



ISSUE REPORT

SEPTEMBER 2022

Could Climate Change Produce a Revolutionary 2023 Farm Bill?

Approaching the five-year deadline for reauthorizing a farm bill offers a moment for review, as well as a chance to speculate on the potential paths for a new farm bill. Among many other things, history teaches that Congress very rarely produces revolutionary changes in policy and that farm bills are no exception. Twenty-two legislative enactments since 1933 can arguably be considered farm bills, but only three can be considered to have produced revolutionary changes; a fourth farm bill comes close.¹

This report briefly reviews farm bill history to highlight these revolutionary bills and seeks to think through what a revolutionary farm bill in 2023 could include.

...continued on page 2

By Jonathan Coppess and Chris Adamo

Coppess is the director of the Gardner Agriculture Policy Program and associate professor of law and policy in the Department of Agricultural & Consumer Economics, University of Illinois at Urbana-Champaign. Adamo is former staff director of the Senate Committee on Agriculture, Nutrition and Forestry, former chief of staff to the Council on Environmental Quality of the White House, and an adjunct professor at Vermont Law School where he teaches The Modern Farm Bill course with Coppess.

About this Issue Report

This Farm Foundation Issue Report provides an initial and brief look at the potential for climate change to drive revolutionary changes in a farm bill. It focuses on two initial concepts that could be built around farm support and the Supplemental Nutrition Assistance Program, but also notes the multiple paths towards revolutionary status in 2023.

Congress could take many paths to enact a revolutionary farm bill; out of necessity, this report selects a single path to highlight how climate change could revolutionize a farm bill.

Brief Historical Review: Revolutionary Farm Bills and All the Rest

While there is no official categorization of farm bills as revolutionary, the long legislative history and development of the policies can be separated into three basic categories.² The first and most common is what can be considered a *status quo farm bill* in which Congress makes very few changes or mostly minor revisions; a status quo farm bill finds Congress

tweaking programs and tinkering at the edges but leaving most of the policy unchanged. The second category would be an *evolutionary farm bill* in which Congress makes significant and substantial revisions but those are mostly within a direction established by previous farm bills. An evolutionary farm bill continues the basic policies of previous farm bills but builds upon them or revises them substantively. Finally, the third category is a *revolutionary farm bill*. It is one in which Congress makes not only major changes, but changes that go against previous evolutions or revolutions or that push policy in a new and different direction. Revolutionary farm bills can be the result of significant political shifts and arguably alter the dynamics both political and programmatic. **Figure 1** summarizes this categorization of farm bills.

FIGURE 1:

Categorization of Farm Bills

Revolutionary	Evolutionary	Status Quo
<p>1933 Agricultural Adjustment Act (AAA) <input checked="" type="checkbox"/> First direct assistance to farmers; set course for next 40 years of farm policy.</p> <p>1973 Agriculture & Consumer Protection Act (ACPA) <input checked="" type="checkbox"/> Combined food stamps & farm policy, opening farm bill coalition; farm policy shifted to target prices & deficiency payments instead of parity.</p> <p>1996 Federal Agricultural Improvement & Reform (FAIR) Act <input checked="" type="checkbox"/> Decoupled farm supports from planting decisions and market prices; base acreage system continued through 2018.</p> <p><i>Honorable Mention</i></p> <p>Food Security Act of 1985 <input checked="" type="checkbox"/> Foundation for modern conservation policies & programs; Conservation Reserve Program and conservation compliance; largely status-quo for farm support system.</p>	<p>1936 Soil Conservation & Domestic Allotment Act (SCDAA) <input checked="" type="checkbox"/> Replaced support system after Supreme Court decision & in the middle of the Dust Bowl.</p> <p>1938 Agricultural Adjustment Act (AAA) <input checked="" type="checkbox"/> Created parity system of price supports, acreage controls & marketing quotas; created crop insurance.</p> <p>1956 Agricultural Act (AA) <input checked="" type="checkbox"/> Initiated brief existence of Soil Bank (acreage reserve & conservation reserve).</p> <p>1970 Agricultural Act (AA) <input checked="" type="checkbox"/> Effective end of parity, replaced acreage controls with set-aside acres.</p> <p>1977 Food & Agriculture Act (FAA) <input checked="" type="checkbox"/> Removed food stamp purchase requirement.</p> <p>2002 Farm Security & Rural Investment Act (FSRIA) <input checked="" type="checkbox"/> Recreated target prices, continued direct payments; created Conservation Security Program (CSP).</p> <p>2014 Agricultural Act (AA) <input checked="" type="checkbox"/> Replaced direct payments with Agricultural Risk Coverage (ARC) & Price Loss Coverage (PLC) choice.</p>	<p>1948 Agricultural Act (AA)</p> <p>1949 Agricultural Act (AA)</p> <p>1954 Agricultural Act (AA)</p> <p>1958 Agricultural Act (AA)</p> <p>1962 Food & Agricultural Act (FAA)</p> <p>1964 Agricultural Act (AA)</p> <p>1965 Food & Agricultural Act (FAA)</p> <p>1981 Agriculture & Food Act (AFA)</p> <p>1990 Food Agriculture, Conservation & Trade Act (FACT)</p> <p>2008 Food Conservation & Energy Act (FCEA)</p> <p>2018 Agricultural Improvement Act (AIA)</p>

