MIDWEST ROW CROP COLLABORATIVE

# 2020 IMPACT REPORT

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# ADVANCING REGENERATIVE AGRICULTURE IN A DISRUPTIVE YEAR

MIDWEST ROW CROP COLLABORATIVE

**By any measure, 2020 was an extraordinary year. Building on an already accelerating interest in confronting the challenges facing our food and agricultural system in the U.S., the realities of COVID-19 laid bare how fragile—and yet robust—our food system is. With supply chain disruptions and empty grocery shelves, consumers became acutely aware of the presence of a supply chain that starts with farmers.**

We also saw an incredible surge in long overdue attention to issues of equity and systemic racism in the U.S.—issues that are inextricably linked to both food security and environmental health. As one of the most intense areas of agricultural production in the world, the Midwestern U.S. is a vital region for confronting issues surrounding food production.

Times of disruption open the door for systems to change. The Midwest Row Crop Collaborative was established as a platform for catalyzing positive change in row crop agriculture in the upper Mississippi River Basin and the group, with a new model that better reflects the strengths and ambitions of our members, has been hard at work. In 2020, we unlocked new opportunities for problem-solving—co-developing new projects, sharing lessons, and streamlining efforts to guide strategic investment of resources—and engaged more than 900 farmers on 300,000 acres across the region.

- A program in central Iowa, now in its third year, focused on reduced tillage, diverse rotation, cover crops, and advanced nutrient management among farmers in Unilever and PepsiCo supply sheds.
- PepsiCo, Cargill, and Bayer, representing different points in the value chain, drove regenerative practice adoption by launching a project to provide incentives for planting summer and fall cover crops and to reduce fertilizer use in Eastern Nebraska.
- Kellogg and The Nature Conservancy supported farmers in Arkansas, Illinois, Indiana, Michigan, and Nebraska with funding and technical assistance to adopt conservation practices including irrigation efficiency, pay-for-performance models, and “edge-of-field” practices like vegetative buffers and wetland restoration.
- Walmart, Environmental Defense Fund, and The Nature Conservancy developed an online calculator with Cornell University to strengthen quantification of GHG emissions in crop production, focused on corn, soybean, and wheat cropping systems in the United States.

MRCC is a platform for leading companies and environmental nonprofits to collaboratively explore and innovate. Our members are testing approaches to conservation finance mechanisms and engaging consumers, applying insights from behavioral science, assessing federal and state-level policy opportunities, and identifying ways to integrate principles of justice, equity, diversity, and inclusion.

Midwest Row Crop Collaborative members and partners are committed to a food and agriculture system that is part of a healthy environmental ecosystem and is economically viable for all in the value chain. We look forward to expanding the scale and impact of our collaborative work and sharing the results.

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# ABOUT THE MIDWEST ROW CROP COLLABORATIVE

MIDWEST ROW CROP COLLABORATIVE

## Scaling Solutions for Agriculture and the Environment

The Midwest Row Crop Collaborative (MRCC) was formed in 2016 with the recognition that food companies in the supply chain were grappling with similar challenges that could be addressed by a small group of committed partners invested in ambitious goals and driven by strategic action. A unique partnership aligned to drive positive environmental change in the upper Mississippi River Basin, MRCC develops solutions for removing barriers to widespread adoption of sustainable and regenerative agricultural practices, as the entire sector's understanding of "sustainable" and "regenerative" continues to evolve. Comprised of leading companies and environmental nonprofits that span the full food and agriculture value chain, MRCC's membership shares an ambition for system-wide impact and the belief that collaboration and continuous learning are key elements to realizing the future we need.

## Why focus on row crops in the Midwest?

MRCC's work focuses on the heart of row crop agriculture in the Midwestern United States. The region represents a globally unique resource and economically vital landscape that covers more than 125 million acres of agricultural land. With corn and soybean production representing 3/4 of Midwestern agricultural acreage, row crops are by far the largest use of U.S. agricultural land. The U.S. produces around a third of the world's corn and soybeans, and 80 to 90 percent of that comes from the Midwest, making the region a key node in the global production of these crops.

The region faces growing environmental impacts from pressures on the landscape due to unsustainable practices—deteriorating soil health, soil loss, contamination and depletion of groundwater resources, declining water quality and biodiversity, and climate impacts through loss of soil carbon and greenhouse gas (GHG) emissions. The environmental effects of Midwestern agriculture extend well beyond the region and threaten the health and vitality of communities dependent on the waters of the Ogallala Aquifer and the Mississippi River, extending even to the health of the Gulf of Mexico. With pressures from climate change, long-term crop yields are expected to decline from an increase in temperatures, extreme rain events, and incidents of drought, impacting food security and the well-being of farming communities.

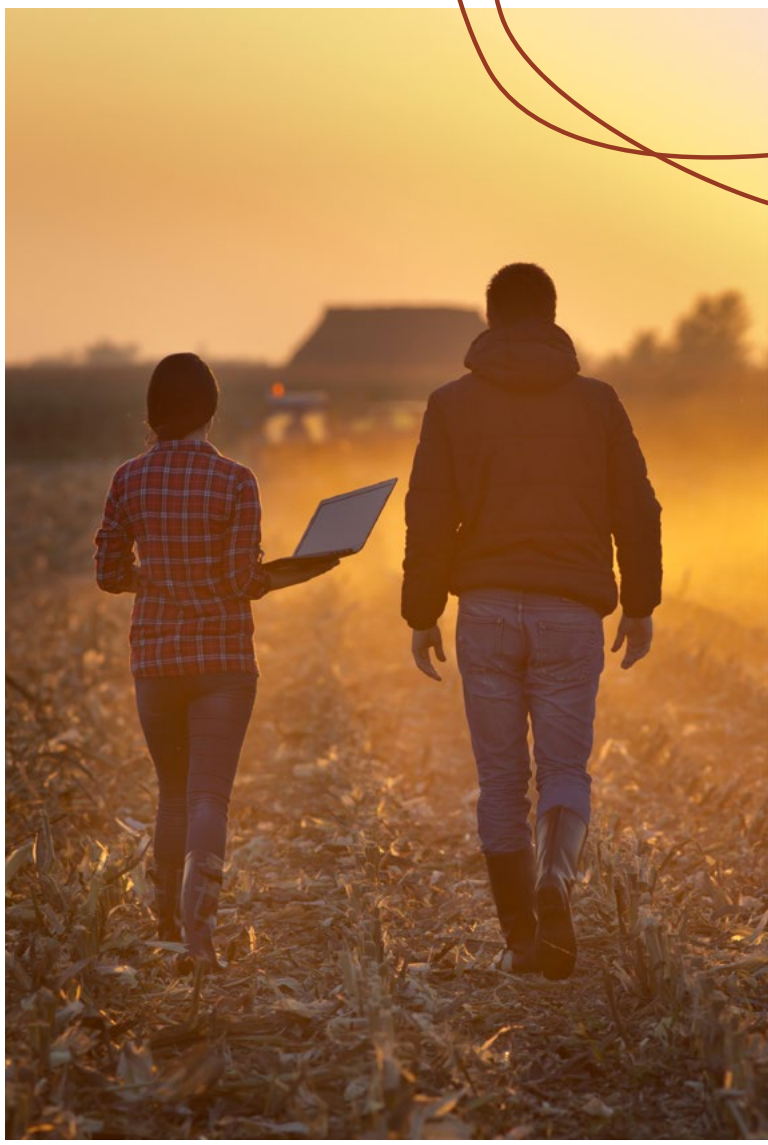
## Collaborating for Systems Change

The urgent environmental, social, and economic challenges facing the current row crop agricultural system in the U.S. are complex and interrelated and cannot be solved in isolation. Members have come to realize that, despite their relative size and influence in the food and agricultural system, they alone will not be able to drive the massive changes needed to build a more resilient and sustainable system. MRCC was founded on the belief that a systems change approach that identifies and addresses barriers to positive change in the system is the only way to achieve the transformation needed at scale. Using science-based approaches, MRCC members work together to design and implement projects and share the insights from what they learn to benefit the environment, farmers, and others similarly committed to systems change.

