

# CLIMATE CHANGE & FARM BILL REAUTHORIZATION: AN EVALUATION OF THE 118TH CONGRESS’S CHALLENGED CAPACITY TO ADDRESS CLIMATE CHANGE IN THE 2023 FARM BILL

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*“Everybody’s entitled to their own figures.”*

*– Kika de la Garza, Chairman of the United States House Committee on  
Agriculture (1981–95)<sup>1</sup>*

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1. Kika de la Garza, *Agriculture Issues*, CSPAN, at 18:27 (June 26, 1990), <https://www.c-span.org/video/?12914-1/agriculture-issues> [<https://perma.cc/RA2U-V3KP>] (The Chairman of the House Agriculture Committee, Kika de la Garza (D-Texas), addressed a luncheon for the Commodity Club of Washington, D.C., where he spoke about budgeting, the 1990 Farm Bill, and its new conservation programs).

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#### ABSTRACT

*This article evaluates how Congress can pragmatically design the 2023 Farm Bill to mobilize the United States Department of Agriculture to assist the agriculture and forestry sectors in responding to the climate crisis. It delves into both budgetary and policy implications, emphasizing the need for a comprehensive examination of fund allocation in light of climate change. Despite widespread political speculation surrounding the 2023 Farm Bill, a detailed analysis on the feasibility of climate-related provisions and fund allocation is lacking. The central goal is to assess how federal funds in the 2023 Farm Bill can effectively address climate change, considering the dynamics of the 118th*

*Congress. Specifically, this article describes the intricate relationship between U.S. agriculture and climate change, evaluates the 2023 Farm Bill budget given historic federal spending since enactment of the 2018 Farm Bill, and discusses vital programs for on-farm climate adaptation and mitigation. Ultimately, it suggests that the prime opportunity for agricultural emissions mitigation lies within the existing discretionary spending programs of the 2023 Farm Bill.*

## I. INTRODUCTION

Since the first successful launch of its programs and funding opportunities, the Farm Bill has quintessentially stood for the United States' successful management of some of its most important natural resources. The Farm Bill initiated conservation movements across the agriculture industry and has supported farmers and rural communities for almost a century.<sup>2</sup> As the United States responds to the impending climate crisis, a key question is whether the Farm Bill can or will be used in this response.

Agricultural practices and climate change are intrinsically linked.<sup>3</sup> Navigating governmental solutions for agricultural responses to the climate crisis can be challenging because of the complex scientific and economic relationships between how agriculture and food systems function in light of climate change.<sup>4</sup> The federal government plays a major role in supporting farm incomes and food security in the United States.<sup>5</sup> Because of this, the government has a part to play in assisting the sector's response to the climate crisis.

Ironically, agriculture and food systems are not only vulnerable to the threats posed by climate change, but they also significantly contribute to the problem.<sup>6</sup> Although agriculture is one of the great contributors to climate change, it is also

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2. See generally Michael X. Heiligenstein, *A Brief History of the Farm Bill*, SATURDAY EVENING POST (Apr. 17, 2014), <https://www.saturdayeveningpost.com/2014/04/a-brief-history-of-the-farm-bill/> [<https://perma.cc/3NY8-3LGK>].

3. See generally U.S. DEP'T OF AGRIC., ACTION PLAN FOR CLIMATE ADAPTATION AND RESILIENCE 3–10 (2021) [hereinafter ACTION PLAN FOR CLIMATE ADAPTION], <https://www.sustainability.gov/pdfs/usda-2021-cap.pdf> [<https://perma.cc/DRK8-32P8>].

4. *Id.*

5. Sidonie Devarenne & Bailey DeSimone, *History of the United States Farm Bill*, LIBR. OF CONG. (Oct. 9, 2023, 3:29 PM), <https://www.loc.gov/ghe/cascade/index.html?appid=1821e70c01de48ae899a7ff708d6ad8b&bookmark=Farm%20Bills> [<https://perma.cc/7E53-QDUJ>].

6. Erik Stokstad, *Can Farmers Fight Climate Change? New U.S. Law Gives Them Billions to Try*, SCIENCE: SCIENCEINSIDER (Aug. 16, 2022, 5:30 PM), <https://www.science.org/content/article/can-farmers-fight-climate-change-new-u-s-law-gives-them-billions-try> [<https://perma.cc/ULP2-BD78>].

negatively impacted by the effects of climate change.<sup>7</sup> Thus, adaptation and mitigation measures are necessary for upholding the global food supply and slowing global warming. The agriculture industry must place emphasis on both (1) adapting its practices to endure the disastrous effects of climate change as well as (2) mitigating its contributions toward the problem.

From a policy perspective, agriculture's approach to addressing climate change is undoubtedly a double-edged sword. In a polarized political environment like the federal legislature, addressing climate change and bolstering farm profits remain conflicting priorities—but they do not have to be. Supporting industry-wide engagement in climate-smart practices to reduce emissions while simultaneously continuing to serve rural communities and keeping farms profitable to feed the growing population must be a priority for policymakers and farmers alike. One of the most significant legal tools available to aid United States agriculture in meeting this challenge is the federal omnibus, multiyear Farm Bill.<sup>8</sup> The most recent Farm Bill, the Agriculture Improvement Act of 2018 (the 2018 Farm Bill), expired at the end of Fiscal Year 2023.<sup>9</sup> While a new Farm Bill (hereinafter referred to as “the 2023 Farm Bill”) has not yet been passed, continuing appropriations enacted in November 2023 give Congress until the end of September 2024 to pass a new bill.<sup>10</sup>

Farm Bills affect nearly every aspect of agriculture and forestry in the United States and are comprised of an array of multi-billion-dollar agricultural and food programs, which are reauthorized approximately every five years.<sup>11</sup> Since the passage of the 2018 Farm Bill, unexpected events have caused the federal government to depart from a traditional periodic bill to appropriating hundreds of billions of dollars in ad hoc spending via freestanding legislation.<sup>12</sup> This departure occurred for several reasons.<sup>13</sup> Congress has appropriated a historic amount of supplemental funding in response to trade wars, natural disasters, and the global COVID-19 pandemic.<sup>14</sup> Additionally, the passage of a historic reconciliation bill

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7. ACTION PLAN FOR CLIMATE ADAPTION, *supra* note 3.