Of course, the most revolutionary farm bill was the first one. The Agricultural Adjustment Act (AAA) of 1933 was the first enactment of policy for direct federal assistance to farmers. It was part of the early New Deal legislative efforts to address the Great Depression. The 1933 AAA set farm policy on a specific course for the following forty years. Specifically, Congress initiated what is known as the parity system that would use loan rates to support crop prices coupled with reductions in acres planted to the supported crops.

The Agriculture and Consumer Protection Act of 1973 was the next revolutionary farm bill, coming on the heels of a massive spike in crop prices. That price spike was driven to some degree by increased export demand but mostly by the wake of the controversial grain deal with the Soviet Union, which occurred in 1972. In 1973, Congress effectively replaced the New Deal parity system of farm support with a system of target prices and deficiency payments; direct cash payments were the priority mechanism over price-supporting loans as production incentives in place of controls. This fixed-price trigger for farm program payments would continue for more than 23 years. It would be briefly replaced in 1996 and then reinstated in 2002; fixed-price triggered support has been continued through the current farm bill.

The 1973 Act was revolutionary for a more important reason. It was the first farm bill to formally and officially incorporate direct assistance to low-income Americans for purchasing food, known as food stamps and now known as the Supplemental Nutrition Assistance Program (SNAP). Adding food stamps to the farm bill marked the first opening of the farm

bill coalition to interests outside of the farm sector. Food stamps and SNAP have been the single most important coalitional partners in farm bills since 1973 and currently represent 80 percent or more of total spending provided by a farm bill.

The final revolutionary farm bill was the Federal Agricultural Improvement and Reform (FAIR) Act of 1996. During another period of high crop prices that coincided with intense partisan efforts to cut federal programs and spending, Congress pushed through major reforms to farm policy. The target prices and deficiency payments created in 1973 were eliminated, replaced by seven-year contracts for annual fixed or direct payments known as Agricultural Market Transition Assistance (AMTA) payments. More fundamentally, the 1996 Farm Bill decoupled farm support payments from planting decisions, a reform that has been continued by each farm bill through the 2018 Act. Decoupling resolved a problem that had haunted farm programs for the 60-plus years since 1933; federal support dependent upon what crop the farmer planted had an influence on the planting decision and could result in farmers planting for the payment rather than for signals from the market. While the 1996 Farm Bill also decoupled payments from market prices, that reform did not survive the price downturn after the 1997 Asian financial crisis. The fixed-price trigger policy was recreated in the 2002 Farm Bill and combined with the annual fixed payments in the Direct and Counter-cyclical Payments (DCP) program.

As indicated in **Figure 1**, a fourth farm bill deserves strong consideration for inclusion in the revolutionary category. The Food Security Act of 1985 was

...continued on page 4

landmark for having created modern conservation policy and establishing that policy within the existing farm bill system. The 1985 Farm Bill serves as the base statutory text for all conservation programs and authorizations to this day. In addition, the 1985 Farm Bill marked an important expansion of the farm bill coalition in Congress, adding environmental and conservation interests. Since that time, farm bills are most successful when this tripartite political coalition—farm payments, conservation assistance, and assistance for low-income Americans to purchase food—are in relatively close alignment or alliance. Problems within this coalition tend to signal problems for a farm bill in the legislative process.

Climate Change: What a Revolutionary Farm Bill Could Look Like in 2023

Farm bills are defined as revolutionary because they enact major changes that push policies in substantively new directions. It is always possible that such changes would be opposed by some or many interested parties. For this discussion, we focus on a particular direction for revolutionary change based on the trends of extraordinary weather events and increasing demands for the agricultural and food sector to reduce environmental concerns, such as reduced carbon footprints or even decarbonizing the sector. Added to those trends are the vast uncertainties resulting from the COVID-19 pandemic.