Working together, MRCC members design, fund, and implement cutting-edge programs and pilots that demonstrate the soil, water, and climate benefits of regenerative agriculture to unlock strategies for a more resilient system by:

- Co-developing new pilot projects, enabling sharing of risk and investment while spurring creativity and experimentation, ultimately establishing proof cases built to scale.
- Sharing an insider's view of practice and strategy implementation and space for ideation and problem-solving with peers in the field.
- Participating in learning opportunities with top industry experts on topics including conservation finance, farmer engagement, and agricultural policy.
- Streamlining multiple initiatives to guide strategic investment of resources and capacity.
- Articulating a collective vision that challenges conventional expectations for environmental solutions and signals a shift across the sector.

**In 2020, MRCC's model evolved to better reflect the strengths of each member, enabling each to focus on collaborative projects most aligned with their commitments and programs. This approach has unlocked an array of new opportunities and has enabled members to deepen their collaboration and knowledge sharing.**



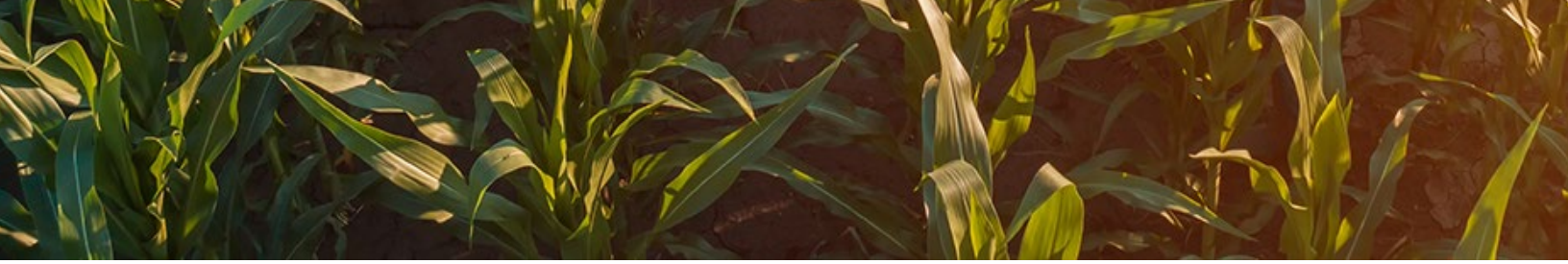
# OVERVIEW OF OUR WORK

MIDWEST ROW CROP COLLABORATIVE

**The Midwest Row Crop Collaborative embraces a systems approach to driving transformation in row crop agriculture, and its members see the primary functions of their combined efforts as identifying barriers to positive change, developing and testing solutions for removing those barriers, and catalyzing scaled adoption through shared learning. Together, the members seek to influence the agricultural system by leveraging their unique resources, infrastructure, and goals to accelerate the adoption of sustainable and regenerative agricultural practices more quickly than any member could do alone.**

Based on the varied positions that its members hold in the food and agricultural system, MRCC is well-equipped to focus on three primary systemic barriers to positive change:

- Risks, both economic and social, to farmers in adopting sustainable practices
- Lack of supporting networks for adoption of sustainable practices
- Insufficient demand and ability to source sustainably produced commodities or small grains



MIDWEST ROW CROP COLLABORATIVE

# THEORY OF CHANGE

**Core Purpose: Incubate and Test Solutions for Removing Barriers to Adoption of Sustainable Farming Practices and Catalyze Scaled Adoption through Shared Learning**

| BARRIERS | SYSTEMS CHANGE PATHWAYS | ACTIONS | OUTCOMES |
|---|---|---|---|
| Risks (economic, social) to farmers in adopting sustainable practices | Conservation Finance & Incentives | Deploy new financial products supporting adoption of sustainable practices | Ready access to financing supporting transition to sustainable practices |
| | De-risking Practice Adoption | Support demonstration of ways to overcome barriers to adoption of sustainable practices through reduced / shared risks | Proven, accessible solutions for addressing risks of adopting sustainable practices implemented across the supply chain |
| Lack of supporting network for adoption of sustainable practices | Agricultural Network Engagement | Identify and demonstrate strategies that support broad adoption of sustainable practices through trusted networks | Trusted, influential networks activated and enabled to communicate and advise on sustainable practices as an industry norm |
| Insufficient demand and ability to source sustainably-produced commodities or small grains | Creating Demand for Sustainable Commodities | Demonstrate supply chain sourcing that leverages multiple parts of the value chain to support demand for sustainable practices | Increased supply chain ability and demand so greater supply chain and farmer uptake continues with increasingly clear business case |
| | Consumer Engagement | Consumer campaigns focused on farmers, soil health, and/or climate | Increased consumer demand stimulates other companies to share risk and expand projects to landscapes |
| Lack of shared knowledge and data on the WHY and HOW of adopting sustainable farming practices | | *Incubate, Test, Learn* | *Scale Adoption through Shared Learning* |

## ASPIRATIONAL GOALS

1. 50% of row crop acres in the Mississippi River Basin implementing soil health practices by 2025.
2. Reducing nutrient loading of nitrogen by 41% and phosphorus by 29% from Mississippi River Hypoxia Task Force States by 2035 (as compared to August 2016 baseline).
3. 50% of all irrigation used in the Ogallala aquifer maximizing water conservation to reduce water quantity stress by 2025.

## VISION

**Healthy soils, that protect water and address climate change, are necessary to support farm families and our communities. Our vision is a U.S. food and agricultural system that is part of a healthy environmental ecosystem and is economically viable for all in the value chain.**

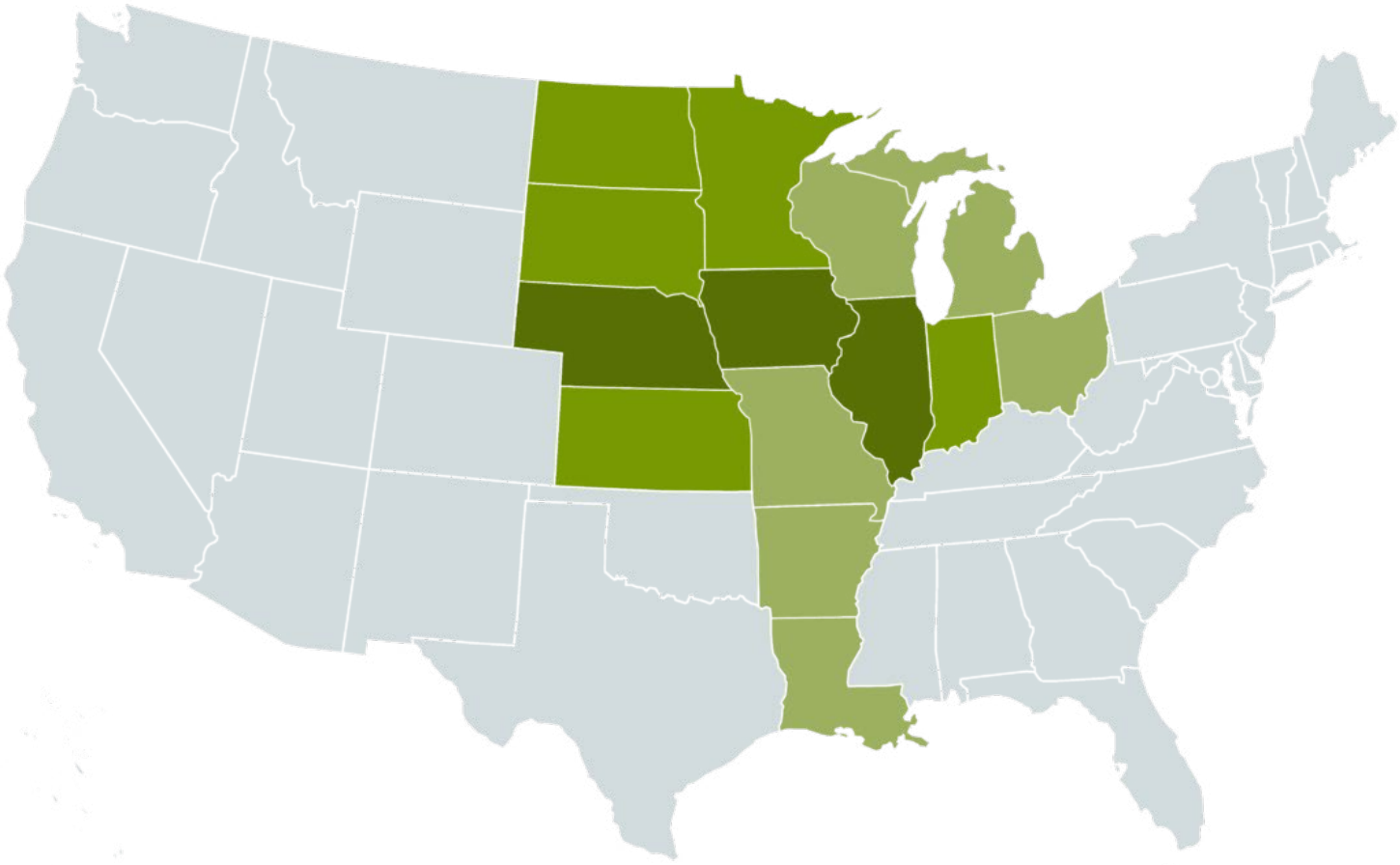
In alignment with the MRCC theory of change, members organize their efforts in five work groups or "pathways to systems change" that provide direction for the development of new collaborative projects and serve as a structure for integrating new opportunities into members' sustainable agriculture projects.