8. See ROMAN KEENEY, PURDUE AGRICULTURAL ECONOMIC REPORT: WHAT FACTORS WILL SHAPE A 2023 FARM BILL 1–2 (2023), <https://ag.purdue.edu/commercialag/home/wp-content/uploads/2023/01/PAER-2023-03> [<https://perma.cc/B2FE-K6XS>].

9. JIM MONKE, CONG. RSCH. SERV., IF12233, FARM BILL PRIMER: BUDGET DYNAMICS 1 (2023) [hereinafter BUDGET DYNAMICS].

10. See Further Continuing Appropriations and Other Extensions Act, 2024, Pub. L. No. 118-22, 137 Stat. 114.

11. BUDGET DYNAMICS, *supra* note 9.

12. KEENEY, *supra* note 8.

13. *Id.* at 1.

14. *Id.*

poured billions more into the agriculture sector.<sup>15</sup> Stand-alone federal spending from 2018–2023 poses budgetary and policy consequences for the 2023 Farm Bill, especially as the federal legislature is split between party leadership for the 118th Congress.<sup>16</sup>

This Article evaluates how Congress can pragmatically design the 2023 Farm Bill to mobilize the USDA to assist the agriculture and forestry sectors in responding to the climate crisis. It analyzes the budgetary and policy implications involved in the overall spending apportionment for the 2023 Farm Bill in relation to climate change. Significant discussion, mostly political speculation, surrounds the 2023 Farm Bill.<sup>17</sup> However, a comprehensive analysis regarding the feasibility of climate-smart Farm Bill provisions and the broad-scale allocation of funds has yet to be done. The primary goal of this analysis is to assess—through a climate-focused lens—how federal funds could be designated in the 2023 Farm Bill to address aspects of climate change while accounting for the makeup of the 118th Congress.

Hence, Part II of this article describes the complicated relationship between United States agriculture and climate change, depicts the 2023 Farm Bill budget in light of federal legislative actions taken since the Bill's last reauthorization, and discusses pertinent Farm Bill programs necessary for on-farm climate change adaptation and mitigation. Part III provides analysis on how funding allotment in the forthcoming 2023 Farm Bill can most feasibly address climate change and suggests that the greatest opportunity for agricultural emissions mitigation lies within the 2023 Farm Bill's existing discretionary spending programs.

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15. See generally *id.*; Kevin O'Neill et al., *Biden's Economic Recovery Path: How Budget Reconciliation Plays a Role in Passing \$3.5 Trillion in Relief*, ARNOLD & PORTER (Aug. 25, 2021), <https://www.arnoldporter.com/en/perspectives/advisories/2021/08/how-budget-reconciliation-plays-a-role-relief> [https://perma.cc/S46D-8HA3].

16. See KEENEY, *supra* note 8, at 4.

17. See, e.g., Leah Douglas, *U.S. House Republican Farm Bill Approach May Test Biden Hunger, Climate Goals*, REUTERS (Nov. 18, 2022, 3:09 PM), <https://www.reuters.com/world/us/us-house-republican-farm-bill-approach-may-test-biden-hunger-climate-goals-2022-11-18/> [https://perma.cc/E24Y-XXH4]; Ximena Bustillo, *Congress Gears Up for Another Farm Bill. Here's What's on the Menu*, NAT'L PUB. RADIO (Feb. 2, 2023, 9:53 AM), <https://www.npr.org/2023/02/02/1151727273/congress-gears-up-for-another-farm-bill-heres-whats-on-the-menu> [https://perma.cc/8MW8-V2S3]; Meredith Lee Hill, *Inside McCarthy's Controversial Plan to Shrink Food Aid*, POLITICO (Apr. 19, 2023, 9:57 AM), <https://www.politico.com/news/2023/04/19/inside-mccarthys-controversial-plan-to-shrink-food-aid-00092667> [https://perma.cc/Y2VY-VHX3].

## II. FRAMING THE ISSUE

### *A. Not Only Is Agriculture Burdened by the Effects of Climate Change, But It Also Contributes to The Emissions Causing Global Warming*

In recent years, farmers, ranchers, and forest landowners have seen an increase in both financial and physical risks to their operations due to changes in weather and climate.<sup>18</sup> An increase in atmospheric carbon dioxide has led to changes in precipitation and temperature patterns, in turn causing climate-related extreme weather events to become more persistent.<sup>19</sup> This has caused an increase in historic droughts and wildfires, torrential floods, early frosts and thaws, and disruptions to critical ecosystems including biodiversity loss on working lands and waters.<sup>20</sup> Severe flooding in California, historic wildfires in New Mexico, and tropical cyclones in Florida serve as only a few examples of many climate-related weather disasters resulting in agricultural losses in 2022 alone.<sup>21</sup> Recovering from lost crop and livestock productivity due to climate-related weather disasters has increased the cost of production for farmers worldwide.<sup>22</sup>

The United States agriculture industry, comprised of over two million farms, is very sensitive to weather and climate as it relies on land, water, and other natural resources.<sup>23</sup> The impact of climate change on agricultural productivity often depends on the specific geographical region.<sup>24</sup> In areas experiencing extreme drought, farmers are forced to increase crop irrigation over longer, hotter growing seasons while also managing declining availability of water resources.<sup>25</sup> Meanwhile, in areas experiencing higher frequencies of heavy precipitation, crops

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18. Rachel Steele & Jerry L. Hatfield, *Navigating Climate-Related Challenges on Working Lands: A Special Issue by the USDA Climate Hubs and Their Partners*, CLIMATIC CHANGE, Jan. 8, 2018, at 1.

19. *See id.*

20. *See id.* at 2–3.

21. *Billion-Dollar Weather and Climate Disasters*, NAT'L CTRS. FOR ENV'T INFO. (Dec. 8, 2023), <https://www.ncei.noaa.gov/access/billions/> [<https://perma.cc/3FHD-DR2Z>].