Climate change presents an area for new policies and coalitional partners in a farm bill. It is increasingly

among the most prominent issues of our time. Since the Intergovernmental Panel on Climate Change (IPCC) Paris Agreement, climate scientists have agreed that for global progress towards minimizing warming to no more than 1.5 degrees Celsius, agriculture and land management must contribute significantly to solutions.³ Since 2015, scientists, governments, environmental NGOs, and the food/agricultural industry have all begun to identify agricultural solutions. Recent agricultural policy has included methods for agriculture to help address greenhouse gas emissions, as well as adapt, adopt, and become more resilient.⁴ The food industry, for example via the Science Based Target initiative (SBTi), has begun unprecedented commitments and initiatives to significantly lower the carbon intensity of the industry's supply chains.⁵ Over the past two years, members of Congress have also begun to issue proposals—some bipartisan—to help fund and facilitate more investments in agricultural solutions.⁶ As a result, climate change could drive policy changes the way the Great Depression and Dust Bowl did in the 1930s, inflation and geopolitics did in the 1970s, soil erosion and environmental concerns did in 1985, and partisan politics and budget cutting did in the 1990s.

Budget limitations and the challenges for political leadership of government in the current political environment create dynamics that are difficult to predict. The challenges are substantial and the outcome for a farm bill remains vastly uncertain. What follows are neither predictions nor recommendations; instead, the following discussion raises ideas to help generate creativity and provoke innovative thinking.

1. Climate Change Policy Could Revolutionize Farm Policy

Farm policy is unnecessarily siloed as either (1) direct farm assistance (Title I, Commodities), (2) conservation assistance (Title II, Conservation), or (3) crop insurance. Combined, these three titles of a farm bill spend approximately \$20 billion annually—an amount which accounts for approximately 15 percent of the total farm bill baseline—generally on many of the same farmers.⁷ Moreover, the programs, policies, and interest groups that support them have become increasingly fractured and factionalized. Policy innovation has largely stalled as interests protect preferred programs and estimated outlays in the zero-sum game under the Congressional Budget Office baseline. At the same time, there have been some innovative movements towards more public-private partnerships over the past couple of efforts. The most significant example has been the crop insurance program as it has operated since 2000. In addition, programs like the Regional Conservation Partnership Program have made important strides to provide incentives for non-federal organizations to invest in agriculture. The growing interest in the food sector to decarbonize supply chains presents a substantial opportunity to increase investment overall by harnessing the interest of the private sector. Under the pressures presented by climate change, policies could move beyond the traditional models of cost-shares and farm-by-farm contracting. Additionally, new policies in this space could drive more efforts to leverage the private sector to become more effective.

To take one prominent example, cost-share policies have demonstrated challenges that diminish their effectiveness for achieving wide adoption of basic conservation efforts at scale. To the farmer, cost-sharing is a half-measure because it requires that the farmer pay some of the costs out-of-pocket. The primary cost share program, the Environmental Quality Incentives Program (EQIP), limits payments to 75 percent of the costs associated with the practice or 100 percent of the income foregone. The primary challenge, however, is in funding. While Congress authorizes approximately \$2 billion per fiscal year for EQIP, the funding is inadequate to meet demand and the program is plagued with persistent backlogs. In fiscal year 2020, for example, USDA was able to fund only 27 percent of eligible program applications that it received.⁸ Farmers innovating or adopting new practices without the certainty of a market incentive, but who are also unable to receive adequate (or any) federal assistance, could be placing themselves at a competitive disadvantage to those farmers who are not innovating or adopting new practices. A one-time cost share may reduce some of this competitive disadvantage, but it does not eliminate it. One alternative to consider is whether funds would be more effective and reach a broader cross-section of farmers if the funds were complementing private sector initiatives to address climate change. Such federal funds could be blended with financial or other incentives adequate to drive impactful management or behavioral changes with more permanence and sustainability. Combined, the private sector and federal program dollars may be better able to increase scale among farmers and

