

Meeting Summary: Fourth Meeting of NAPDC Data Governance Workgroup

Date: August 28, 2025

Attendees: Victor E. Cabrera (U.Wisconsin Madison), Yaguang Zhang (OATS Center at Purdue University), Amy Charkowski (Colorado State University), Val Kovalsky (Nave Analytics), Scout Calvert (University of Nebraska-Lincoln), Jennifer Clarke (University of Nebraska-Lincoln), Dan TerAvest (Our Sci LLC), Ziwen Yu (University of Florida), Nasima Subedi (University of Nebraska-Lincoln), Ben Craker (AgGateway)

Facilitators NPCC: Sofia Castellanos, Kristen Wright, and Prabhas Pokharel

1. Executive Summary

The fourth NAPDC Data Governance Workgroup meeting on August 28, 2025, focused on finalizing key thematic “clusters” of agricultural data issues and drafting core principle statements to guide data collection, sharing, and use. Participants confirmed four main ag data clusters and discussed a variety of topics, including legal regulations and ethical concerns like profit motives and data ownership. The group reviewed global farm data governance frameworks to inform their principles, then broke into small groups to craft draft principles that emphasized transparency, value returned to farmers, plain-language agreements, and farmer training. Each group’s input was shared and consolidated, and volunteers were designated to refine each cluster’s principles for the next session. The meeting concluded with a consensus on next steps.

2. Opening Check-In

The meeting began with a brief, LEGO-themed check-in, where participants shared how they were feeling. Val announced a recent success for their company, which won them a NASA challenge prize for a sustainable business model, which kickstarted the meeting on a celebratory and positive note.

3. Workgroup activity/discussion

Confirming Ag Data Clusters: The group reviewed and confirmed four key data governance clusters that had been refined in an updated matrix. These clusters address: (1) Farmer Communication & Data Use Expectations, (2) Farmer Motivations, Concerns & Incentives, (3) Farmer–Researcher Agreements: Clarity, Risks & Outcomes, and (4) Farmer Education & Extension Partnerships. There was a brief discussion of potential additions, like the idea of a fifth cluster focused on technology, data storage, and infrastructure. Instead of immediately adding a new category, participants leaned toward ensuring such technical considerations are incorporated into the existing clusters as needed. No objections were raised to the four primary clusters, and the team proceeded with those as the framework (with a note to remain flexible if new themes emerge).

Legal and Ethical Considerations: Attendees brought up how emerging state-level data regulations and legal frameworks might fit into the clusters. Jennifer Clarke noted ongoing discussions about states proposing new ag data laws and questioned where issues of what data agreements are legally valid belong in the framework. She cited a Nebraska bill on agricultural data (LB525) as an example. The group considered whether such policy issues should be addressed under the Agreements cluster (Cluster 3). Sofia acknowledged the importance of this question, noting that Oregon doesn't have similar laws. Ben Craker provided a practical example – using farmer data to train AI models (such as feeding it into ChatGPT to improve software) – to clarify the type of data usage such laws might target. This exchange highlighted the need to monitor legal developments and potentially integrate compliance guidance into the governance framework. Victor Cabrera suggested that the group's work could be valuable to share with policymakers, underscoring a desire to bridge their framework with real-world policy discussions. Throughout, the importance of keeping ethical considerations at the forefront was emphasized, given the rapid advancement of AI and data-driven tools in agriculture.

New Cluster Ideas and Data Profit Concerns: The conversation also explored whether the current clusters adequately cover all concerns. Ziwen Yu observed that the clusters seemed too focused on academic research and might not address the industry's profit-driven use of farm data. He pointed out that “monetary implications of data” – or data derivative profits – are at the root of many ethical issues and should be explicitly included in the framework. The group debated whether this topic warranted a new cluster or could be folded into an existing one. Ziwen suggested integrating “data derivative profits” into one of the established clusters rather than creating a separate category. This spurred discussion on how companies vs. researchers use data: research institutions focus on transparency and shared benefits, whereas industry might prioritize profit, raising questions of trust and fairness. Scout asked for clarification on what kinds of “profits” were meant, noting that individual farm data alone often isn't lucrative unless aggregated into larger datasets. She implied that considering concrete use cases would help, as most farm data yields value (and potential profit) only at scale. Participants acknowledged these complexities. For example, Amy Charkowski cautioned that in some contexts (e.g. Western states' water data), sharing data can actually put farmers at a disadvantage or risk their access to resources. Victor added that farm size can influence these dynamics: larger operations might see more benefit from data initiatives, whereas smaller farmers might worry about others profiting from their information or even recognize the intellectual property value of their farm data. In summary, the group struggled to balance a farmer-centric, trust-building approach with the realities of commercial interests. Sofia emphasized that the framework must remain farmer-centric, focusing on farmers' trust and concerns first and foremost, even as it acknowledges profit motives and regulatory factors.