22. *Climate Change-Related Disasters a Major Threat to Food Security – FAO*, UNITED NATIONS CLIMATE CHANGE (Mar. 18, 2021), <https://unfccc.int/news/climate-change-related-disasters-a-major-threat-to-food-security-fao> [<https://perma.cc/BB66-22DH>].

23. *Climate Change Impacts on Agriculture and Food Supply*, U.S. ENV'T PROT. AGENCY (Nov. 16, 2023), <https://www.epa.gov/climateimpacts/climate-change-impacts-agriculture-and-food-supply> [<https://perma.cc/LW2V-PREF>].

24. *Id.*

25. Prasanna Gowda et al., *Agriculture and Rural Communities, in IMPACTS, RISKS, AND ADAPTATION IN THE U.S.: FOURTH NATIONAL CLIMATE ASSESSMENT, VOLUME II 391*, 399 (D.R. Reidmiller et al. eds., 2018).

are harmed by soil erosion and depletion of soil nutrients.<sup>26</sup> Regardless, changes in temperature, rainfall, and frost-free days are leading to extended growing seasons in almost every state, affecting the types of crops farmers are able to plant.<sup>27</sup> Changes in heat and humidity can also affect the health and productivity of livestock animals raised for meat, milk, and eggs.<sup>28</sup>

The impacts of climate change on agriculture are worthy of more attention than is given here. However, this Article focuses primarily on the large-scale allotment of funding in the 2023 Farm Bill. Still, some of the crucial impacts of climate change on agriculture include: increases in extreme weather events such as wildfires, hurricanes, floods, and droughts; decreased farming and livestock productivity; threats to water quantity and quality; reduced soil quality; pressures from pests and diseases; a disproportionate impact on vulnerable communities such as farm workers and tribes; and stress on agricultural infrastructure and public lands.<sup>29</sup> The severity of these impacts often depends on both the rate and intensity of climate change and the ability of producers to adapt their production practices.<sup>30</sup> A substantial portion of rural communities in the United States depend on agriculture, forestry, and other related industries as economic drivers.<sup>31</sup> The consequences of climate change on the frequency of extreme weather events holds negative implications for the agriculture industry and the rural communities who steward most of the nation's forests, fisheries, watersheds, rangelands, and agricultural land.<sup>32</sup>

While agriculture is threatened by climate change, it also helps exacerbate the rate at which it occurs. In 2021, the agricultural sector was responsible for 9.4% of total United States greenhouse gas (GHG) emissions.<sup>33</sup> Due to poor soil management practices, such as excessive fertilizer application and tillage, nitrous oxide emissions accounted for 49.2% of total agriculture emissions.<sup>34</sup> Nitrous

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26. *Id.* at 415.

27. *Climate Change Impacts on Agriculture and Food Supply*, *supra* note 23.

28. MARGARET K. WALSH ET AL., USDA TECHNICAL BULLETIN 1953: CLIMATE INDICATORS FOR AGRICULTURE 18–19 (2020), <https://doi.org/10.25675/10217/210930> [<https://perma.cc/9KQS-3DP9>].

29. ACTION PLAN FOR CLIMATE ADAPTATION, *supra* note 3.

30. Gowda et al., *supra* note 25, at 398.

31. *Id.* at 396.

32. *Id.* at 393.

33. U.S. ENV'T PROT. AGENCY, INVENTORY OF U.S. GREENHOUSE GAS EMISSIONS AND SINKS: 1990–2021, at 5-1 (2023) [hereinafter INVENTORY OF U.S. GREENHOUSE GAS EMISSIONS AND SINKS], <https://www.epa.gov/system/files/documents/2023-04/US-GHG-Inventory-2023-Main-Text.pdf> [<https://perma.cc/5ZY9-HQUH>].

34. *Id.* at 5-1–5-2.

oxide is the largest source of agricultural emissions.<sup>35</sup> Methane emissions from digestive processes of ruminant livestock and poor livestock manure management represent 32.6% and 11.0% of agriculture emissions respectively.<sup>36</sup> Beef and dairy cattle are the largest contributors of agricultural methane emissions.<sup>37</sup>

Because of the nitrous oxide and methane emissions from agriculture, the industry is recognized as a significant contributor to total United States GHG emissions.<sup>38</sup> Carbon dioxide, methane, and nitrous oxide are the GHGs with the highest emissions both in the United States and globally.<sup>39</sup> Nitrous oxide and methane are two of the most potent heat trapping gases over a 100-year timescale, having approximately 300 times and 32 times the global warming potential of carbon dioxide.<sup>40</sup> Nitrous oxide emissions also take part in the destruction of stratospheric ozone.<sup>41</sup>

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35. *Id.*

36. *Id.* at 5-2.

37. *Id.*

38. *See id.* at 2-28–2-30.

39. *Overview of Greenhouse Gases*, U.S. ENV'T PROT. AGENCY (Oct. 10, 2023), <https://www.epa.gov/ghgemissions/overview-greenhouse-gases> [<https://perma.cc/Z37N-5TB2>].

40. Andrew P. Rees et al., *Nitrous Oxide and Methane in a Changing Arctic Ocean*, 51 *AMBIO* 398, 399 (2022).

41. Lisbet Norberg et al., *Methane and Nitrous Oxide Production From Agricultural Peat Soils in Relation to Drainage Level and Abiotic and Biotic Factors*, *FRONTIERS ENV'T SCI.*, Mar. 19, 2021, at 1.