...continued on page 6

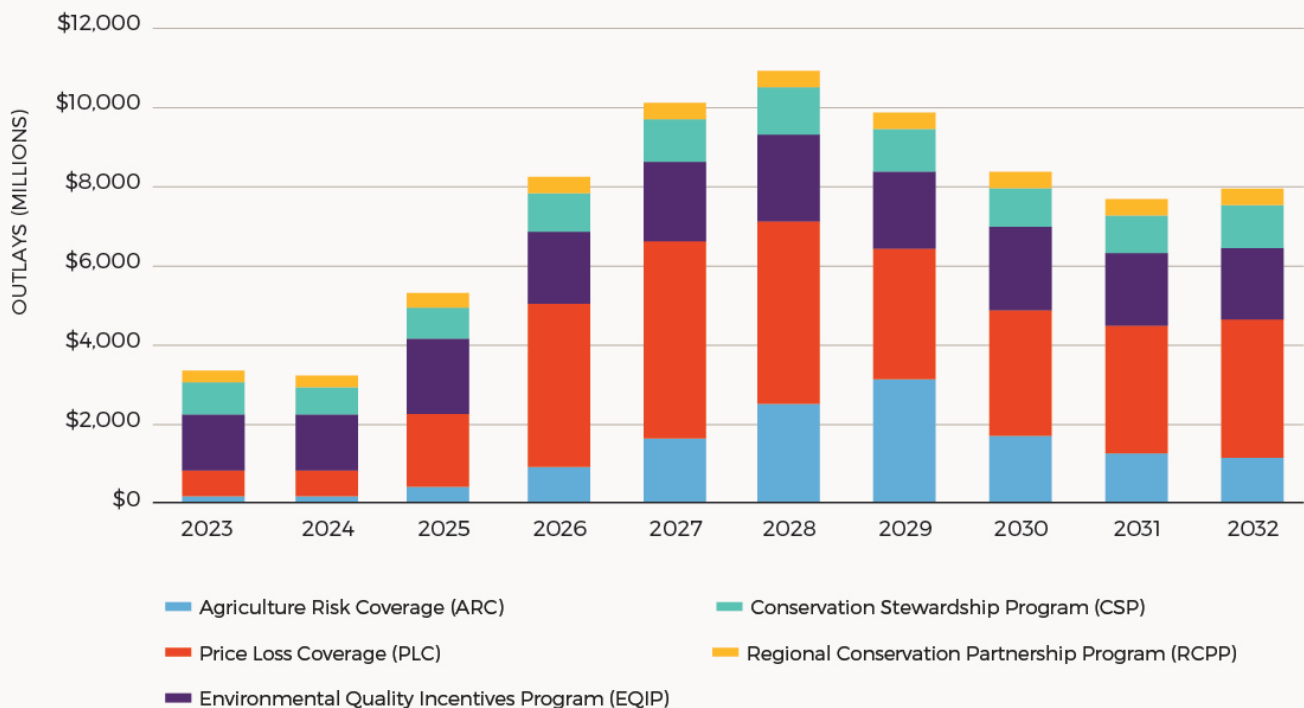
across the landscape, with innovative incentives such as pay-for-performance. Such blended policies could also reduce the transaction costs to the farmer and decrease funding shortfalls.

A revolutionary farm bill reconfigured to address climate change could eliminate the counterproductive divide between Title I and Title II, realigning working lands conservation and funding with farm support policies. It could combine farm risk management programs (Agriculture Risk Coverage (ARC) and Price Loss Coverage (PLC)) with natural resource conservation working lands programs (Environmental Quality Incentives Program (EQIP), Conservation Stewardship Program (CSP), and Regional Conservation Partnership Program (RCPP)) for a comprehensive policy on

climate change risk management, mitigation, adaptation, and resiliency (see Figure 2). The baseline funds for these programs could be as much as \$75 billion (over 10 years) and could be aggregated to create a single public-private policy that supports the development of markets for ecosystem services, including greenhouse gas (GHG) capture for climate change. Importantly, such a reconfigured policy could also provide a vital backstop for the risks to the farmer due to adopting conservation or sustainable practices, uncertain new markets, and for the increased risks resulting from climate change. Basic support to the farmer could be responsive to market and weather risks, incentivize competition for ecosystem outcomes, and help verify or document those outcomes for private sector actors and potential developing

FIGURE 2:

Potential Funding for Climate-Smart Agricultural Policy (CBO May 2022)



markets. Private aggregators or similar efforts could also be incorporated, facilitating farmer enrollment, participation, and government management of delivering benefits.

2. Climate Change Could Revolutionize SNAP

The 2014 and 2018 farm bills were both consumed by partisan attacks on SNAP that sought to reduce participation largely by controversial increases to work requirements and other eligibility provisions. The Biden Administration and the 117th Congress have gone in the opposite direction in the wake of the COVID-19 pandemic and follow-on inflation. This dynamic sets up a potentially problematic partisan scenario if Republicans retake one or both houses of Congress in the 2022 midterm elections. Given recent history, a truly revolutionary farm bill debate would be one in which Congress worked out a bipartisan consensus on improving, or perhaps pessimistically, just maintaining SNAP. Continuing with the climate change theme, such a revolution in farm bill policy could see SNAP expanded to help drive climate adaptation throughout the food supply chain.

The Agricultural Act of 2014 created the Food Insecurity Nutrition Incentive Program to provide additional incentives to low-income households and individuals for the purchase of fruits and vegetables.⁹ The Agricultural Improvement Act of 2018 revised the program, including the title (Gus Schumacher Nutrition Incentive Program).¹⁰ SNAP provides more than \$100 billion each fiscal year to low-income Americans for the purchase of food and can be an important avenue for driving changes in the food and agricultural system. The

incentive program is notable for multiple reasons, among them that it receives mandatory funding from the Commodity Credit Corporation, crossing over the lines between food and farm assistance. It also provokes thinking about the intersection of food systems, food insecurity, climate change, sustainable farming, and the multiple, siloed programs in the farm bill. Additionally, it helps bridge a divide among camps that either believe SNAP should have more prohibitions on unhealthy foods and those who want to maintain SNAP choice so as to avoid an overly paternalistic system.