- **Pathway 1: Conservation finance and incentives**
- **Pathway 2: De-risking practice adoption**
- **Pathway 3: Agricultural network engagement**
- **Pathway 4: Creating demand for sustainable commodities**
- **Pathway 5: Consumer engagement**

As part of their commitment, members contribute to ongoing learning by jointly developing, funding, and implementing a variety of innovative programs and pilot projects designed to test approaches that can accelerate new solutions. Although MRCC's geographic focus for impact is the Upper Mississippi River Basin and its core projects are located in Iowa, Illinois, and Nebraska, associated member projects extend into other Midwestern states and further down the Mississippi River Basin.

In each of these projects, the members agree to report on outcomes from their investment and engagement. Examples of metrics include GHG reductions, irrigation efficiency improvement, reductions in nutrient loading, new acres using sustainable farming practices, and farmer benefit. The reported impacts are offered in the following pages for each project separately and, taken together, demonstrate the broader impact of the Midwest Row Crop Collaborative.

## Map of MRCC project activity



# SUMMARIES OF PROJECTS IN THE FIELD

MIDWEST ROW CROP COLLABORATIVE

MRCC members are committed to investing in sustainable agriculture projects in their supply chains. Within MRCC specifically, in 2020, members invested directly into joint projects with each other, including cost share and technical assistance for farmers. In addition to direct investment, members contributed significant in-kind investment of resources within MRCC member organizations to advance research, incubate new approaches, and share expertise and lessons learned.

**In 2020, members' work together engaged more than 900 farmers, resulting in the adoption of sustainable practices on more than 300,000 acres**

As a sector, agriculture is actively wrestling with the best ways to measure the impact of sustainable agriculture projects. Given MRCC's approach, designed to tackle different aspects of systems change and with a diverse portfolio of projects, members recognize that projects will vary in their goals and impacts: there is no one-size-fits-all set of metrics that will apply across MRCC's collaborative work. Consequently, MRCC tracks a few common key metrics to understand the direct impact of its project work—and its role in catalyzing broader change.

In 2020, members' work together engaged more than 900 farmers, resulting in the adoption of sustainable practices on more than 300,000 acres. Projects are improving soil health, sequestering carbon, increasing biodiversity, and reducing nitrogen, water use, and soil erosion. Over the next several years as MRCC expands its portfolio of projects and measurement approaches continue to be refined, we expect that the ability to measure impact will continue to improve. The following case studies shed more light on the impact and learning from a handful of MRCC collaborative projects.

# Iowa Regenerative Agriculture Cover Crop Program

## Overview

Since 2018, Unilever and PepsiCo have partnered with Practical Farmers of Iowa (PFI) to implement a regenerative agriculture cover crop cost share program. PFI is a leading farmer support organization that equips farmers with tools and resources to build resilient farms and communities. The Iowa program is offered to farmers producing soybeans within Unilever's Hellman's mayonnaise supply chain and farmers producing corn for PepsiCo's supply chain.

## Goals

The program aims to improve soil health and environmental outcomes of soybean and corn supply chains by increasing the adoption of practices such as reduced tillage, diverse rotation, cover crops, and advanced nutrient management among Iowa farmers within each company's supply sheds.

## Approach

There are five primary components to the program:

- Cost share for farmers planting cover crops
- Technical assistance for farmers on cover crops, advanced nutrient management, reduced tillage, and diverse rotations
- Peer-to-peer learning opportunities for farmers
- Monitoring of environmental indicators to track the program's success in reaching corporate goals
- Development of the business case for adopting sustainable farming practices for different stakeholders in the value chain

**GEOGRAPHY**

Central and Eastern Iowa

**TIMELINE**

2018-2022

**MRCC MEMBERS**

PepsiCo and Unilever

**PARTNER**

Practical Farmers of Iowa

**MRCC SYSTEMS CHANGE PATHWAY**

De-risking Practice Adoption

Farmers receive $10 per acre to plant cover crops on up to either 160 acres or 10% of their total farmland. Since 2019, the program has also included an increased incentive for first-time cover croppers—farmers new to the practice can receive $40 per acre for up to forty acres.

**Both programs have grown significantly since their launch. In 2020, 120 farmers participated in PepsiCo's program and 360 farmers participated in Unilever's program—over 40% of whom were new to the program. Participating farmers across the programs planted over 165,000 acres of cover crops, with about 40% of those acres supported by cost share through this program.**

Additionally, the 2020 program included a new component for training trusted advisors. Through lunchtime calls and webinars branded as "Agronomist Boot Camp," sales agronomists and crop advisors learned more about the logistics and business of cover crops, primarily from other agronomists. Over 700 participants attended the meetings, and upon completing the series, 90% reported feeling more confident providing cover crop guidance.

## Impact

- Cover crop acres have lower GHG emissions than non-cover crop acres when emissions from farm operations are weighed against GHG sequestered in the soil. Cover crops planted through PepsiCo's program reduced GHG emissions by 38%.
- Cover crops reduce nitrate loads to water bodies. In 2020, PFI worked with the Iowa Soybean Association to sample tiles and streams within the project area with varying levels of cover crop coverage. They found tile outlets from fields with higher cover crop coverage had 32% less nitrate pollution than tile outlets from fields with low or no cover crop coverage. This is congruent with a literature review summarized in the **"Iowa Science Assessment of Nonpoint Source Practices to Reduce Nitrogen and Phosphorus Transport in the Mississippi River Basin"** which shows that cover crops have the potential to reduce nitrate-N loads between 28 and 31% (July 2012).
- Biodiversity—measured as the field's potential capacity to support diverse ecosystems—is much higher on acres with cover crops. The biodiversity score in Field to Market's Fieldprint Calculator was 16% higher for cover crop acres compared with non-cover crop acres.

## Lessons

- Farmers are slow to adjust their approach to weed control. Most maintained the number of weed control passes or the number of herbicides they used on cover crop acres when compared with non-cover crop acres. As the program works to address the use of inputs, farmers will see more cost savings and increased overall environmental benefit.
- In 2020, Unilever focused on partnering with cooperatives and elevators that buy and merchandise soybeans in the Unilever supply shed to identify and engage new farmers. They credit these partnerships with increasing the number of new farmers in the program; in 2020, 155 farmers joined the program and 55% of them had little or no experience with cover crops.
- Partnerships between companies sourcing corn and soy from the same region simplify the program's administration by PFI and make it possible for farmers to participate in the program throughout their corn-soy rotations if they are suppliers in both supply chains. A major grant beginning in 2021 will support further expansion of cover crops and introduce small grains to provide continuous living cover throughout the rotation.