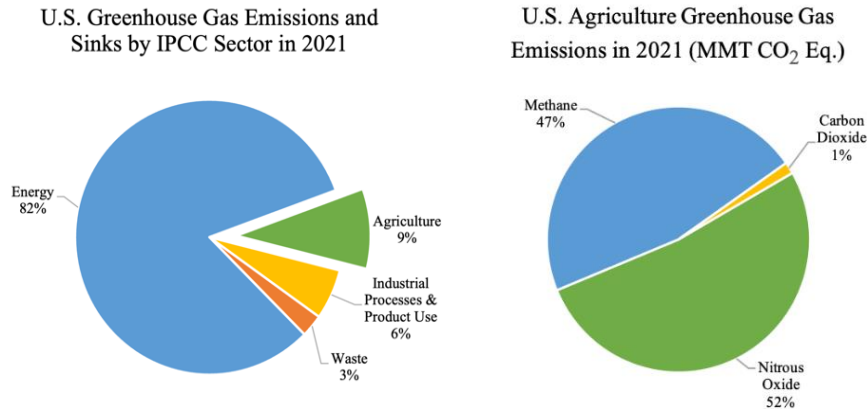


Figure 1

Source: EPA Inventory of GHG Emissions and Sinks: 1990–2021

Because soil management and livestock production are the primary sources of agricultural emissions, the industry has taken steps to mitigate its impact.<sup>42</sup> Technology improvements have been made so certain values are now adjusted for capture of GHG, like the capture and destruction of methane at livestock facilities using anaerobic digesters.<sup>43</sup> When agriculture removes carbon from the atmosphere, the EPA accounts for this capture in its total emissions calculations.<sup>44</sup> Farming practices like planting cover crops help reduce emissions by keeping carbon in the ground which allows farmers to apply less fertilizer, and implementing no-till or conservation tillage prevents soil erosion and saves farmers on input costs from fertilizer and diesel.<sup>45</sup> Climate-smart practices like these have reduced carbon emissions and lowered input costs—a win-win for farmers and the environment.<sup>46</sup>

However, implementing on-farm, climate-smart practices comes with costs and often requires a great deal of technical and financial assistance.<sup>47</sup> Additionally, varying attitudinal orientations among farmers towards climate change presents a

42. *Sources of Greenhouse Gas Emissions*, U.S. ENV'T PROT. AGENCY (Nov. 16, 2023), <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions> [<https://perma.cc/FC6U-6KXQ>].

43. INVENTORY OF U.S. GREENHOUSE GAS EMISSIONS AND SINKS, *supra* note 33, at 5-14.

44. *Id.* at 6-100.

45. Stokstad, *supra* note 6.

46. *Id.*

47. *Id.*

unique challenge for implementing sustainable practices.<sup>48</sup> No matter the financial and environmental benefits of such practices, a farmer must be willing to implement them.

A 2023 study shows that farmers are more likely to participate in USDA climate-smart or conservation programs when they can establish a connection between profitability and the implementation of sustainable agriculture practices.<sup>49</sup> The study also concluded that commodity organizations should communicate information to farmers regarding government programs with messaging that accentuates the “voluntary aspect” of the particular program.<sup>50</sup>

Additionally, a 2020 study showed 81% of farmers indicated that climate change is occurring, which is up from 68% in 2011.<sup>51</sup> However, only 37% of farmers indicated that development of programs and markets to help farmers make carbon capture practices a part of their farm enterprise should be pursued.<sup>52</sup> Aside from the technical knowledge and capital required to implement climate-smart practices, this sociological component remains among one of the greatest challenges facing the industry in its response to the climate crisis.<sup>53</sup> While the scope of the Farm Bill is broad and impactful, it is unable to affect climate change in this regard.

Even so, incentives do exist for farmers to implement climate-smart practices that can overcome these sentiments.<sup>54</sup> For example, companies have created a crediting mechanism for United States farmers to voluntarily sell carbon credits as

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48. See Haleigh Erramouspe et al., *A Case Study Using Q Methodology to Explore the Attitudinal Orientation of Sorghum Producers Toward Sustainable Agricultural Practices*, Proceedings of the 2023 Western Region American Association for Agricultural Education Research Conference, Volume 42, 76–83 (2023), <https://aaea.wildapricot.org/resources/Documents/Western%20Region/2023meeting-%20Logan,%20UT/2023%20WR-AAAE%20Final%20Research%20Proceedings.pdf> [<https://perma.cc/6ZUK-EMFB>].

49. *Id.* at 80.

50. *Id.*

51. J. Gordon Arbuckle Jr., *Iowa Farm and Rural Life Poll Shows Farmers' Beliefs on Climate Change Are Shifting*, IOWA STATE UNIV. EXTENSION AND OUTREACH (Jan. 22, 2021, 8:14 AM), <https://www.extension.iastate.edu/news/iowa-farm-and-rural-life-poll-shows-farmers-beliefs-climate-change-are-shifting> [<https://perma.cc/Z9NB-4HX7>].

52. *Id.*

53. *Id.*

54. Nathanael M. Thompson et al., *Opportunities and Challenges Associated With “Carbon Farming” for U.S. Row-Crop Producers*, PURDUE UNIV. CTR. FOR COM. AGRIC. (June 28, 2021), <https://ag.purdue.edu/commercialag/home/resource/2021/06/opportunities-and-challenges-associated-with-carbon-farming-for-u-s-row-crop-producers/> [<https://perma.cc/SQD9-5Y79>].

compensation for implementing certain carbon sequestration practices.<sup>55</sup> To date, the only way United States farmers can sell carbon is through markets organized by publicly and privately-owned companies.<sup>56</sup> Carbon crediting is a promising avenue for incentivizing climate-smart practices such as no-till farming, reductions in nitrogen fertilizer application, and land retirement.<sup>57</sup> However, carbon crediting has yet to find a home in the Farm Bill.<sup>58</sup>

Collaborative public and private efforts produced technological advancements that increased the availability of capital to front new research projects.<sup>59</sup> This, in turn, has led to significant improvements in crop and animal productivity while reducing agriculture's environmental footprint.<sup>60</sup> Some of these advancements include production of biofuels using organic agricultural materials and organic farming using only bio-based and renewable raw materials.<sup>61</sup> An additional climate-smart practice is converting working lands to grasslands and forest lands, which allowed the land-use and forestry sector to offset approximately 13.1% of total (gross) GHG emissions in 2021.<sup>62</sup> While progress has been made, agriculture and forestry are two of the few sectors with the potential for significant increases in carbon sequestration to offset GHG emissions.<sup>63</sup> It is estimated that "U.S. agriculture and forestry can provide 10-20% of the sequestration and emission reductions needed to reach net-zero emissions by 2050."<sup>64</sup>

Although agriculture is burdened by climate change and must prioritize adaptation measures such as the farm safety net, there are also opportunities for further mitigation of emissions. Agriculture and forest systems can play a role, and the 2023 Farm Bill has potential to aid farmers and foresters in their contributions to solving the climate crisis—if Congress can make these sentiments fit.

