TIFS | TRANSFORMATIONAL INVESTING IN FOOD SYSTEMS

RESILIENCE IN AGRICULTURE LENDING & INSURANCE COALITION (RALIC)

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ORGANIZATIONAL OVERVIEW

ABOUT TIFS

Since 2020, Transformational Investing in Food Systems (TIFS) has operated as a catalyst for financial and business innovation at the intersection of food, finance, and systems. We work globally to align the flow of capital with the goals of regenerative and agroecological food systems—supporting farmers, businesses, and communities that are restoring ecosystems, strengthening food security, and building climate resilience.

Although trillions of dollars are circulating in the global financial system, very little of it reaches food producers who are implementing changes on the ground to transform food systems at the speed and scale needed. To overcome the bankability gap and increase capital deployment for regenerative food systems, TIFS prototypes and implements financing solutions that create precedents for financing producers and businesses at scale.

Our work is rooted in a systems approach. We connect dots between global finance and local food system actors, prototype solutions that unlock catalytic capital, and co-create tools to assess and improve the effectiveness of financing models. We prioritize integrated capital approaches that pursue ecological, economic, and cultural outcomes together, because fundamental transformation demands more than short-term returns.

In 2025, TIFS introduced several precedent-setting mechanisms that will have a lasting impact on the regenerative agriculture and financial sectors. Resilience in Agriculture Lending & Insurance Coalition (RALIC) is one such important initiative.

WITH GRATITUDE TO THESE EXPERT REVIEWERS & KEY CONTRIBUTORS

Jonathan Coppess
Gardner Associate Professor of Agricultural Policy
University of Illinois at Urbana-Champaign

Harley Cross
Co-Founder and Director of Strategy
Land Core

Aria McLauchlan
Co-Founder and Executive Director
Land Core

Jim Moseley
Former Deputy Secretary of the USDA, Founder
Farm Advisors

Liz Rice
Executive Director
Indiana Association of Soil and Water Conservation Districts

ABOUT THE AUTHOR:
Tina Owens, Regenerative Agriculture Systems & Investment

Tina is a systems leader, strategist and futurist within the Organic and Regenerative Agriculture movements in the United States. Building upon her two decades of work at two of the world's largest food companies, Tina is working with leading entities undertaking system-wide transformation for the soil health sector.

Through her work at TIFS, Tina has founded the Resilience in Agriculture Lending & Insurance Coalition, an effort to address missing data infrastructure for the market maturity of soil health. As a head of agriculture and sustainability for some of the world's largest food brands, Tina has led several transformational shifts relating to how food is sourced, how producers are rewarded, how consumers opt-in, and how systems are regenerated or decarbonized.

ABOUT RALIC

RALIC is an initiative developed by TIFS that brings together state conservation districts, state Departments of Agriculture, insurance companies, farmer coalitions, and other stakeholders. Running from 2025 to 2028, the initiative aims to promote a significant transformation in private insurance systems for crop insurance, focusing on soil-centered practices and converting anecdotal information into formalized actuarial data. The resulting data will have broader implications for underwriting, supply chain risk analysis, institutional wealth management, and more.

EXECUTIVE SUMMARY

In 2025 TIFS has launched a multi-year effort to address Missing Middle Data Infrastructure through the **Resilience in Agriculture Lending & Insurance Coalition (RALIC)**. Several key data gaps hinder market maturity for regenerative agriculture and soil investments.

Current crop insurance systems, mainly run by private companies under federal guidelines, do not adequately support regenerative practices, restricting farmers' transition. In a recent survey of Iowa farmers, "nearly half of respondents indicated that having sufficient crop insurance makes it easier to take risks related to adopting in-field conservation practices, such as no-till and cover crops."