Actions including supply chain engagement and retailer training help Unilever and PepsiCo address challenges to adoption beyond the up-front cost of implementing cover crops. Currently, the companies are working with MRCC members Environmental Defense Fund (EDF) and The Nature Conservancy (TNC) on innovative financing and lender education to grow and improve the financial incentives available to farmers, further reducing barriers to cover crop adoption. *Read more about this work on page 25.*

PepsiCo and Unilever believe that by embracing a more holistic approach to accelerating regenerative agriculture, mechanisms like cost share can both support Iowa farmers in transitioning their growing practices and offer lessons to inform the companies' regenerative agriculture programs globally.

# Eastern Nebraska Full Supply Chain Collaboration

## Overview

PepsiCo, Cargill, and Bayer have partnered to implement a program to incentivize planting summer and fall cover crops and reduce fertilizer use in sourcing regions in Eastern Nebraska. The project is unique in its approach, engaging corporate partners that operate at different points in the supply chain, each bringing its own strengths to driving sustainable practice adoption. PFI and Sustainable Environmental Consultants (SEC) provide implementation capacity through farmer engagement, data collection, and analysis of project impact. The initial phase kicked off with recruitment of farmers into the program, with the first cover crop planting in the fall of 2020.

## Goals

The project aims to increase conservation practice adoption—specifically cover crops and reduced fertilizer use—leading to GHG emission reductions, increased water quality, and improved farm economics. By providing farmers with economic analyses and cost share to incentivize their initial use of cover crops and nutrient management, the program intends to help farmers with the up-front costs so they can continue to employ these practices and improve their environmental impact without cost share in future years.

## Approach

- Cargill identifies farmers selling corn to its facility in Blair who might be interested in the cost share program and connects them with PFI.
- PFI provides farmers with a cost share of $10 per acre of fall cover crops planted for up to 200 acres or $15 per acre of summer cover crops planted for up to 100 acres with an option to receive an additional $10 per acre if farmers reduce their nitrogen use by 40 pounds per acre. PFI also provides technical assistance to farmers on cover crop selection and planting, fertilizer management, termination management, and other practice implementation concerns.

### GEOGRAPHY

Blair, Nebraska and surrounding area

### TIMELINE

2020-2030

### MRCC MEMBERS

PepsiCo, Cargill, Bayer

### PARTNERS

Practical Farmers of Iowa, Sustainable Environmental Consultants

### MRCC SYSTEMS CHANGE PATHWAY

De-risking Practice Adoption, Creating Demand for Sustainable Commodities

- SEC aggregates field-level data to analyze environmental impacts including water quality benefits, soil erosion reduction, and GHG emissions and sequestration. Additionally, SEC prepares total project impact reports and individual reports for the farmers.

## Impact

- Forty-eight farmers enrolled in the first year of the program, far exceeding its year one goal of 25.
- Participating farmers planted almost 15,000 acres of cover crops, 52% of which were supported through cost share.
- Additional impact metrics will be available in future years as the program collects more data.

## Lessons

- By collaborating with each other as companies aligned along the value chain, partners were able to share in the cost of reducing farmers risk in practice adoption while realizing the full Scope 3 emissions reductions for each respective company.
- There's a lack of good implementation and data collection partners to manage landscape-level regenerative agriculture projects. Adding capacity and improving the capability of implementing partners is crucial to increasing the scale of this work.
- Members note two key factors in their success in engaging farmers in this project. First, PFI trained local Cargill teams so they were well-equipped with knowledge on soil health and the cost share program when they had conversations with farmers. Second, the program targeted a region with few other cost share opportunities. Members were surprised and pleased that farmers interest exceeded what they typically encountered in areas where similar opportunities are more common.

# Precision Conservation Management in Eastern Illinois

## Overview

PepsiCo supports Precision Conservation Management (PCM) in East-Central Illinois to provide farmers with resources to adopt a range of conservation practices—nutrient management, reduced tillage, cover crops, and diverse rotations. PCM, the conservation program operated by Illinois Corn Growers Association, uses technology, data management, and cost share to help farmers adopt conservation practices.

## Goals

Through its partnership with PCM, PepsiCo aims to reduce GHG emissions, improve soil carbon, increase biodiversity, decrease water and nutrient runoff, and improve farm profitability in its corn and vegetable oil supply chains in the region.

## Approach

- PepsiCo partners with its regional suppliers to recruit farmers to the program. Illinois Corn Growers Association's PCM Program Specialists work with PepsiCo originators or suppliers in different geographies to bring farmers into the program.
- PCM Specialists enroll farmers in the program and analyze the economics of a range of potential regenerative agricultural practices. PCM Specialists then produce a report on field-by-field performance with environmental metrics. Specialists are trained to include cover crop and cost share advice through the program in addition to the measurement and reporting services they have traditionally provided this guidance helps farmers to adopt a range of conservation practices.
- In addition to advisory support, Illinois Corn Growers Association administers a cost share program and provides overall tracking and GHG emissions reporting.

### GEOGRAPHY

East Central Illinois (Danville and Decatur area, expanding in 2021 to Paris)

### TIMELINE

2018-2030

### MRCC MEMBERS

PepsiCo (adding Cargill in 2021)

### PARTNERS

Illinois Corn Growers Association, Bunge, ADM, Sustainable Food Lab (adding FFAR in 2021/2022)

### MRCC SYSTEMS CHANGE PATHWAY

De-risking Practice Adoption

## Impact

- In 2020, 186 farmers were engaged through the program and conservation practices were added to 17,404 acres (61% soybean acres and 39% corn acres). At least one conservation practice was implemented on 18% of the total acres on participating farms.
- Corn fields with conservation interventions sequestered 0.56 metric tons of $CO_2e$ per acre, whereas corn fields without interventions emitted 0.29 metric tons of $CO_2e$ per acre. Soybean fields with conservation interventions sequestered 1.34 metric tons of $CO_2e$ per acre, 415% more than the 0.26 metric tons of $CO_2e$ per acre sequestered on fields without interventions.
- Water quality scores—measured through the Water Quality Index for Agricultural Runoff—increased 5.1% on corn fields and 5.9% on soy fields.
- Biodiversity scores—measured as the field's potential capacity to support diverse ecosystems—increased across all locations, an average of 24% for corn acres and 40% for soybean acres.
- Soil conservation—measured as tons of soil lost per acre over one year—improved, with 37% less soil loss on corn acres and 11% less soil loss on soybean acres.

## Lessons

- Data gathering and reporting can be incredibly complicated and much more difficult than encouraging farmer behavior change. One lesson learned is to define the level of data collection required for success and balance the human effort and capital required for data collection with the capacity available to help farmers make practice changes. This is a dynamic field with new or altered requirements arising via carbon markets, legislation, and voluntary governance bodies like the Science Based Targets Initiative (SBTi), but one that adds a great deal of complexity.
- One key to success for PepsiCo was identifying an existing farmer support organization working in its supply shed—PCM. PepsiCo partnered with Sustainable Food Lab to assist PCM in adding capabilities to their farmer engagement model. In addition to their original data management and advisory skills, PCM Specialists have been trained in providing agronomic assistance and innovative insurance financing.
- PepsiCo has added an innovative finance component to the program in 2021. Farmers with the highest nutrient application levels will be offered free top-up insurance coverage if they agree to reduce their application of nutrients to Maximum Return to Nitrogen (MRTN) rates. PepsiCo hopes this addition will bring more significant input reductions than they have seen using the existing incentives.

# Kellogg and The Nature Conservancy Supporting U.S. Farmers

## Overview

*Supporting U.S. Farmers* provides farmers in five of Kellogg's sourcing states with funding and technical assistance to adopt conservation practices. Each state's program is tailored to the unique needs of the crops in that state – rice in Arkansas, corn and soybeans in Illinois, corn in Indiana and Nebraska, and wheat in Michigan. One unique aspect of the work is the inclusion of "edge-of-field" practices like vegetative buffers and wetland restoration, in addition to the more common in-field sustainability practices. The project also stands out for its focus across multiple geographies and the learning that results from this diversity of project experiences.