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55. Sarah Sellars et al., *What Questions Should Farmers Ask About Selling Carbon Credits?*, UNIV. OF ILL. AT URBANA-CHAMPAIGN DEP'T OF AGRIC. AND CONSUMER ECON.: FARMDOC DAILY (April 13, 2021), <https://farmdocdaily.illinois.edu/2021/04/what-questions-should-farmers-ask-about-selling-carbon-credits.html> [<https://perma.cc/D7BG-VXC5>].

56. *Id.*

57. *Id.*

58. *See generally id.*

59. Gowda et al., *supra* note 25, at 396–97.

60. *Id.*

61. *See* H. Fredriksson et al., *Use of on-Farm Produced Biofuels on Organic Farms – Evaluation of Energy Balances and Environmental Loads for Three Possible Fuels*, 89 AGRIC. SYS. 184, 185–86 (2006).

62. INVENTORY OF U.S. GREENHOUSE GAS EMISSIONS AND SINKS, *supra* note 33, at 6-2–6-3.

63. *See id.*

64. Sellars et al., *supra* note 55.

*B. Considering Agriculture's Dependence on The Farm Bill, Reauthorization Is Non-Negotiable*

For almost a century, agriculture has been supported by the enormous safety net referred to as the Farm Bill. The first Farm Bill, the Agricultural Adjustment Act of 1933, was signed by President Franklin D. Roosevelt as a part of the New Deal.<sup>65</sup> After World War I, crop prices in the United States dropped, contributing to both the Great Depression and the Dust Bowl, affecting agricultural markets and farmers.<sup>66</sup> Thus, the first Farm Bill's two titles were designed to boost crop prices by reducing surpluses.<sup>67</sup> For the first time, the federal government increased agricultural purchasing power and provided emergency relief for indebted farmers.<sup>68</sup>

Since 1933, Congress has passed eighteen Farm Bills—each one becoming more expansive in nature.<sup>69</sup> The modern Farm Bill's breadth is vast. The most recent Farm Bill, the Agriculture Improvement Act of 2018, spans twelve titles and encompasses dozens of programs and hundreds of billions of dollars in federal spending, including a host of nutrition assistance and commodity-based revenue support programs.<sup>70</sup>

The 2018 Farm Bill expired at the end of Fiscal Year 2023 on September 30, 2023.<sup>71</sup> When a Farm Bill expires, some programs may cease to operate unless reauthorized. If the Farm Bill is not reauthorized, farm commodity programs, such as disaster relief, price loss coverage, agriculture risk coverage, marketing assistance loan, and dairy margin coverage programs, would expire and revert to permanent law from the 1940s.<sup>72</sup> Nutrition programs, such as the Supplemental Nutrition Assistance Program (SNAP), require periodic reauthorization, but appropriations could keep them operating.<sup>73</sup> Certain programs have permanent authority and do not need reauthorization—e.g., the Federal Crop Insurance

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65. *History of the United States Farm Bill*, *supra* note 5.

66. *Id.*

67. *Id.*

68. Agricultural Adjustment Act of 1933, Pub. L. No. 73-10, 48 Stat. 31.

69. RENÉE JOHNSON & JIM MONKE, CONG. RSCH. SERV., RS22131, WHAT IS THE FARM BILL? 1 n.1 (2023) (eighteen Farm Bills have been enacted: 1933, 1938, 1948, 1949, 1954, 1956, 1965, 1970, 1973, 1977, 1981, 1985, 1990, 1996, 2002, 2008, 2014, and 2018).

70. *See* Agriculture Improvement Act of 2018, Pub. L. No. 115-334, 132 Stat. 4490.

71. *Id.*; KEENEY, *supra* note 8.

72. GENEVIEVE K. CROFT ET AL., CONG. RSCH. SERV., R47057, PREPARING FOR THE NEXT FARM BILL 2 (2022).

73. *See id.*

Program (FCIP).<sup>74</sup> However, the 2018 Farm Bill also contains 21 discretionary programs that do not have a continuing budget baseline beyond Fiscal Year 2023.<sup>75</sup> Similar to how SNAP works, necessary programs for GHG mitigation—like the Biobased Markets Program, the Bioenergy Program for Advanced Biofuels, and Biorefinery Assistance—would lose the statutory authority to receive appropriations until the Farm Bill is reauthorized.<sup>76</sup>

Failure to reauthorize a Farm Bill carries grave consequences for the survival of farming operations and food security, so Congress's timely passage of the 2023 Farm Bill passage is important.<sup>77</sup> If Congress delays, it may pass a short-term extension of the Farm Bill or other funding to fill the gap until new policy is agreed upon, which it has already done.<sup>78</sup> On November 15th, Congress passed a continuing resolution, which included an extension of the 2018 Farm Bill through September 30, 2024—the end of Fiscal Year 2024.<sup>79</sup> This does not come without precedent. The 2008 Farm Bill expired on September 30, 2012, was given a nine-month extension, and expired a second time before it was finally reauthorized in early 2014.<sup>80</sup> Currently, the timeline for reauthorizing the Farm Bill is set against a backdrop of politically divided government and the lingering effects of economic shocks that have triggered tens of billions in ad hoc spending and emergency transfers to agriculture entities.<sup>81</sup> The events that plagued the last six years may continue posing challenges for Congress and stakeholders in 2024.

### *C. The Farm Bill Must Be Capable of Supporting Both Mandatory and Discretionary Spending Programs*

Much of this Article discusses the budgetary considerations for the 2023 Farm Bill. Funding flows are a unique aspect of the Farm Bill's potential to affect

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74. *See id.*

75. BUDGET DYNAMICS, *supra* note 9, at 2.

76. *See id.* at 1–2.

77. *See* KEENEY, *supra* note 8.