RALIC tackles the barriers farmers face in adopting soil-centered practices by creating practical solutions such as new forms of transition support and captive insurance models that offer lower premiums to farmers in transition. At stake is more than actuarial and insurance data: the initiative is also building both public and private datasets that determine who controls, benefits from, and has access to critical information about regenerative systems, risk, and performance. Without this evidence base, both public and private decision-makers lack the data needed to design supportive policy, and integrated capital, and soil-centric approaches risk being confined to a niche rather than advancing as system-wide levers for resilience.

RALIC represents a transformative opportunity to redefine financial support for regenerative agriculture, addressing systemic barriers and enhancing market maturity by fostering partnerships and innovative financial mechanisms.

TIFS is uniquely addressing Missing Middle Infrastructure (Data, Finance, and Physical) across a variety of needs that are foundational to supply and demand systems, risk management and modeling, and the capital structures that support transition.

MISSING MIDDLE INFRASTRUCTURE

INTRODUCTION AND BACKGROUND

For regenerative agriculture to become standard market practice, multiple stage-gate and foundational processes must be developed that are mission-critical for current and future growth of the sector. Chief among them is addressing critical Missing Middle Data Infrastructure–namely, actuarial and reporting data standardization, and uniquely, crop insurance systems. In the 2025 report *Financing for Regenerative Agriculture*, TIFS called out that, *"the primary barrier to increasing capital deployment for regenerative agriculture is missing confidence that the financing will fit financiers' current risk and reward standards."* This includes data infrastructure needed by agriculture insurance and credit systems, risk and resilience data for underwriting and other forms of lending and credit tied to food and agriculture. It also extends to institutional shareholders, who require better tools to measure implicit risk to supply chain disruptions and report them in public company filings.

Although crop insurance in the United States is often considered a federal program, it is actually managed and operated by private insurance companies that receive specific subsidies and guidance from the USDA Risk Management Agency through data on yield, county-level risk profiles, crop coverage details, and more.

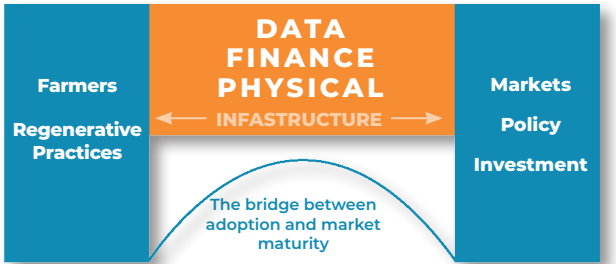
To influence the broader public system of subsidized crop insurance, it must first be proven that the outcomes of cover crops, crop rotation, and no- and low-till systems (i.e. the foundational elements of all soil health programs, practices, and certifications) are not only economically viable, but also inherently more resilient and profitable for all stakeholders. Whether supporting on-farm transition to cover crops for greater profitability or demonstrating the ripple effect to both private and public balance sheets, the system stands at a moment of inflection where historical data is no longer the leading indicator of future results.

The 10-year look back in crop insurance, referred to as the Actual Production History (APH) is based on a rolling average of up to 10 years of a farmer's yield records. No credit is given for beneficial practice changes (including those that would reduce or address risk). Because a transition to soil-centered practices creates a known withdrawal period (with a likely yield drop), farmers are disincentivized from straying outside the known system of what crop insurance protection they can achieve.

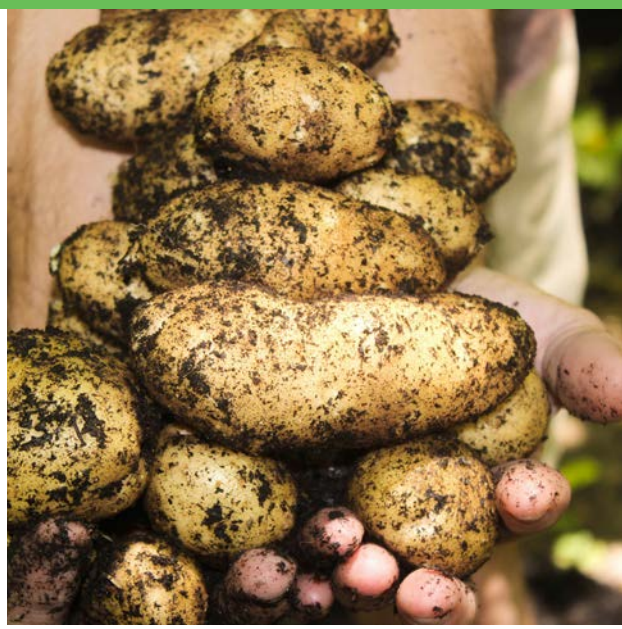
The learning curve carries some risk, but the data shows enough payoff—proving better long-term outcomes. Not only do farmers need systems that support their transition, but the industry and all stakeholders also need better risk data to demonstrate the core value of these practices in stabilizing several other system-dependent outcomes, like supply chains for food companies.

