

## New paths forward for increasing conservation on Michigan farms

Conservation agriculture systems have the potential to increase soil health and support farm resilience. These systems include practices such as reduced tillage, cover crops, diversified crop rotations and integrated crop/livestock production.

Adoption of these practices remains low among farmers, despite long standing efforts to promote conservation. This project directly engaged farmers and farm advisors to better understand barriers to adoption and to work towards improving conservation practice implementation.

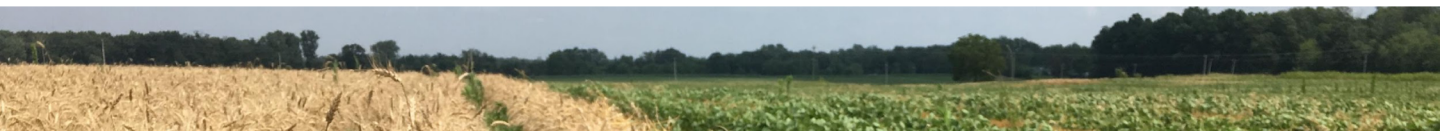
A team representing Michigan Agri-Business Association, Michigan Environmental Council, National Wildlife Federation and Michigan State University's Kellogg Biological Station Long-term Ecological Research Program hosted discussions across Michigan from 2018-2020. Seven roundtable discussions in three regions took place, with 33 producers and farmer advisers attending.

**Key Lessons Learned.** Participants indicated a range of challenges that can prevent farmers from adopting conservation practices, from personal and on-farm barriers to lack of support from policies and markets. The two main themes that summarize these barriers are: 1) a lack of choices in the crops, markets and products that farmers have access to; and 2) a lack of connections between key stakeholders. To address these barriers, farmers and agricultural professionals identified four priority areas to increase conservation agriculture across Michigan:

- 1) more diverse and robust **markets**,
- 2) accessible and flexible **conservation programs**,
- 3) strong **agricultural communities**,
- 4) and investments in **human capital** to support conservation and innovation.

We have identified several pathways to build a system that truly supports on-farm conservation efforts. We lay out a variety of policies, market mechanisms and new organizations that could support conservation agriculture across Michigan.

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# New paths for conservation agriculture in Michigan

## MARKETS

- More diverse, robust markets could build incentives for innovative management and diversified production systems, and could potentially incorporate soil health outcomes into the value of food products.
- Market pathways could take two forms:
  - 1) Creating and/or expanding markets for additional crops, including small grains, forages, biomass and ecosystem services;
  - 2) Expanding markets with product qualities (for example, nutrient density) or production practices (for example, sustainability metrics) that match changing consumer preferences.

## CONSERVATION PROGRAMS

- Conservation programs need to engage farmers over long time frames and should prioritize developing farmer skills and changing mindsets to focus on soil health.
- Policies should incentivize risk-minimizing practices and adaptive management. They must be more flexible and adaptable to real-world situations.

## AGRICULTURAL COMMUNITIES

- Local, inclusive networks are key support systems. These include farmer networks for peer-to-peer connections and networks with a broader set of farmer advisers and stakeholders. More involvement from non-operating landowners who rent land, lenders and food market professionals could help build and strengthen these networks.
- Regional and state level networks are needed to overcome challenges associated with adopting practices and transferring knowledge.
- The research community should provide more applicable primary research supported by local examples so that farmers see conservation systems working.

## HUMAN CAPITAL

- Efforts need to support not only practices, but the people implementing them through development of human capital — the knowledge, skills and self-confidence to thoughtfully manage complex, innovative and adaptive farm operations.
- Programs and support are needed for skill development, focused on specific on-farm technical skills (especially farm labor) and management skills (especially information management, experimentation, resiliency, marketing and financial management).