78. Markie Hageman Jones, *The Complicated Road for a Farm Bill to Pass Through Congress*, AGDAILY (Jan. 13, 2023), <https://www.agdaily.com/insights/complicated-road-for-farm-bill-pass-through-congress/#:~:text=However%2C%20if%20Congress%20fails%20to,an%20agreement%20on%20new%20policy> [<https://perma.cc/Q68K-RRF8>].

79. *See* Further Continuing Appropriations and Other Extensions Act, 2024, *supra* note 10.

80. Jody Campiche & Larry D. Sanders, *Another Farm Bill Expiration: How Did We Get Here, What Does it Mean, and What Happens Now?*, OKLA. STATE UNIV. EXTENSION (Mar. 2017), <https://extension.okstate.edu/fact-sheets/another-farm-bill-expiration-how-did-we-get-here-what-does-it-mean-and-what-happens-now.html> [<https://perma.cc/WT4U-37FF>].

81. *See* KEENEY, *supra* note 8.

agricultural climate mitigation and adaptation measures.<sup>82</sup> Foremost, the Spending Clause of the United States Constitution authorizes Congress to spend money to “pay the Debts and provide for the common Defence and general Welfare of the United States” and is one of Congress’s most important enumerated powers.<sup>83</sup> For almost a century, federal spending “in aid of farmers” has fallen within the broad scope of “general welfare.”<sup>84</sup>

Federal agriculture spending comes in two forms—discretionary and mandatory spending.<sup>85</sup> Discretionary spending programs (e.g., rural development, research, and credit programs) are authorized by Farm Bills but are funded separately in annual appropriation acts.<sup>86</sup> When a program receives funding directly from a Farm Bill, it is considered mandatory.<sup>87</sup> Mandatory spending programs (e.g., farm commodity programs, conservation, crop insurance, and nutrition assistance programs) do not require a separate appropriation and are assumed to continue in the baseline even if a Farm Bill expires.<sup>88</sup> Both types of programs are used to make up the entirety of the Farm Bill’s funding.<sup>89</sup>

The Congressional Budget Act of 1974 established the annual budget process.<sup>90</sup> Pursuant to the Congressional Budget Act, the Congressional Budget Office (CBO) produces baseline estimates of projected outlays for mandatory Farm Bill spending over 10 years.<sup>91</sup> Farm Bills have five and 10-year budget projections.<sup>92</sup> CBO baselines project how much money will flow out of the United States Department of Treasury, the Federal Crop Insurance Corporation (FCIC), and the Commodity Credit Corporation (CCC) towards mandatory spending

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82. *Id.*

83. U.S. CONST. art. I, § 8, cl. 1.

84. *United States v. Butler*, 297 U.S. 1, 79 (1936) (Stone, J., dissenting) (“As the present depressed state of agriculture is nation wide in its extent and effects, there is no basis for saying that the expenditure of public money in aid of farmers is not within the specifically granted power of Congress to levy taxes to ‘provide for the general welfare.’”).

85. CROFT ET AL., *supra* note 72, at 4.

86. *Id.* at 5.

87. *See id.*

88. Jonathan Coppess, *A View of the 2023 Farm Bill from the CBO Baseline*, UNIV. OF ILL. AT URBANA-CHAMPAIGN DEP’T OF AGRIC. AND CONSUMER ECON.: FARMDOC DAILY (Feb. 23, 2023), <https://farmdocdaily.illinois.edu/2023/02/a-view-of-the-2023-farm-bill-from-the-cbo-baseline.html> [<https://perma.cc/S9HL-ERGW>].

89. *See id.*

90. Congressional Budget and Impoundment Control Act of 1974, Pub. L. No. 93-344, 88 Stat. 297 (most recently amended by P. Law No. 116-94).

91. *See id.*

92. BUDGET DYNAMICS, *supra* note 9.

programs over 10 years, assuming the current law continues.<sup>93</sup> The House and Senate agriculture committees are guided by this CBO baseline as well as their imposed spending limits set by the “302(a) allocation.”<sup>94</sup> 302(a) allocations are given to committees with jurisdiction over mandatory spending programs and keep committees within the overall spending limit established by the budget resolution.<sup>95</sup> Essentially, Congress has the budget authority allowing the USDA to spend a certain amount through the Farm Bill, and outlays represent the money being spent.<sup>96</sup>

Each year, the President submits an annual budget request to Congress containing a request for agriculture spending, which is developed between the USDA and the White House Office of Management and Budget.<sup>97</sup> The budget request (1) contains the President’s recommendation for overall fiscal policy, (2) lays out the administration’s priorities for federal programs, and (3) typically includes some proposals to alter mandatory programs.<sup>98</sup> While this is important for Farm Bill implementation, the President’s budget request for Fiscal Year 2025 has no bearing on how much money will be authorized in the 2023 Farm Bill.<sup>99</sup> Once a Farm Bill is passed, any increases in cost beyond the baseline may be subject to budget constraints, such as pay-as-you-go (PAYGO) requirements.<sup>100</sup> The Farm Bill is subject to all rules and procedures outlined in federal budgeting statutes for its development and subsequent implementation.<sup>101</sup>

The debt ceiling’s impact on Farm Bill budgeting is also important and remains a consideration for any large spending bill, including a Farm Bill, which authorizes mandatory entitlements.<sup>102</sup> The United States Treasury reached the statutory debt ceiling of \$31.4 trillion on January 19, 2023.<sup>103</sup> However, on June 3,

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93. See CONG. BUDGET OFF., BASELINE PROJECTIONS: USDA FARM PROGRAMS (2023), [https://www.cbo.gov/system/files/2023-05/51317-2023-05-usda\\_0.pdf](https://www.cbo.gov/system/files/2023-05/51317-2023-05-usda_0.pdf) [<https://perma.cc/V5SW-2N93>].

94. CTR. ON BUDGET AND POL’Y PRIORITIES, INTRODUCTION TO THE FEDERAL BUDGET PROCESS 6–8 (2022), <https://www.cbpp.org/sites/default/files/atoms/files/3-7-03bud.pdf> [<https://perma.cc/QMN2-RRV5>].

95. *Id.* at 6.

96. *Id.*

97. *Id.* at 4.

98. *Id.* at 4–5.

99. *Id.* at 5.