A revolutionary farm bill could take the incentives program as a model for designing large-scale climate-based incentives or a sustainable diet program. SNAP beneficiaries could receive additional benefits for purchasing not only healthy foods, but foods that have been produced in a sustainable manner. An incentive program along these lines could help provide SNAP recipients with additional, affordable access to foods that have improved sustainable footprints and healthy profiles. Doing so would also increase the demand signals to the farmer for production systems geared towards both sustainable and healthy foods. Conceptually, such policy would combine sustainability and climate resiliency with healthy food through the entire food chain, including food and income insecure Americans. Such a revolutionary program would present conceptual, funding, and political challenges, but it would represent the first-of-its-kind policy to work across the major mandatory funding programs, blending investments in farm support, conservation, and nutrition through the unprecedented challenges presented by climate change.

...continued on page 8

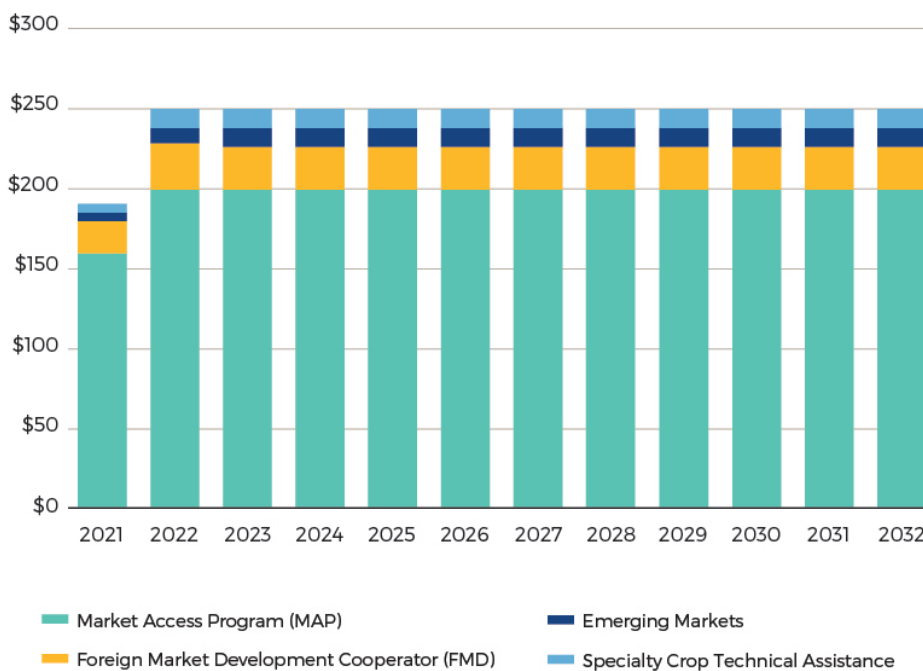
Could a Revolutionary Farm Bill Impact Other Policies?

Climate change could drive more revolutionary changes in a 2023 farm bill, but the options are more limited. For example, climate change will be a prominent issue for international trade and exports that are critical to the economic health of many U.S. producers. The farm bill, however, has limited jurisdiction for trade policy. The farm bill funds trade promotion efforts by USDA and industry but does not impact tariffs or other policies (see Figure 3). These funds could be repurposed or expanded to further reduce barriers for American exports, especially those produced in a climate-smart or resilient manner. Coupled with revised policies for commodities and conservation discussed above, trade promotion can reduce barriers for those commodities

(and farmers) that have achieved higher levels of verified GHG or ecosystem outcomes. In that way, climate change could drive change beyond Title I and Title II of a farm bill.

In addition, focus at the federal level on issues of innovation, competitiveness, and equity could also catalyze revolutionary changes in the next farm bill.¹¹ While not directly connected to a farm bill, large-scale investments in manufacturing and research could impact agriculture, drive innovation, and further development, including in response to climate change. Potentially more directly relevant to a farm bill debate, President Biden signed an executive order directing the federal government to promote and improve competition; USDA responded with a plan and report to support fair and competitive markets.¹² Included in this effort is a \$1 billion investment to expand independent meat and poultry processing, as well as \$100 million

FIGURE 3: What About Agricultural Trade?



Trade in the Farm Bill; Limited Options

- ☑ Title III provides mandatory funding for trade promotion activities and foreign food aid (Food for Progress).
- ☑ Approximately \$251 million per fiscal year in the baseline for the next farm bill, mostly in MAP and FMD as indicated in the graph.
- ☑ USDA's Foreign Agricultural Service (FAS) partners with U.S. agricultural trade associations and businesses to share in the cost of overseas marketing and promotional activities to develop export markets for U.S. commodities products.
- ☑ Additional \$230 million per fiscal year in the baseline for Food for Progress activities (donations, transportation, and administration).

to invest in local and regional food infrastructure. For farm inputs, USDA announced \$500 million to develop a grant program that will support domestic fertilizer production and innovations that include building capacity for new domestic fertilizer alternatives that are more sustainable or climate resilient.