## Goals

The project aims to reduce costs, risks, and knowledge barriers to scale the adoption of sustainable agricultural practices. Through this work, the project hopes to demonstrate that agriculture can contribute to improved environmental outcomes including increased soil health, improved water quality, and expanded aquatic habitat in streams and wetlands.

## Approach

- Across all states, the project includes three elements that build upon each other year after year: farmer outreach and education, practice adoption, and measurement and documentation of continuous improvement.
- The specific conservation practices included in the program vary by state:
  - » In Arkansas, the project provides farmers irrigation pump timers to manage irrigation efficiently and conserve water from the Alluvial Aquifer.
  - » In Illinois and Indiana, the project provides small grants and technical advice to farmers using practices that support the state's Nutrient Loss Reduction Strategy through the *Saving Tomorrow's Agriculture Resources* (*STAR*) initiative.

### GEOGRAPHY

Arkansas, Illinois, Western Indiana, Eastern Michigan, Southeast Nebraska

### TIMELINE

2019-2021

### MRCC MEMBERS

Kellogg Company, The Nature Conservancy

### PARTNERS

Star of the West, Syngenta, local Soil and Water Conservation Districts, University of Nebraska, the Nebraska Environmental Trust, Upper Big Blue Natural Resource District, Enterprise Rent-A-Car Foundation, Delta Plastics

### MRCC SYSTEMS CHANGE PATHWAY

De-risking Practice Adoption, Consumer Engagement

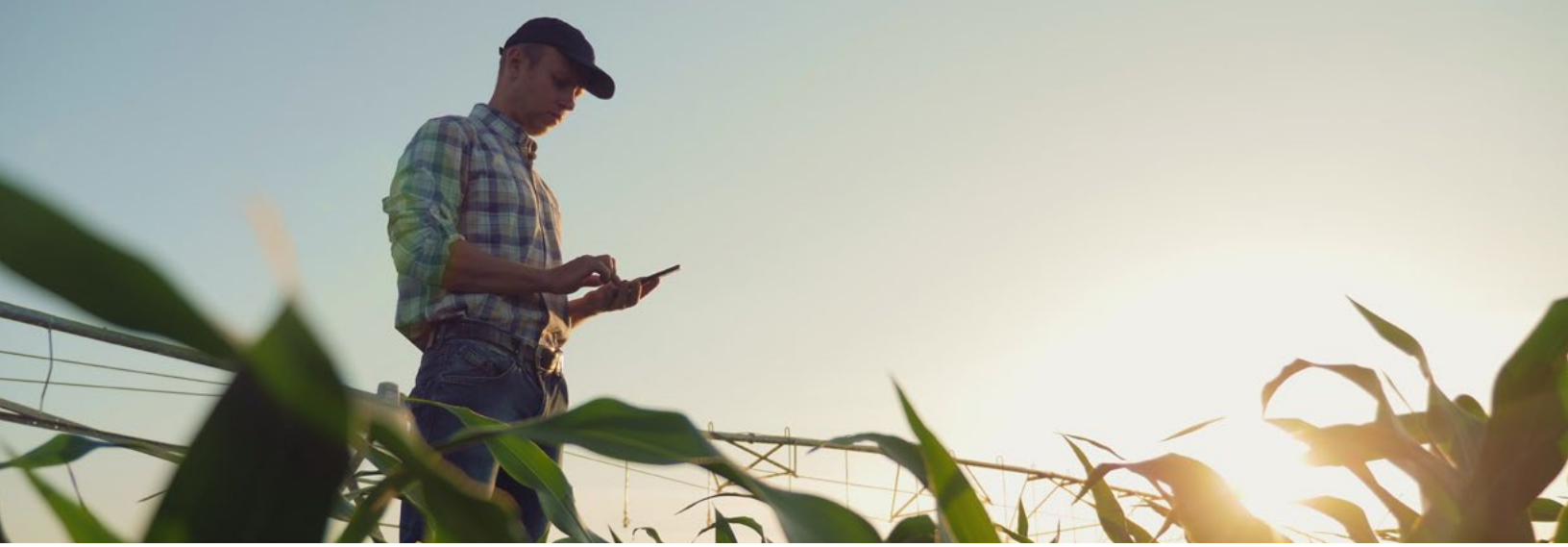
  - » In Michigan's Saginaw Bay watershed, the project incentivizes soil health practices and improved water quality through a pay-for-performance program.
  - » In Nebraska, a public-private partnership supports farmers to improve soil health through interseeding cover crops.
- Local staff from TNC manage project implementation at a state level and Kellogg staff provide advice and support. Each state project also has local partners that contribute to farmer engagement, project implementation, and data collection.
- Kellogg is planning consumer engagement campaigns at the point of sale in retailer grocer locations in project states with the intent to connect consumers with an awareness of the regional farmers growing their food using conservation practices. *Read more about Kellogg's partnership with Walmart's on page 23.*

## Impact

- The program engaged 222 farmers who implemented conservation practices on 102,625 acres.
- In Michigan, the project resulted in 7,822 pounds of nitrogen load reductions, reduced sediment loads by 629 tons, and prevented 2,858 metric tons of GHG emissions.
- In Arkansas, the project reduced irrigation water use by 4.72 billion gallons.
- In Nebraska, 11 farmers are participating in a pilot project to interseed diverse cover crop mixes on 40 acres of corn rotations to help de-risk the implementation of this practice. The pilot will also help the partners better understand the effects of interseeding as they scale the practices to over 10,000 acres at these farms. Soil health and yield impacts from the project will be available after the 2022 harvest.
- Impact metrics for the program in Illinois and Indiana will be available when this project phase concludes at the end of 2021.

## Lessons

- All projects with direct cost share for practice or technology adoption either build on existing public conservation grants or have been leveraged to secure additional public funds. These projects have demonstrated how public and private investment can amplify each other to promote impact at scale.
- The project structure reflects learnings from TNC and Kellogg experience that solutions must be tailored to local needs rather than one-size-fits-all. The project's multi-solution approach allows farmers to adopt practices that are specific to the geographic, climate, and market conditions they face.
- Tracking continuous improvements is necessary but not sufficient to drive adoption of conservation practices at scale. Stakeholders need monitoring, reporting, and verification of environmental outcomes to meet their goals, but multiple strategies for engagement and farmer support are needed to encourage practice adoption "measurement alone is not enough to create change."



# Projected Climate Smart Agriculture Opportunities for Reducing GHG Emissions

## Overview

Adoption of climate smart agriculture has the potential for significant mitigation of agricultural GHG emissions, but quantifying the impact of land management practices on soil GHG emissions is challenging due to variability of local conditions. Easily scalable emissions quantification is crucial for long-term success of reducing GHG emissions in agriculture, but it is simply not feasible to sample enough soil every year to quantify carbon. Digital platforms that rely on modeling are one of the only ways to make agricultural GHG reduction quantifiable and cost-effective.

With funding support from the USDA's Natural Resources Conservation Service's Conservation Innovation Grants program, Bayer, National Corn Growers Association, and other partners developed a comprehensive value chain intervention that verifies the impact of climate smart agricultural practices, offering a replicable approach for measuring emission reductions from on-farm practices in corporate supply chains. The project developed a framework to estimate regionally specific soil GHG reductions associated with the adoption of climate smart agricultural practices in corn and soybean production.

## Goals

The project aimed to develop a framework that draws on existing offset standards, emerging low-cost verification technologies, and proven precision business planning methods to drive conservation adoption and achieve GHG reductions. The framework was designed to provide technical guidelines to support offsets and "insetting" projects related to agriculture within a company's own supply chain or circle of influence. Ultimately, the goal was to develop a publicly available, scalable, Gold Standard-certified GHG insetting framework for agriculture.