100. See Statutory Pay-As-You-Go Act of 2010, 2 U.S.C. §§ 931–939.

101. See Jones, *supra* note 78.

102. *Id.*

103. 31 U.S.C. § 3101; Jonathan Coppess, *The Debt Ceiling: Reviewing Federal Budget Data*, UNIV. OF ILL. AT URBANA-CHAMPAIGN DEP’T OF AGRIC. AND CONSUMER ECON.:

2023, the federal government averted default when President Biden signed the Fiscal Responsibility Act of 2023 into law.<sup>104</sup> While this increased the federal debt limit, it also established new discretionary spending limits for 2024 and 2025 appropriations, expanded work requirements for federal programs, and modified certain requirements related to the federal budget process.<sup>105</sup>

The Fiscal Responsibility Act of 2023 imposed caps on discretionary funding that may affect appropriations for agriculture discretionary programs in Fiscal Years 2024 and 2025.<sup>106</sup> The Act also modified work requirements for recipients of SNAP benefits.<sup>107</sup> While the dust has mostly settled around the debt ceiling issue, it should be noted that deficit reduction efforts in 2011 ultimately caused budget cuts in the 2014 Farm Bill, and debate over SNAP work requirements delayed passage of the 2014 and 2018 Farm Bills.<sup>108</sup> Any spending cuts may hurt the Farm Bill's ability to authorize funds to assist agriculturists in reducing GHG emissions, and a fight over SNAP could further delay passage of the 2023 Farm Bill. The federal debt will almost certainly remain a topic of conversation regarding the 2023 bill.

In addition to the debt ceiling issue, the historic number of ad hoc payments made since the 2018 Farm Bill are also of concern. Ad hoc payments made since the 2018 Farm Bill are a significant departure from typical farm relief, raising concerns about the baseline for the 2023 Farm Bill and the effectiveness of farm

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FARMDOC DAILY (Mar. 23, 2023), <https://farmdocdaily.illinois.edu/2023/03/the-debt-ceiling-reviewing-federal-budget-data.html> [<https://perma.cc/Y58T-QZXM>].

104. See Fiscal Responsibility Act of 2023, Pub. L. No. 118-5, 137 Stat. 10; CONG. BUDGET OFF., 59235, HOW THE FISCAL RESPONSIBILITY ACT OF 2023 AFFECTS CBO'S PROJECTIONS OF FEDERAL DEBT (2023) [hereinafter HOW THE FISCAL RESPONSIBILITY ACT AFFECTS CBO'S PROJECTIONS], <https://www.cbo.gov/system/files/2023-06/59235-Debt.pdf> [<https://perma.cc/4B2Q-W5ZU>].

105. HOW THE FISCAL RESPONSIBILITY ACT AFFECTS CBO'S PROJECTIONS, *supra* note 104, at 1.

106. *Id.*

107. *Id.*

108. See Bradley D. Lubben, *Federal Debt, Deficits, Spending, Baselines Affect Farm Bill*, FARMPROGRESS: NEBRASKAFARMER (June 9, 2023), <https://www.farmprogress.com/farm-policy/federal-debt-deficits-spending-baselines-affect-farm-bill> [<https://perma.cc/3MPF-SC7S>].



safety net programs.<sup>109</sup> Moreover, these ad hoc payments reflect the growing number of natural disasters facing agriculture due to climate change.<sup>110</sup>

*D. The Years Since The 2018 Farm Bill Have Yielded Historic Government Transfers to The Agriculture Industry and Investments Toward USDA Programs*

Given the unpredictable nature of how the agriculture industry is affected by catastrophic events, supplemental spending—independent from the Farm Bill baseline—is sometimes necessary to sustain certain industries and maintain food security.<sup>111</sup> Some of this century’s largest direct government transfers to agriculture have occurred in the timeframe covered by the 2018 Farm Bill.<sup>112</sup> International trade disruptions, natural disasters, the COVID-19 pandemic, and historic appropriations made by the Biden Administration for infrastructure and climate change have resulted in unprecedented levels of government appropriations to the agriculture sector.<sup>113</sup>

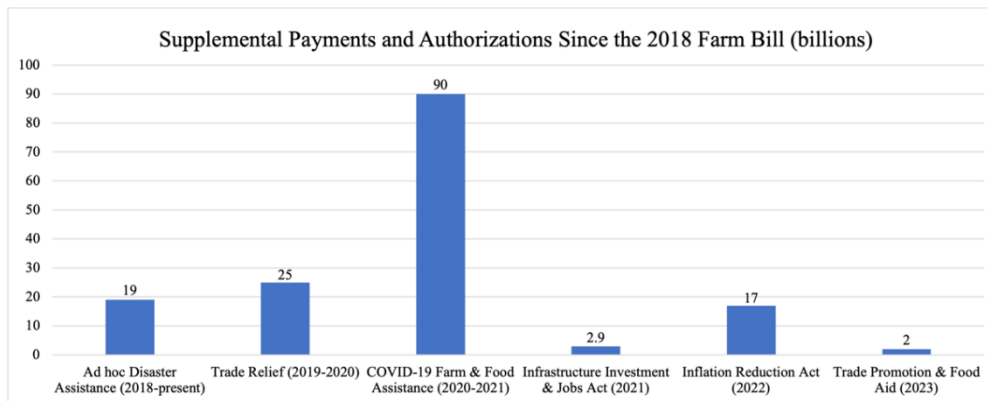


Figure 2 – Source: CRS Report IF12233<sup>114</sup>

The following subsections summarize the federal investments made independent from the 2018 Farm Bill baseline in response to the overlapping crisis

109. Chris Clayton, *Ad-Hoc Money Fuels Farm Safety Net: Seven Worries About Farm Safety Net Heading into Next Farm Bill*, PROGRESSIVE FARMER (Feb. 9, 2023, 3:36 PM), <https://www.dtnpf.com/agriculture/web/ag/news/article/2023/02/09/seven-worries-farm-safety-net-next> [<https://perma.cc/L3C2-CAX9>].

110. *See id.*

111. *See KEENEY, supra* note 8, at 1.