The Missing Middle Of Data Infastructure

The lack of confidence in regenerative agriculture financing is a key barrier for investors, compounded by systemic challenges such as pricing externalities, outdated policies, data deficiencies, and the complexities farmers face during transition.



THE FOUNDATION OF WHAT WE KNOW ABOUT RISK IN AGRICULTURE IS ABOUT TO CHANGE



Recent advancements in data analytics have demonstrated to private crop insurers that there is a significant difference in crop insurance payouts between farmers practicing conventional agriculture (business as usual) and those integrating soil-centric practices. In short, after three years of integrating cover crops, crop rotation, and no-or low-till systems, the difference in risk mirrors that of the difference in costs of covering smokers versus non-smokers in health insurance.

This realization has created an inflection point for the agriculture insurance industry, presenting an opportunity to stabilize revenues by covering crop insurance and revealing the long-term trajectory of payouts under the current system.

Most importantly, crop insurance remains a primary barrier to farmers' ability to undertake regenerative transitions. During our Midwest-focused work, beginning in 2024, TIFS was able to determine how crop insurance is foundational to every farmer and organization funding a shift to soil-centric practices. TIFS has continued to receive direct feedback and validation from both farmers and farm-facing entities that crop insurance options supporting transitions to soil-centric practices are foundational tools for farmers to uptake these practices. RALIC is an effort actively centering farmer-led solutions.

Through a Regenerative Agriculture Systems Review, TIFS interviewed over 40 farmer-facing leading organizations working in the Midwest, including producers, off-takers, and farm support organizations, to understand existing partnerships that could be leveraged for wider impact. We also conducted a Midwest Regenerative Survey to understand how regional stakeholders rank both farmer-focused and system-level solutions. **Based on the farmer-focused and system-focused interventions identified across broad stakeholder groups, we are undertaking a paradigm shift in crop insurance actuarial data to support regenerative transitions.**

See The Case for Crop Insurance Reform here from the Conservation Finance Network, including a deeper look at the critical nature of creating supportive soil conversion policies.

FIGURE 1. Crop Insurance Scored the Highest with Producer-Centric Entities in Pivotal System Credibility Interventions within TIFS' Midwest Work

Category	Rank
Crop Insurance Coverage (Private Market Options)	1
Flexible & Accessible Capital Market Systems	2
Technical Assistance with Regionally Appropriate Science	3
Data Reporting: From Field to Boardroom	4
Institutional Shareholder Interest	5

Current systems keep farmers locked into existing practices based on backward-looking actuarial data that is no longer fit for purpose in predicting future costs and outcomes. To support their adoption of regenerative practices, many farmers have chosen to operate outside of the crop insurance systems of support, fearing penalties. While early adopters and changemakers are likely to take that risk, the soil health movement needs to become more mainstream for farmers and their crops. Adoption will scale when regenerative systems are integrated into everyday business practices across all cropping systems.

Because operating loans from Farm Credit Systems typically require federally-backed or private crop insurance programs to finance any on-farm activities happening within a given crop year, farmers must make both individual and collective decisions about their risks of maintaining the status quo. Farm Credit Systems support over 40% of all U.S. farm business debt, making it the largest single lender to U.S. agriculture. As a result, it is a significant system that influences on-farm practices based on decades of data collected during different economic periods, often without the benefit of today's understanding of the far-reaching effects of soil health.