### GEOGRAPHY

Illinois, Indiana, Iowa, Minnesota, Missouri, Nebraska, Ohio, Wisconsin

### TIMELINE

March 2017 to March 2020

### MRCC MEMBERS

Bayer, EDF, TNC

### PARTNERS

National Corn Growers Association – Soil Health Partnership Initiative, AgSolver, Applied GeoSolutions, DNDC-ART, Climate Smart Group, Crop Growers

### MRCC SYSTEMS CHANGE PATHWAY

De-risking Practice Adoption

## Approach

Model simulations were performed on sites in sensitive Mississippi River Basin watersheds in U.S. Corn-Belt states, including Illinois, Indiana, Iowa, Minnesota, Missouri, Nebraska, Ohio, and Wisconsin. The model examined changes in soil organic carbon stocks, $N_2O$ emissions, and $CH_4$ fluxes corresponding with alternative land management scenarios, including tillage practices, adoption of cover crops, and improved N-fertilizer timing. The framework was validated with field-scale trials on over 100 farms with 200,000 acres in commercial row crops, using the OpTIS platform for data collection.

## Impact

- The project achieved design certification as part of the Value Change Program, co-led by SustainCERT and Gold Standard, which provides guidance for companies to report on value chain emissions reductions in line with the Greenhouse Gas Protocol and recognized by SBTi.
- In addition to measurement, the framework provides step-by-step guidance on how to implement an environmental project for cover crops, strip or no-till, and nutrient management. It serves as a model for companies to drive conservation adoption and achieve value chain emissions reductions.
- With the framework as a foundation, Bayer launched the **Bayer Carbon Initiative**, a pilot program that pays farmers for capturing carbon in cropland soils. The company seeks to enroll about 1,200 row crop farmers in the U.S. and Brazil in its first season, scale up in upcoming seasons, and ultimately expand to other countries.

## Lessons

- For farmers to successfully enroll in conservation programs, the process must be as easy and seamless as possible. Partnering with the Soil Health Partnership (SHP) was critical for farmer recruitment. Farmers already involved with SHP could easily join in the Bayer project, removing enrollment challenges and creating more efficient information and data gathering for project partners.
- Success of the project heavily relied on the diverse expertise provided by different partners and SHP members. It is critical to have diverse voices ranging from a major commodity association to environmental NGOs.
- The adoption of multiple practices has the greatest GHG reduction potential.
- Adequate field data acquisition is necessary for credible benchmarking of models-based approaches, and essential for acceptance by global standards organizations. Automated data acquisition and tracking is critical to avoid data errors.
- Use of spatially explicit subfield modeling based on publicly available data provides a relatively low-cost approach to strategically target climate smart practices to agricultural regions where adoption is most impactful.
- Policy that would further support creation of market opportunities for farmers to adopt conservation practices will be crucial to scaling the adoption of sustainable practices.

# Engaging Consumers on Regenerative Agriculture

**GEOGRAPHY**

Arkansas, Illinois, Indiana, Michigan, Nebraska

**TIMELINE**

2021 launch

**MRCC MEMBERS**

Kellogg Company, Walmart

**MRCC SYSTEMS CHANGE PATHWAY**

Consumer Engagement

## Overview

Consumers can play a central role in transforming agriculture to become more sustainable and, in alignment with that recognition, consumer engagement serves as a **key pillar in driving systems change** in MRCC's theory of change. Despite constantly shifting food preferences, some of the public's growing priorities are unrelated to the more traditional aspects like flavor, value, and convenience—today's consumers are seeking out food that also has a positive environmental impact, supports local communities, and fits into a healthy lifestyle. Beyond these trends, COVID-19 has changed *what* and *how* farmers produce, distribute, and consume, adding further pressure from the public to the list of considerations for companies. The future of food depends, at least in part, on how able and willing companies are to showcase the value of sustainable and regenerative agricultural practices to the public in ways that enable consumers to understand their impact and demand products made using these practices.

## Approach

Kellogg and Walmart recognize that niche brands in the natural and organic channel can't alone make the impact that's needed in agriculture but, with collaboration, the two companies can create large-scale impact. Currently, the companies are working together to develop an in-store consumer activation campaign in Walmart stores across five states, highlighting Kellogg's Supporting U.S. Farmers program in those states. This campaign will showcase farmers from each state who benefit from Kellogg's work with The Nature Conservancy to provide localized technical and cost share support to farmers within their supply chain. Examples of the types of support farmers receive ranges from cost-share for implementing conservation practices in Michigan to installing water meters on rice farms in Arkansas. *Learn more about the Supporting U.S. Farmers program on page 17.*

Leaders from both companies shared insights from the planned campaign and the importance of consumer engagement in a VERGE 20 session, "**Purpose-Driven Branding: Sustainable Agriculture, Collaboration, and a Post-COVID World**."

## Current status

Due to challenges from COVID-19 and its impact on retail shopping and reduced in-store foot traffic, the campaign is on hold with plans to activate in 2021.

## Lessons

- Because most corn, soybeans, and wheat don't show up on the plate in their original forms, brands must go the extra mile to connect consumers with producers, helping consumers to understand how their food purchases support local communities. Kellogg and Walmart have found that illustrating how their efforts support U.S. farmers has been a compelling way to make the case to consumers for more sustainable agricultural practices.
- Amy Senter, Kellogg CSO, shared that "consumers don't need to be fully knowledgeable about the meaning of 'regenerative agriculture' to understand the important role that farmers play for food security in their communities and related to the environment as stewards of the land." However, navigating the variety of ecolabels can be confusing for the rushed shopper and there is a need to communicate sustainable agriculture's quantifiable impacts. On-pack "sustainable" labelling schemes are becoming more common, but a gap remains around how to account for on-farm sustainable (and more recently "regenerative") agriculture projects that don't result in a certification, such as organic, in the claims. Research is needed to understand how sustainable or regenerative agriculture projects currently are or aren't rolling up into labelling claims.
- Consumers play a critical role in changing the agricultural landscape, as farmers grow what the market demands. For brands and retailers, though, this isn't just about dollars and cents—it's also about building trust and taking responsibility to ensure that food will continue to be on the shelves in fifty years.

# Focused on Financing Sustainable Agriculture

**MRCC MEMBERS**

EDF, PepsiCo, TNC, Unilever

**MRCC SYSTEMS CHANGE PATHWAY**

Conservation Finance & Incentives

## Overview

In late 2019, MRCC convened a Forum on Conservation Finance in Agriculture to strengthen knowledge on the topic and build connection among those seeking to address related challenges in their work. The absence of effective conservation financing solutions and incentives available to farmers was among the key barriers identified to guide MRCC's activities in 2020. Subsequently, a work group was established to explore and pilot new financial products and better understand the practical challenges in expanding access to financing supportive of the transition to sustainable agricultural practices.

By aligning priorities, insight, and resources and working with lenders and other financial institutions, work group members seek to better understand the financial needs and impacts associated with sustainable agriculture and the risk to the finance sector in not actively supporting the transition to sustainable agriculture. The finance sector's interest in sustainable agriculture is still emerging but—with the vision and leadership of MRCC members—there are clear opportunities to build financial infrastructure that can credibly and efficiently enable the adoption of sustainable agricultural practices. Finance is not a silver bullet, but it is one important tool for unlocking change in the agricultural system.

## Approach

In 2020, the work group's activities included market research to better understand the need and appetite for new forms of finance among farmers, the design of a pilot lending product with financing partners, collaboration with corporate members to identify opportunities for piloting in supply chain projects, and initial planning for education opportunities on financing for sustainable agriculture.

Beyond deploying and refining financing solutions, members of the work group seek to answer the following questions:

- How effectively does access to better financial products incentivize the adoption of sustainable agricultural practices?
- How can multiple financial incentives most effectively stack, especially outside of carbon market models?
- How can financing solutions scale beyond existing supply chain programs offered by companies?
- What conditions must exist for financiers to engage actively as partners in accelerating sustainable agriculture?

The subject matter expertise and research assets provided by EDF and TNC guide the work group's activities, with EDF's work on the economics of the transition to sustainable agriculture offering value in informing how potential financing solutions are structured. Bringing their own relationships to financiers and perspective into how proposed solutions align with supply chain investments, members PepsiCo and Unilever can align a future pilot with their Iowa Regenerative Agriculture Cover Crop Program and engage the program's implementing partner, PFI, in providing technical knowledge to the work. *Learn more about the Iowa Regenerative Agriculture Cover Crop Program on page 11.*

## Current status

Based on data collected to guide the design of financing solutions, the work group is currently developing a report identifying opportunities and farmer perspectives on the role of banks and lending products in the transition to regenerative agriculture. Additionally, the work group has also begun work with a financing solution provider to structure and test a warranty product with retailers and farmers in the coming months.

