Informing Research and Extension for Extreme Weather, Climate and NJ Agriculture

February 11, 2026

Aim of this discussion:

1- Reflect on what you learned today and think about how you will apply it in your own work.

2- Understand what specific topics might require a deeper dive to continue to support the formation of our Community of Practice.
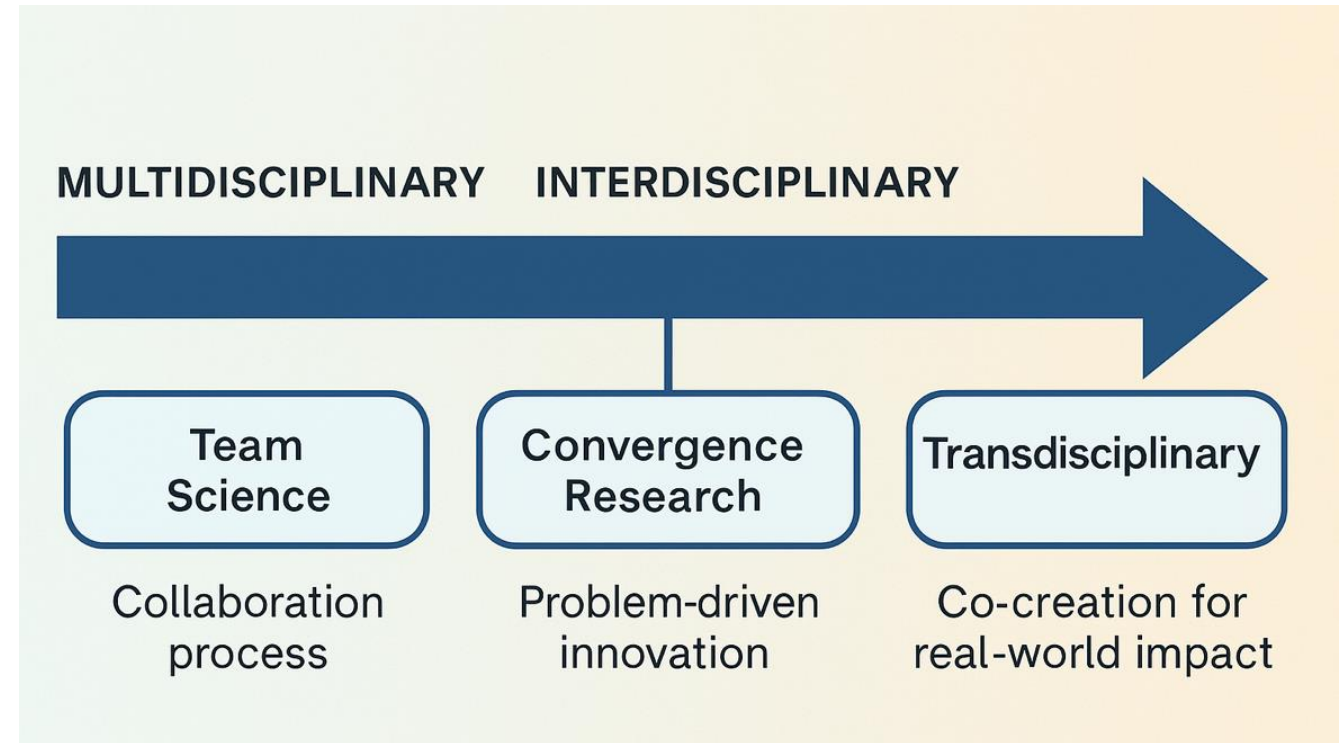
3- Continue to listen, collaborate, and collectively act towards solutions.

Community-based Participatory Research and Action

Let's think about:

Co-development = process with shared decision-making

Ensure that our *"next steps"* are not just academic goals but practical solutions for the NJ farming community.

MULTIDISCIPLINARY   INTERDISCIPLINARY

Team Science — Collaboration process

Convergence Research — Problem-driven innovation

Transdisciplinary — Co-creation for real-world impact

Aim#1. Grounding the Research in Stakeholder Needs

Past survey's show a broad range of concerns such as:

Climate and Biological Stressors   Topsoil Health   Economic Realities & Profitability

Aim#2. Use Convergence Research as "Change Levers" to Accelerate Change

Convergence research occurs where NJ farmer needs overlap with ongoing research:

- **Agrivoltaics & Energy**: Combining solar power with grazing or crop production.

- **Breeding & Biology**: Developing disease-resistant species to counter the increased pest pressure identified in the surveys.

- **Technology & Data:** Expanding the use of drone sprayers and robotic weed control to manage labor and climate-related challenges.

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Where do stakeholder needs intersect with ongoing research to create the most impactful "next steps" for a co-development strategy?

- How can **technology** be used to help manage things like labor shortages or climate stressors?

- How can we accelerate the **adoption of viable farming practices** (such as heat, drought, or salt-tolerant crop varieties and developing disease-resistant lines for aquaculture and specialty crops)?

- Can we develop **financial assistance programs** for cover crops and climate adaptation?

- Can we establish **participatory governance structures** that ensure shared decision-making between researchers and stakeholders?

Reflection in Mentimeter

https://go.rutgers.edu/qs49rk0m

Reflection--Open Discussion

Based on what you learned today:

- Please share one word(s) that describes environmental (or biological) stressor(s) most impacting NJ farm's viability:

- Where is NJ agriculture most resilient?

- Where is NJ agriculture most vulnerable?

- What research initiatives have the most potential to make NJ farms more viable?

- What actions do you think are required to implement, scale, and sustain transformative initiatives?

- What topics do you want more access to through programming?