Global Principle Frameworks: Moving toward the principles discussion, Sofia introduced reference materials from existing global ag data governance principles – including US-based frameworks (like Ag Data Transparent and NASA Acres) and international ones (Australia's

NFF Farm Data Code, the UK’s principles, New Zealand’s code of practice, the EU’s 2019 Code of Conduct, etc.). The intention was to leverage existing principles and not reinvent the wheel. Val Kovalsky noted that some frameworks (e.g. NASA Acres, the Australian code) were government-led and cautioned against drawing hard distinctions between academic and industry contexts. Val argued that separating principles by sector could add complexity and cause divergence, suggesting the group keep a unified approach to principles regardless of research or industry setting. Sofia agreed that their previously defined clusters would serve as a baseline for developing NAPDC’s principles, ensuring consistency. With that understanding, the larger team split into small breakout groups to draft a first set of one-line principle statements for each cluster, using the global examples as inspiration. Kristen Wright encouraged everyone to frame their ideas in clear “language of principle,” for example, turning broad values into actionable statements (e.g. “Decisions are made inclusively”). This exercise bridged the earlier discussions to the concrete task of principle-writing.

4. Post-Breakout Room Discussion

After the 20-minute breakout sessions, each group reported back draft principle statements for their assigned clusters. Group 1 (reported by Dan TerAvest) prioritized plain-language communication and farmer benefits. They proposed a principle to “accurately and clearly communicate uses of data in plain language”, ensuring farmers understand how their data is used. They also emphasized designing research with farmers’ motivations in mind and providing value back to farmers as a core tenet. Group 1’s statements highlighted being transparent about benefits and risks to farmers (including who will have access to data, how data is anonymized, and who ultimately benefits). They furthermore stressed treating farmers as equal partners in research and promoting farmer education on data rights, sharing, and governance.

Group 2 (led by Yaguang Zhang) echoed similar themes of farmer value and understanding. They agreed that research must bring tangible value to farmers and that clear agreements are essential so that farmers know exactly “who knows what” about their data. Group 2 highlighted education and training as well – ensuring farmers are informed and capable of engaging with data, and that learning is mutual (farmers and researchers learning from each other as equals). This reflected a commitment to two-way knowledge exchange and respect in data partnerships.

Group 3 (led by Nasima Subedi) centered their principles on transparency, ownership, and capacity-building. Their first point was about transparency and notice, meaning farmers should always be well aware of how their data is used and who owns it. They stressed making it clear that farmers remain the ultimate owners of their data. To achieve this, any farmer–researcher agreement should be written in plain, simple language, even suggesting the use of bullet points or executive summaries to ensure clarity. Group 3 also revisited the notion of value back to farmers, discussing pros and cons of sharing data and ensuring farmers see benefits from participation. Additionally, they proposed providing farmers with training on data sharing and ethical issues that might arise, so that farmers are better equipped to manage their data and

understand potential risks. Across all groups, common themes emerged: transparency, clarity, farmer benefit, equal partnership, and education were consistently highlighted as guiding principles.

During the share-out, Ben Craker raised an important question about the strength of wording in these principles. He asked whether the principles should say “we encourage...” vs. “we require...” essentially debating how forceful or binding the principles should be. This led to a brief group reflection on tone and enforceability. Sofia responded that she would lean towards firmer language – e.g., using “we require” – but noted that the final phrasing would be determined collectively as they refine the principles. This exchange highlighted the group’s desire to strike the right balance between aspirational and enforceable language in the framework. In terms of next steps, everyone agreed to continue refining these draft principles after the meeting. Sofia asked for volunteers to take ownership of each cluster’s principle development moving forward.

5. Volunteers Chosen for Next Session

The following participants volunteered to lead further work on each of the four data clusters:

- Yaguang Zhang – Cluster 1 (Farmer Communication & Data Use Expectations)
- Dan TerAvest – Cluster 2 (Farmer Motivations, Concerns & Incentives)
- Ziwen Yu – Cluster 3 (Farmer–Researcher Agreements: Clarity, Risks & Outcomes)
- Ben Craker – Cluster 4 (Farmer Education & Extension Partnerships)

(Note: Victor Cabrera offered to assist as needed, although he will be unable to attend the next meeting). These volunteers will coordinate to refine the principle statements for their respective clusters.

The meeting was adjourned at 10:56 AM.