Although the finance sector awaits an industry-wide shift in support of sustainable agriculture, some financiers are supportive of such efforts, willing to introduce the topic to their networks, and have demonstrated an openness to integrating innovative elements into their offerings. In order to speed the transition of the finance sector from "interested" to "activated," related efforts are emerging—another group engaging on the topic is the Innovative Finance Workgroup, convened by Field to Market with a broader set of leaders uniting around the topic. Complementing these efforts, MRCC sees its role as testing solutions on the ground in supply chain projects and sharing the lessons to strengthen future efforts.

**"Because food and agricultural lenders often finance both farmers directly as well as companies in the supply chain, they are motivated to identify financing solutions that support farmer adoption of conservation practices and company efforts to achieve their sustainability goals. This collaboration has enabled us all to learn and identify the greatest opportunities to support farmers in overcoming the financial barriers to conservation adoption."**

Maggie Monast, Environmental Defense Fund

# Soil Health-GHG Calculator for Agricultural Supply Chains

## Overview

Through its Project Gigaton, Walmart aims to avoid one billion metric tons (a gigaton) of GHG emissions from its global supply chains by 2030. One of Walmart's key supply chains, food and agriculture, has been challenged by a lack of simple, scientifically rigorous tools for GHG accounting in food production. As part of its agricultural GHG reduction estimator for crops, Project Gigaton has included a basic method to estimate $N_2O$ reductions resulting from farmer actions to optimize fertilizer use. Walmart sought to improve the rigor of its existing methodology by expanding it to include agricultural conservation practices used to improve soil health. Walmart engaged the Cornell Atkinson Center for Sustainability to develop an online accounting tool to estimate the GHG emissions from common soil health practices.

## Approach

A team of Cornell researchers developed an online calculator to strengthen quantification of the impact soil management practices have on GHG emissions in crop production, focused on corn, soybean, and wheat cropping systems in the Continental United States. Named FAST-GHG, the tool was built in partnership with scientists from MRCC members EDF and TNC.

FAST-GHG focuses on the practices of improved tillage and cover cropping, which represent the most scalable and near-to-market solutions for sequestering carbon in cropland soils. The calculator also includes a range of nitrogen-fertilizer management practices. Designed for simple use, the tool requires only cropping system, location, and crop acreage as inputs. The calculator provides default values for input data such as nitrogen fertilizer rate, grain yield, soil texture, and climate if site-specific data is unavailable, but calculates enhanced results when site-specific data is used. The tool combines a detailed understanding of carbon and nitrogen management with broadly available input data to quantify the aggregate GHG benefit of agricultural practices across supply chains, presented as avoided GHG emissions.

**GEOGRAPHY**

Continental United States

**TIMELINE**

Launched September 2020

**MRCC MEMBERS**

Walmart, EDF, TNC

**PARTNERS**

Cornell Atkinson Center for Sustainability

**MRCC SYSTEMS CHANGE PATHWAY**

Creating Demand for Sustainable Commodities

## Current status

- In September 2020, Walmart made the FAST-GHG tool available to its suppliers as part of Project Gigaton. The FAST-GHG methodology and online calculator provide support to food companies that aim to reduce GHG emissions in their agricultural supply chains, despite limited information about the emissions generated in the production of commodities they sell, allowing them to quantify reduced GHG emissions resulting from soil health practices.
- FAST-GHG is publicly available, with the methodology behind it carefully and transparently documented to allow any individual to implement the approach. Cornell, EDF, and TNC are exploring additional ways to make the tool available, to develop future calculators related to impacts such as water quality and biodiversity, and to compare the calculator's outputs with other publicly available tools designed to help companies estimate their GHG emissions from agriculture.

## Lessons

- Clear standards and accountability and opportunities for optimization and reducing production costs are needed to ensure benefits for farmers.
- Many agricultural practices have GHG impacts beyond the production site that are not accounted for by other calculators. This "leakage", while extraordinarily difficult to measure and often simply ignored, is an important component of measuring GHG impacts.
- Likewise, permanence is a critical challenge for climate solutions in agriculture, with increase in soil organic carbon stocks being quickly reversible if management practices are not maintained. Tools like FAST-GHG need to explicitly account for the risk of reversal due to the abandonment of soil health practices.
- This tool and the collaborative effort that led to its development can serve as a model for other organizations to build upon for more types of agricultural products and in different parts of the world.

# SHARED LEARNING AND CATALYZING CHANGE

MIDWEST ROW CROP COLLABORATIVE

Participation in MRCC is more than the development of collaborative projects—each member also commits to sharing lessons from their experience to strengthen the efforts of others, while seeking to learn from others to inform their own work. This "shared learning" process includes internal member opportunities, as well as external opportunities for public engagement.

Some examples of internal opportunities that build on the trusted relationships between members include member monthly learning calls, webinars, and other convenings. Topics explored in these events in 2020 included:

- Making the business case for soil health
- Financing resilient agriculture
- Standards & assurance
- Beyond the early adopters, reaching "middle adopters"
- Regenerative grazing
- Social barriers to practice adoption
- Biodiversity strategies
- Soil & Water Outcomes Fund
- Non-operator landowners

Additionally, MRCC members value the chance to share the successes and setbacks they've encountered in their work externally, recognizing that those lessons can support others in their journey toward a more sustainable agricultural system.

In 2020, members' insights from shared learning were featured at conferences, including a Kellogg- and Walmart-led panel at VERGE 20 on "**Purpose-Driven Branding: Sustainable Agriculture, Collaboration, and a Post-COVID World**," to discuss the impact of values-driven consumers, or MRCC's session at the 2020 Sustainable Agriculture Summit on "**Growing Together: Collaborative Action for Sustainable Midwest Row Crop Agriculture**," which brought together members Kellogg, TNC, PepsiCo, and Walmart to share lessons learned from collaboration.

Outside of events, members contribute to learning products such as "**From the Inside Out**," a report that combines insights from internal discussions and interviews highlighting project wins and challenges in advancing the adoption of sustainable agricultural practices together. The MRCC website features member-authored blogs covering topics such as the need for sustainable finance, social science in the agricultural sector, and the value of systems thinking. Beyond these opportunities for knowledge-building, MRCC communications channels are also used to support sustainable agricultural practices by sharing member-originated resources, news, and amplifying perspectives to consider as the field evolves.

The goals that MRCC aims to meet require all actors in the value chain to join in addressing the challenge—and when farmers are asked to change the way they work, they need to see that others are with them in this process. In joining MRCC, members commit to opening themselves to each other, to farmers, and to the general public in service of the agricultural system's transformation.

# PARTNERSHIPS TO ADVANCE SUSTAINABLE AND REGENERATIVE AGRICULTURE

MIDWEST ROW CROP COLLABORATIVE

MRCC actively seeks partners who share a vision of a U.S. food and agricultural system—one that is part of a healthy environmental ecosystem and is economically viable for all. It welcomes partnerships that can help to scale solutions, streamline the efforts and investments of its members and other stakeholders, and strengthen collaboration in the region.

Each partnership is unique, but they all have certain features in common:

- Embrace of a systems-change approach that considers the interrelationships of different parts of the food and agricultural system
- Shared interest in the strategic and efficient use of resources
- Open orientation toward the sharing of lessons, challenges, and opportunities
- Desire to build project work that serves the needs of all partners involved

Partners may include project implementers, technical advisors, solutions developers, funders, or other industry collaboratives. Together, MRCC works with partners on research or testing specific solutions on the ground across the food and agriculture value chain. A few examples of key MRCC partnerships include:

**Field to Market: The Alliance for Sustainable Agriculture:** As a diverse collaboration working to create productive and profitable opportunities across the agricultural value chain for continuous improvements in environmental outcomes, Field to Market's work is grounded in science-based tools and resources, system-wide collaboration, and increased supply-chain transparency. MRCC and Field to Market work closely together to ensure that plans are aligned, helping to streamline company and NGO investments in new approaches and complementing each other's initiatives for more impactful delivery on a shared mission of a more sustainable agricultural system. Examples of partnership include collaborating on new research to better understand how trusted advisors influence and support farmer practice adoption and MRCC's participation in Field to Market's Innovative Finance Workgroup.