A farm bill that reformed and revitalized competition policies would easily meet any standards for the revolutionary label. The closest a farm bill has gotten to this matter was in 2008, but it was hardly revolutionary. In the Senate, then-chairman Thomas Harkin introduced a competition bill and called for a competition title, but the final bill managed only to make minor revisions to the Packers & Stockyards Act of 1921. USDA's regulation in response was halted by Congress in an appropriations act in 2011.¹³ Supply chain issues in the wake of the COVID-19 pandemic, as well as concerns about the impacts from climate change, could drive the first real effort by Congress in decades to address fair competition practices in a farm bill, although most matters for antitrust are outside the jurisdiction of the agricultural committees. The USDA report referenced above provides at least a roadmap for potential changes in a farm bill, which could include changes to existing programs that help foster better competition across the food system.

The Inflation Reduction Act of 2022: First Step to a Revolutionary Farm Bill?

On Tuesday, August 16, 2022, President Joe Biden signed into law the Inflation Reduction Act of 2022. Democrats in Congress passed the bill through complicated reconciliation procedures and the bill included nearly \$20 billion in additional funding for

conservation programs.¹⁴ Specifically, Congress appropriated \$18 billion in funding to EQIP, CSP, and RCPP (as well as the Agricultural Conservation Easement Program (ACEP)) in increasing amounts over four fiscal years (2023 to 2026). The additional funds are designated for climate-smart agricultural conservation practices, those that improve soil carbon, reduce losses or help capture and sequester greenhouse gas emissions, or otherwise reduce or avoid emissions associated with farming. Another \$1.3 billion is available for technical assistance and for a program to quantify greenhouse gas emission reductions and capture or sequestration. This unprecedented influx of new funding for conservation programs is in addition to the baseline funds that were authorized in the farm bill and could be available for the 2023 farm bill. The additional funds could alter budget constraints significantly and help initiate a real step towards crafting a revolutionary farm bill in 2023; new funds could increase the odds for some degree of revolutionary thinking. In addition to an unprecedented influx of new funding for conservation programs, for example, the Inflation Reduction Act funding is explicitly provided for priorities to reduce GHG emissions and help capture and sequester GHG in farm soils, but also prioritized higher impact GHG emissions such as methane and nitrous oxide. For the first time, there is a line item of funding specifically for livestock enteric emissions. The incentives push beyond those for soil-based practices. A revolutionary farm bill might take this even further, refining the Regional Conservation Partnership Program (RCPP) to better and more effectively combine with the private sector for a historic level of investment. The private sector is motivated to decarbonize agriculture and could bring significant resources to the effort, especially within the value chain of the food system.

...continued on page 10

With the additional funding and important revisions to the authorizing provisions, private initiatives could be designed to provide innovative incentives such as pay-for-performance and multi-year contracts that work across the entire farm system.

In addition to the additional investments in conservation programs, the Inflation Reduction Act also invests in rural communities, rural electric cooperatives, and rural small businesses. Among the investments is nearly \$10 billion for rural electric cooperatives to advance efforts to address climate change, including reliability and transitioning towards renewable energy sources. Given that the farm bill generally invests little or no mandatory funding in rural development, these investments could be considered revolutionary on their own. Combined with efforts to promote better, more fair competition and innovation throughout the food system, these investments in rural development and rural entrepreneurs open an entirely new path of opportunities for revolutionizing the farm bill in 2023.

Finally, the Inflation Reduction Act provides nearly \$6 billion in relief for Farm Service Agency (FSA) farm loan borrowers who are in distress or who have been discriminated against in the programs. A long, troubled history of discrimination haunts farm policy; it has been most often concentrated in, but not limited to, the farm loan programs. The 2008 Farm Bill, for example, included \$100 million to settle discrimination cases and Congress followed in 2010 with a \$1.15 billion appropriation to settle discrimination claims.¹⁵ Congress provided potentially billions in debt relief for socially disadvantaged farmers in the American Rescue Plan Act of 2021 but the debt relief was subsequently blocked by courts and the Inflation

Reduction Act funding replaces the earlier relief funding.¹⁶ Given the substantial funding provided to address ongoing discrimination problems, the 2023 farm bill could include substantive changes to the farm loan programs that would help avoid future problems. Such changes might even help young, beginning, and socially disadvantaged or historically underserved farmers get started in farming and succeed. FSA could work to shed its troubled history and reputation, becoming a resource for real opportunity and much more than a problem-plagued last resort for credit and farmland access. Doing so would certainly add weight to an argument for revolutionary farm bill status.