Nature and ecologically based systems are at a point in market maturity where the overall economic and market risks must be at the center of proof points for scaling regenerative agriculture.

Recent private crop insurance payment data indicate that **the difference between "bare ground farming" and "continuous living cover farming" is measurable in terms of risk and resilience, similar to the smoking/non-smoking datasets developed in the early 2000s for health insurance** (according to a RALIC partner). While the data is still being developed for public-facing uses, a brief overview of the benefits of soil research, cover crops, no-till, and more can be read here.

To impact Federal Crop Insurance programs, private insurance markets must prove the economic viability of regenerative practices such as cover crops, crop rotations, and low/no till methods. Insurance and reinsurance providers ***are mapping crop losses by commodity and modeling future losses due to climate disruptions.*** These findings now need to be transformed into rigorous actuarial data for industry-wide adoption, highlighting significant cost and risk reduction.

While most crop insurance programs focus on individual crops like corn and soy, soil-centric practices are beginning to show measurable differences in resilience. The crop insurance industry, covering over 500 million acres annually, is gradually shifting toward system-wide change rather than focusing solely on actuarial data for individual crops. Crop insurance payouts are closely tied to water stress and high temperatures, which are exacerbated by soil degradation from conventional practices. Soil-centric practices, like cover cropping and crop rotation, can mitigate these risks and improve soil health and resilience. Read about crop insurance relationships here and here.

THE ROLE OF THE RESILIENCE IN AGRICULTURE LENDING & INSURANCE COALITION:

Through RALIC, TIFS is partnering with other leaders to develop captive insurance risk pools which derisk regenerative transitions and create co-investment opportunities for farmers and investors for the value of regenerative systems. In addition to the **private dataset** created by the risk pool creation, RALIC is also supporting a **public dataset** effort with the leaders at Land Core, building upon their multi-year, multi-state effort quantifying the risk reduction associated with diversified crop rotations and dry weather. This data, along with its accompanying Risk Model Tool, could directly impact the assessment of insurance risks and inform agricultural lender pricing.

In addition to the public dataset, **actuarial data and private insurance product development will work to demonstrate market rate returns with quantified risk reductions in the insurance and lending industries to drive broader market adoption.** RALIC is partnering with a large crop insurance broker, and regional intermediaries, to activate captive insurance products that support farmers by covering related yield drag during their transition to regenerative practices.

It is worth noting that any yield drag due to practice changes by the farmer is temporary and wouldn't be covered by federal crop insurance, as it only applies to natural and weather losses, not actions taken by the farmer. The current system is built to define good farming as doing whatever it takes to reach the insurable yield.

While other complementary insurance innovation efforts are also being undertaken to update crop insurance policies for the future, many of them are offered specifically through offtake contracts with a large corporation (which the majority of farmers do not have) or are related to the introduction of a single crop (like a novel cover crop). **RALIC is an effort that meets farmers where they are already operating within existing commodity systems,** with the intention of providing transition support from and for their local Conservation Districts in understanding field-level data.

The current system is built to define good farming as doing whatever it takes to reach the insurable yield.

Converting to regenerative agriculture practices comes with a brief period of yield loss that is not covered in existing crop insurance systems.

RALIC'S EFFORTS WILL RESULT IN SEVERAL CRITICAL OUTCOMES FOR MISSING MIDDLE DATA INFRASTRUCTURE:

- Actuarial data on regenerative practices that inform finance, insurance, and policy, influencing future policies and providing metrics on how to reduce taxpayer costs for Federal Crop Insurance.
- Deployment of captive risk pools to derisk regenerative transitions and generate financial returns for producers, investors, and insurers from polyculture risk mitigation and better risk management tools.
- Participation in public-private partnerships that drive shared industry outcomes, policy discussions, and market stability.
- Future opportunities for capital and financial institutions to redefine risk management, integrating Scope 3 emissions data and sustainable sourcing strategies.
- Long-term reductions in risk and costs from extreme weather events and climate disruptions, which impact all sectors.