**Sustainable Food Lab:** Like MRCC, the Sustainable Food Lab embraces a systems approach in developing solutions to the challenges facing the food system and is currently engaged with several MRCC members and other peer companies demonstrating leadership in sustainable agriculture. In 2020, MRCC and Sustainable Food Lab established a partnership to better understand barriers and drivers to a more sustainable food and agricultural system in the Midwest and identify pathways for scaling solutions. MRCC also seeks to tap into the expertise and close farmer relationships of Sustainable Food Lab's Soil Health Leadership Lab to strengthen the connection between members' supply chain initiatives and farmers.

**MBOLD:** As a coalition of CEO's and other C-suite leaders of some of the world's foremost food and agriculture companies, MBOLD's mission is well aligned with MRCC. Both groups believe that building soil health and reducing emissions are critical as we tackle climate change and make the food system more resilient. MBOLD and MRCC are working together to craft commercialization pathways for alternative cover crop systems, particularly winter camelina, in collaboration with the Forever Green Initiative at the University of Minnesota.

# ADVANCING SOUND POLICY

MIDWEST ROW CROP COLLABORATIVE

Within each MRCC member organization are individuals with deep and expansive knowledge about the development and implementation of sustainable agricultural policy. As members of the MRCC's Policy Work Group, they bring visibility into all points of the agricultural value chain and an appetite for systemic change through policy engagement connected to MRCC's on-the-ground project work.

In 2020, MRCC sought to develop a direction and plan for the way it lends its support to sustainable agriculture policy. Through a series of hosted presentations from organizations including Pheasants Forever, National Sustainable Agriculture Coalition, and the National Association of Conservation Districts, the MRCC's Policy Work Group members assessed current efforts and identified the most productive opportunities to engage. To guide and evaluate MRCC's activities, work group members developed a set of policy principles:

## 1. Healthy soils as a basis for ecosystem and farm resilience

*Management for the health and productivity of soils is the keystone of water quality, reduced GHG emissions, and the productivity and resiliency of farms. MRCC members support government policy that incentivizes and removes barriers to the widespread adoption of farming practices that build soil health in row crop systems, including incentive structures beyond government cost-share for conservation practices.*

## 2. Agriculture as a solution for climate change

*Climate change is a significant and growing threat to the economic and environmental health of agricultural systems. MRCC members support government policy that helps farmers achieve resilience through sustainable practice adoption, including market-based approaches such as value chain partnerships and mechanisms that encourage carbon sequestration and/or greenhouse gas mitigation through agricultural practices.*

## 3. Place-based interdependence of farms and nature that supports biodiversity

*Farms are complicated ecosystems of soil, plants, water, and livestock. MRCC members support government policy that rewards place-based and holistic farm management that mainstreams biodiversity. Government incentives should prioritize resource outcomes and improvements, with the flexibility for farmers to choose the practices that work best for their operations and local ecosystem.*

## 4. Equity and economic viability for all in the value chain, especially farm families and minority farmers

*The future of the agricultural system is bound to the well-being of the communities who make its function possible, and policy should reflect that reality. MRCC members support government policy that encourages a regenerative economic system for farmers and rural communities: building long-term economic stability, encouraging a wide diversity of crops and farming operations, enhancing the quality of life for farm families and rural communities, and creating opportunity for community members who are Black, Indigenous, and people of color (BIPOC).*

## 5. Promoting regenerative outcomes

*Regeneration is the outcome of a holistic approach, rather than any individual practice. MRCC members prioritize policy that promotes across the aforementioned principles and pushes beyond just practice adoption to verifiable regenerative outcomes on the landscape.*

Finding agreement in these principles has helped MRCC establish a shared vision for its collective efforts and—through a range of federal and state-level policy engagement opportunities—in 2021, MRCC hopes to offer lessons, observations, and recommendations to support the scaled adoption of sustainable agricultural practices. These contributions, primarily identified through member experiences designing and testing innovative strategies, will advance MRCC's key policy priorities:

- The accelerated adoption of in-field and edge-of-field conservation practices that improve water quality and soil health, including locally driven adoption of existing and innovative practices.
- The strengthening of soil health and water quality research and data collection to improve the measurement of outcomes, impact of on-farm conservation practices, and rate of adoption of conservation practices.
- The improvement of opportunities for public-private partnerships to drive implementation of conservation practices. Public-private partnerships should increase availability of incentives to farmers to overcome cost, risk, or knowledge barriers to adoption of conservation measures.

While there are other active multi-member policy initiatives focused on conservation and agriculture, MRCC's landscape focus includes climate, water, conservation systems, and agricultural programs, grounded in the reality of members' collaborative project work. In 2020, MRCC's members initiated this expansive approach to policy engagement and, with the groundwork already laid, will move to action in the coming year.

# JUSTICE, EQUITY, DIVERSITY AND INCLUSION IN MIDWESTERN AGRICULTURE

MIDWEST ROW CROP COLLABORATIVE

As the fates of people and environment are so tightly bound to one another, the realization of a truly sustainable agricultural system demands engaging with—and following the leadership of—impacted communities. When MRCC and its goals were established, the agriculture sector largely considered environmental and social issues separately. Today, members recognize that separating people from the landscape undermines the work of creating a sustainable agricultural system. While MRCC's efforts primarily focus on systems change to accelerate the adoption of regenerative agricultural practices, marginalized and overburdened communities should be engaged in meeting environmental goals and also help guide systemic changes that shift how costs and benefits are shared throughout the value chain.

In alignment with growing corporate commitments to justice, equity, diversity, and inclusion (JEDI), in 2020 members sought the support of a consultant to guide them in identifying the most impactful ways to integrate these principles into MRCC's approach. In 2021, MRCC members will embark on a rigorous process, using social science research to develop a strategy that will advance JEDI more effectively through MRCC's collaborative projects and programs. MRCC members look forward to starting what they understand will be a long journey to better address inequity in the agricultural system while maintaining a commitment to environmental outcomes.

# ACCELERATING IMPACT IN THE YEAR AHEAD

MIDWEST ROW CROP COLLABORATIVE

There is no denying the unprecedented challenges we all faced in 2020. But against the backdrop of a once-in-a-century health crisis, turbulent politics, social unrest, and all the disruption these gave rise to, MRCC and its partners continued progress toward the systemic change that is desperately needed in the food and agricultural system. From bold new commitments by individual companies to expanded collaborative work together, members continued to raise their ambition and take action.

With momentum from the deepened commitment and partnership among its members, MRCC will continue building on and adding to its body of work. Looking ahead to 2021, there are several new opportunities to move MRCC's collective work forward:

- Expanding and testing new program elements, including the impact of incorporating small grains into the rotation, development of supply chains for commercialized cover crops, and new edge-of-field practices in collaborative projects.
- Testing new incentives and financial models including pay-for-performance and warranties.
- Supporting the development of policy that incentivizes regenerative and soil health-building practices in row crop systems and removes barriers to their scaled adoption.
- Developing a more robust, quantifiable business case for regenerative agriculture.
- Deepening understanding of how issues of justice, equity, diversity, and inclusion can be addressed in collaborative projects in the region.
- Bolstering the use of insights from behavioral science, including better understanding and leveraging trusted networks.
- Exploring approaches to consumer activation, regenerative claims and on-pack labels, and point-of-sale strategies to drive consumer demand for products produced using regenerative practices.

MRCC remains a platform for industry-leading companies and environmental nonprofits to test, explore, and innovate with each other, with an open orientation toward learning and improving. MRCC's members are eager to expand their work in the coming months and explore other potential pathways for change, including welcoming key new members and partners to strengthen and expand its impact across the food and agricultural system. In 2021, agriculture is poised to see a surge in energy and resources directed towards sustainable and regenerative approaches, and MRCC is prepared to help deliver the change so urgently need.