Ample Opportunity for Creative Solutions

Contemplating a revolutionary farm bill in 2023 is difficult in the current political environment, a task made more difficult by the two most recent farm bill reauthorization debates. Further complicating the potential of a revolutionary farm bill are the budget rules where each new program or idea must be offset by cuts to existing programs. The Inflation Reduction Act of 2022, however, has provided a nearly \$20 billion infusion of additional funding for conservation programs—Congress also added over \$10 billion for rural development, nearly \$6 billion for farm loan borrowers and \$5 billion for forestry, which are also farm bill programs. That enactment potentially alters the negotiating dynamics and more, and it could prove to be the first step towards a revolutionary farm bill in 2023.

This report provides an initial and brief look at the potential for climate change to drive revolutionary changes in a farm bill. It focuses on two initial

concepts that could be built around farm support and the Supplemental Nutrition Assistance Program, but also notes the multiple paths towards revolutionary status in 2023. Ultimately, the most fundamental limits on a revolutionary farm bill along the lines discussed herein are political. Such changes would require substantial demand for new policies from a mobilized public that focused not just on members of Congress but also the interests that work closely with

them to craft policies and gather the votes for success in the legislative process.

A farm bill is an omnibus legislative vehicle—involving multiple policies and statutes—with substantial mandatory funding and flexible mechanisms. As such, it holds ample potential for creative policy solutions that will spur critical innovation.¹⁷

ENDNOTES

The months leading up to the next farm bill are fluid, with further developments likely. Please visit farmfoundation.org to stay informed of any possible future Farm Foundation Forums or further commentary regarding the 2023 farm bill.

An early draft of this Farm Foundation Issue Report was kindly reviewed by Farm Foundation Board Member and Program Chair Dr. John Foltz. He is interim associate director, Farm Financial Management and Policy Institute, The Ohio State University.

- 1 The Library of Congress has produced a great farm bill history website that lists 18 farm bills, but notably does not include the Soil Conservation and Domestic Allotment Act of 1936. It also leaves out the relatively minor 1958, 1962, and 1964 farm bills that are included in this count. See, Library of Congress, “History of the United States Farm Bill,” available: <https://www.loc.gov/ghe/cascade/index.html?appid=1821e70c01de48ae899a7ff708d6ad8b>.
- 2 Adapted from: Coppess, Jonathan. *The Fault Lines of Farm Policy: A Legislative and Political History of the Farm Bill* (University of Nebraska Press, 2018). See also, Coppess, Jonathan. “Issue Report: Reconciling Farm Commodity Policy.” *Farm Foundation* (September 2017), available: https://www.farmfoundation.org/wp-content/uploads/2018/09/IR-Coppess_IssueReportFINAL-Oct-2017.pdf.
- 3 See e.g., Intergovernmental Panel on Climate Change (IPCC), “Working Group III Sixth Assessment Report (2022),” available: <https://www.ipcc.ch/report/ar6/wg3/>.
- 4 See e.g., U.S. Dept. of Agriculture, “Action Plan for Climate Adaptation and Resilience” (August 2021), available: <https://www.sustainability.gov/pdfs/usda-2021-cap.pdf>; U.S. Environmental Protection Agency, “Sources of Greenhouse Gas Emissions: Agriculture” (updated April 14, 2022), available: <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions#agriculture>; U.S. Dept. of State and U.S. Exec. Office of the President, “The Long-Term Strategy of the United States: Pathways to Net-Zero Greenhouse Gas Emissions by 2050” (November 2021), available: <https://www.whitehouse.gov/wp-content/uploads/2021/10/US-Long-Term-Strategy.pdf>.
- 5 See e.g., World Resources Institute, “The Science Based Targets initiative (SBTi),” available: <https://www.wri.org/initiatives/science-based-targets>.
- 6 See e.g., S.1251 Growing Climate Solutions Act of 2021 (117th Congress, 1st Session); U.S. Senate Committee on Agriculture, Nutrition, and Forestry, “Growing Climate Solutions Act Passes U.S. Senate” (June 24, 2021), available: <https://www.agriculture.senate.gov/newsroom/dem/press/release/growing-climate-solutions-act-passes-us-senate>.
- 7 See e.g., Congressional Budget Office, “Details About Baseline Projects for Selected Programs: USDA Mandatory Farm Programs” (May 2022), available: <https://www.cbo.gov/system/files?file=2022-05/51317-2022-05-usda.pdf>; Coppess, J., K. Swanson, N. Paulson, G. Schnitkey and C. Zulauf. “Reviewing the Latest CBO Farm Bill Baseline.” *farmdoc daily* (12):80, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, June 1, 2022, available: <https://farmdocdaily.illinois.edu/2022/06/reviewing-the-latest-cbo-farm-bill-baseline.html>.

