little. They need the information repeatedly, might not retain it for a following workshop".
- Rainwater catching - where to apply for grants for smaller spaces. Food bank/community centers
- Stakeholders don't directly ask about climate change but that they are adapting in a natural way.
- The topic pulls itself into discussions, because the farmers and landowners are living climate change in their everyday life. That's how extension aims to talk about climate change, through the lived experiences.
- The audience brings their issues/experiences to the workshop, and that drives the discussion about the climate.
- Some participants speak about climate change directly, some refer to "unpredictable weather"
- Some farmers might talk about climate change if they're one-on-one, but not if they are in a group of other farmers.
- Some farmers can see what happens with climate change with pests, etc.

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