WHAT RALIC MEANS FOR FARMERS

Farmers currently make individual decisions based on their unique circumstances, with some opting to abandon the insurance system entirely and adopt their own practices, as they believe these better suit their land and operation. First adopters, and those directly following them, have been willing to take risks on their own shoulders, so that the existing conventional system (in the private sector) can be updated to support more farmers in the coming years. RALIC offers a different pathway forward.

SOIL-CENTRIC CAPTIVE INSURANCE PROVIDES SOLUTIONS FOR FARMERS IN THE FOLLOWING WAYS:

- RALIC works to match what farmers expect from a standard commodity crop insurance system, ensuring the choice aligns with farmers' current insurance practices and risk management strategies.
- The captive covers yield drag, which is typical during the first 1-3 years of conversion as soil is weaned off intensive production systems.
- The soil-centered captive enrolls only those farmers who are converting or are already practicing regenerative agriculture. These are the "non-smokers," i.e., the lower/lowest risk farmers in the system. As a result, their insurance premiums are predicted to drop by as much as 10-20% from what they currently pay into the federally subsidized system.
- Ag credit providers and operating loan providers require crop insurance coverage under standard and accepted metrics to facilitate lending to farmers. The captive provides the commensurate coverage, while still covering commodity crops like corn and soy but allowing for the new practices to be considered.
- Through the steps above, the captive creates a ***new normal*** standard of operation that matches existing and acceptable steps for all stakeholders, without requiring the farmer to convince partners to "just trust them" in a transition process.
- Captive insurance is currently an underutilized tool for farmers to move a standard business cost into a potential investment and ownership opportunity.

RECOMMENDATIONS & NEXT STEPS

RALIC holds the potential to demonstrate how regenerative practices can be financially supported, tracked, and scaled, thereby transforming the way farmers interact with the insurance and lending industries in the future. This need is foundational to all regenerative efforts across the United States (U.S.) and beyond.

TIFS is actively leading efforts to integrate regenerative practices into the U.S. agricultural system by addressing the systemic barriers that have traditionally hindered access to financing. Through innovative financial mechanisms, such as private crop insurance, collaboration with key partners, and strategic investments, RALIC is poised to unlock significant opportunities for funders and investors eager to catalyze a regenerative agriculture revolution in the Midwest and beyond.

FIGURE 2. There is continued work to be done for Regenerative as Standard Market Practice.*