...continued on page 12

ENDNOTES (continued)

- 8 See, CRS 2022: <https://crsreports.congress.gov/product/pdf/download/IF/IF12024/IF12024.pdf/>. See also, <https://www.ewg.org/news-insights/news/2021/08/growing-farm-conservation-backlog-shows-need-congress-spend-smarter>.
- 9 See e.g., Agricultural Act of 2014, P.L. 113-79 (113th Congress, 2d Session; February 7, 2014), available: <https://www.congress.gov/bill/113th-congress/house-bill/2642/text>; Steele-Adjognon, M., Weatherspoon, D. "Double Up Food Bucks program effects on SNAP recipients' fruit and vegetable purchases." *BMC Public Health* 17, 946 (2017), <https://doi.org/10.1186/s12889-017-4942-z>.
- 10 See e.g., Agricultural Improvement Act of 2018, P.L. 115-334 (115th Congress, 2d Session; December 20, 2018), available: <https://www.congress.gov/bill/115th-congress/house-bill/2/text>. Note that USDA is reviewing ways to ease waivers for SNAP authorized retailers. See, 85 FR 27709 (May 11, 2020), available: <https://www.federalregister.gov/documents/2020/05/11/2020-09993/agency-information-collection-activities-supplemental-nutrition-assistance-program-snap-waiver>.
- 11 On August 9, 2022, President Biden signed into law the CHIPS Act of 2022 which appropriated \$54 billion for domestic semiconductor, microchips, and telecommunications equipment. The CHIPS Act was included in the appropriations bill for the legislative branch. The Act also provided tax credits for investing in advanced manufacturing, as well as nearly \$6 billion for research and innovation. See, P.L. 117-167 (H.R. 4346, 117th Congress, 2d Session; August 9, 2022), available: <https://www.congress.gov/117/bills/hr4346/BILLS-117hr4346enr.pdf>; Congressional Budget Office, "Estimated Budgetary Effects of H.R. 4346," (July 21, 2022), available: <https://www.cbo.gov/publication/58319>.
- 12 See, U.S. Dept. of Agric., Agricultural Marketing Service, "Agricultural Competition: A Plan in Support of Fair and Competitive Markets" (May 2022), available: https://www.ams.usda.gov/sites/default/files/media/USDAPlan_EO_COMPETITION.pdf.
- 13 See e.g., Greene, Joel L. "USDA's 'GIPSA Rule' on Livestock and Poultry Marketing Practices, Congressional Research Service, CRS Report R41673 (January 7, 2016), available: <https://crsreports.congress.gov/product/pdf/download/R/R41673/R41673.pdf/>.
- 14 See e.g., Coppess, J., K. Swanson, N. Paulson, C. Zulauf and G. Schnitkey. "Reviewing the Inflation Reduction Act of 2022; Part 1." *farmdoc daily* (12):19, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, August 11, 2022, <https://farmdocdaily.illinois.edu/2022/08/reviewing-the-inflation-reduction-act-of-2022-part-1.html> and Part 2 (August 12, 2022), <https://farmdocdaily.illinois.edu/2022/08/reviewing-the-inflation-reduction-act-of-2022-part-2.html>.
- 15 See, Carpenter, Stephen. "The USDA discrimination cases: Pigford, in re Black farmers, Keepseagle, Garcia, and Love." *Drake J. Agric. L.* 17 (2012): 1; Congressional Research Service, CRS Report, "The Pigford Cases: USDA Settlement of Discrimination Suits by Black Farmers" (updated May 29, 2013), available: https://www.everycrsreport.com/files/20130529_RS20430_dd9873a41009e49aa63cdc17a785093c21f8eb23.pdf.
- 16 See, Monke, Jim, M. Stubbs, K. Bracmount and K. Hoover, Congressional Research Service, CRS Insight IN11978 (August 7, 2022) available: <https://crsreports.congress.gov/product/pdf/download/IN/IN11978/IN11978.pdf/>; Black, Christine J. and A.J. Anderson, Congressional Research Service, CRS Legal Sidebar LSB10631 "The American Rescue Plan Act: Equal Protection Challenges" (July 29, 2021), available: <https://crsreports.congress.gov/product/pdf/download/LSB/LSB10631/LSB10631.pdf/>.
- 17 See e.g., Bradshaw, Corey JA, Paul R. Ehrlich, Andrew Beattie, Gerardo Ceballos, Eileen Crist, Joan Diamond, Rodolfo Dirzo, et al. "Underestimating the challenges of avoiding a ghastly future." *Frontiers in Conservation Science* (2021): 9.



Farm Foundation
1301 West 22nd St., Suite 906
Oak Brook, IL 60523-2197
farmfoundation.org

 facebook.com/thefarmfoundation

 twitter.com/farmfoundation

 linkedin.com/farm-foundation

 youtube.com/thefarmfoundation