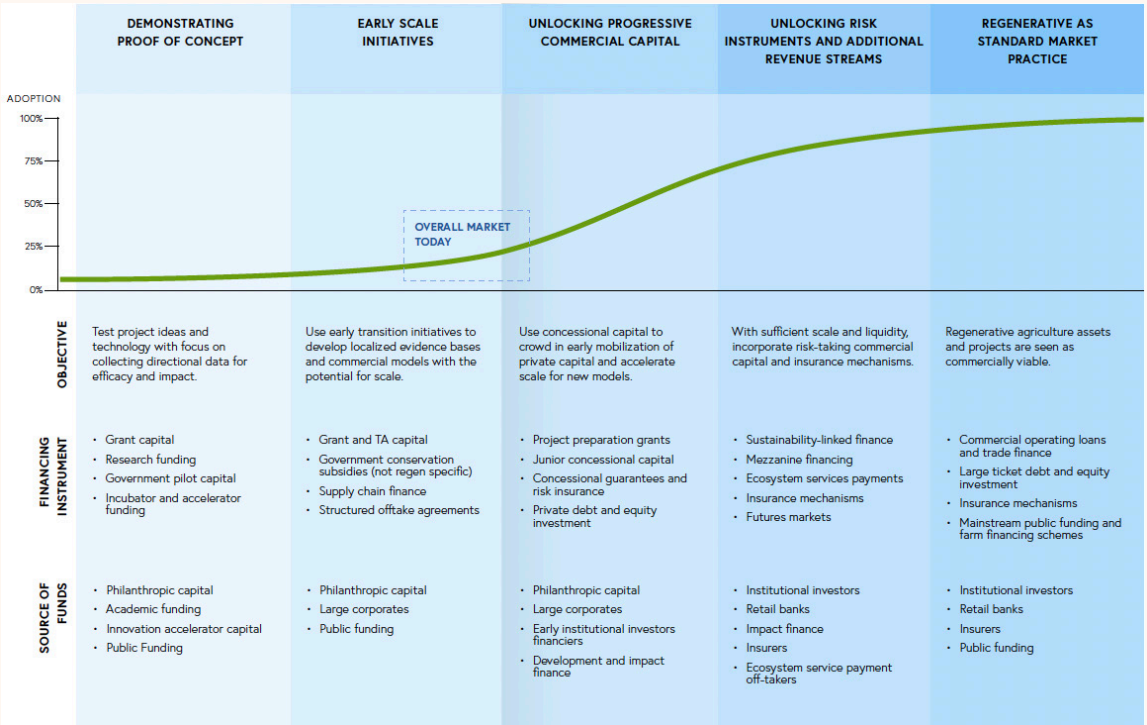


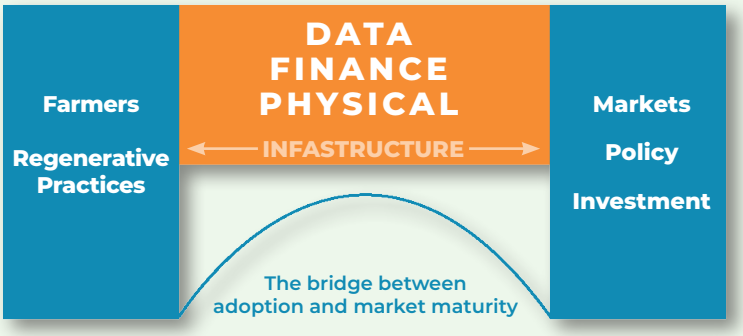
*Chart image from Financing for Regenerative Agriculture, 2024.

CONCLUSION

We are at the beginning of a transformational moment in understanding agriculture resilience and financial risk, both at the individual farm level and at the collective investment level. The actions that RALIC is undertaking are core to the value proposition that regenerative systems offer in the market maturity of a system as future standard market practice.

Until the actuarial data of soil-centric practices is normalized, the Missing Middle Data Infrastructure will continue to remain a barrier for all future scaling of the regenerative movement across the U.S.

This work is in conjunction with several other transformational efforts being led across TIFS, all of which go hand-in-hand with market maturity needs for the broader transition to regenerative agriculture.



ADDITIONAL READING

SUGGESTED RESOURCES FOR FURTHER DETAILS ON THE TOPIC OF RA PRACTICES IMPACTING RISK AND RESILIENCE:

- The Case for Crop Insurance Reform (2020)
- Soil Health Practices: Cover Crops and No-Till (2024)
- Diversified crop rotations mitigate agricultural losses from dry weather (2024)
- What's the relationship between soil organic matter and crop insurance? (2022)
- How Crop Insurance Prevents Some Farmers From Adapting to Climate Change (2023)
- Interactions between Crop Insurance and Conservation Practices: Insights from Analysis of Farm Survey and Farm Program Data (2025)

TIFS TRANSFORMATIONAL INVESTING IN FOOD SYSTEMS

OUR MISSION:

To unlock finance and accelerate the transition to regenerative food systems worldwide.

For more information about TIFS please contact:
Tina Owens, Regenerative Agriculture Systems and Investment: tina.owens@tifsinitiative.org
or Rex Raimond, Director: rraimond@tifsinitiative.org

www.tifsinitiative.org

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