112. *See id.*

113. CROFT ET AL., *supra* note 72, at 4, 45.

114. *See BUDGET DYNAMICS, supra* note 9, at 2.

of the last several years. Also discussed are appropriations made to the USDA in the Bipartisan Infrastructure Law and the Inflation Reduction Act. Discussing the transfers made to agriculture within the last five years sheds light on how much the industry depends on the federal government in times of crisis. The fact that most of these supplemental payments were independent from existing Farm Bill outlays indicates there may not be room in the 2023 Farm Bill budget for new climate programs.

*1. Since The 2018 Farm Bill, Congress Has Authorized \$136 Billion Dollars In Ad Hoc Spending*

In 2018, the Trump Administration imposed tariffs on a broad range of imports, which resulted in Canada, China, the European Union, India, Mexico, and Turkey placing retaliatory tariffs on many United States exports, including a wide range of agricultural and food products.<sup>115</sup> In 2018 and 2019, these retaliatory tariffs imposed exorbitant fees on agricultural commodities such as soybeans, wheat, and corn affecting United States farm sector income.<sup>116</sup> Estimated losses from the trade wars from 2018–2019 were approximately \$13.2 billion.<sup>117</sup> These losses were mostly from retaliatory tariffs imposed by China.<sup>118</sup> As a result, Congress appropriated funds and authorized the USDA CCC to pay farmers directly for their losses under the powers of the CCC Charter Act.<sup>119</sup>

In response to these trade wars, the USDA also created the Market Facilitation Program (MFP), the Food Purchase and Distribution Program (FPDP), and the Agricultural Trade Promotion Program (ATP) to restore the market to pre-retaliatory levels.<sup>120</sup> In Fiscal Years 2019 and 2020, the Trump Administration increased outlays by over \$25 billion to producers affected by retaliatory tariffs.<sup>121</sup>

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115. See Trade Expansion Act of 1962, Pub. L. No. 87-794, § 232, 76 Stat. 872, 877; STEPHEN MORGAN ET AL., U.S. DEP'T OF AGRIC. ECON. RSCH. SERV., THE ECONOMIC IMPACTS OF RETALIATORY TARIFFS ON U.S. AGRICULTURE iii (2022), <https://www.ers.usda.gov/webdocs/publications/102980/err-304.pdf> [<https://perma.cc/9UT6-M9XS>] (“In 2018, the United States imposed Section 232 tariffs on steel and aluminum imports from major trading partners and separately Section 301 tariffs on a broad range of imports from China.”).

116. MORGAN ET AL., *supra* note 115, at 2.

117. *Id.* at 3.

118. *Id.*

119. 15 U.S.C. § 714b (general trade and commerce powers of the USDA Commodity Credit Corporation).

120. MORGAN ET AL., *supra* note 115, at 7.

121. BUDGET DYNAMICS, *supra* note 9, at 2.

Congressional ad hoc farm support and funds from the CCC also provided substantial relief for supplemental disaster assistance for the 2018–2019 crop years.<sup>122</sup> Furthermore, more than \$19 billion has been authorized by Congress since 2018 in ad hoc disaster assistance for agriculture losses.<sup>123</sup> In part due to climate change, widespread flooding led to record-high levels of farmers refraining from planting, which curbed some crop production in 2019, and drought conditions led to production declines for certain crops in 2021.<sup>124</sup> The vast majority of ad hoc assistance appropriated since 2018 was exempt from budget rules applicable to Farm Bill programs and discretionary spending.<sup>125</sup> These events resulted in billions of dollars of unanticipated spending.<sup>126</sup>

When the 2018 Farm Bill was enacted, the CBO estimated the total cost for mandatory programs—which includes farm safety net and permanent disaster assistance programs—would be \$428 billion over its five-year duration.<sup>127</sup> Due to the trade war, natural disasters, and the subsequent federal responses of the last few years, spending on direct payments to farmers blew past CBO’s spending prediction and created tens of billions of dollars in outlays.<sup>128</sup>

Relationships with trading partners saw improvement leading to a substantial increase in United States commodity exports in 2021 and 2022.<sup>129</sup> This is somewhat due to recent agricultural commodity trade negotiations, namely the United States–Mexico–Canada Agreement (USMCA) and the China Phase One Agreement.<sup>130</sup> These negotiations and their specific impacts are not analyzed in this Article, but Congress may base its estimates on the success recorded in 2021–2022.<sup>131</sup> The agricultural trade deficit in Fiscal Year 2023 was \$16.7 billion, and

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122. STEPHANIE ROSCH, CONG. RSCH. SERV., IF12218, FARM BILL PRIMER: FARM SAFETY NET PROGRAMS 2 (2022).

123. BUDGET DYNAMICS, *supra* note 9, at 2.

124. CROFT ET AL., *supra* note 72, at 10.

125. ROSCH, *supra* note 122, at 2.

126. *See id.* at 2.

127. CROFT ET AL., *supra* note 72, at 2.

128. *See id.* at 14; ROSCH, *supra* note 122, at 2.

129. BART KENNER ET AL., U.S. DEP’T OF AGRIC. ECON. RSCH. SERV. & FOREIGN AGRIC. SERV., OUTLOOK FOR U.S. AGRICULTURAL TRADE: NOVEMBER 30, 2023, at 1–2 (2023), <https://www.ers.usda.gov/webdocs/outlooks/108032/aes-126.pdf?v=4324> [<https://perma.cc/H3J5-VUWZ>] (United States agricultural exports increased from \$139.7 billion in 2020 to \$171.7 billion in 2021 and \$196.4 billion in 2022).

130. *See 2022 Was Another Record Year for U.S. Farm Exports*, U.S. DEP’T OF AGRIC. (Feb. 10, 2023), <https://www.usda.gov/media/press-releases/2023/02/10/2022-was-another-record-year-us-farm-exports> [<https://perma.cc/A3GH-GLBY>]; United States–Mexico–Canada Agreement Implementation Act, Pub. L. No. 116-113, 134 Stat. 11 (2020).

131. *See 2022 Was Another Record Year for U.S. Farm Exports*, *supra* note 130.

USDA is now forecasting a record \$30.5 billion agricultural trade deficit in Fiscal Year 2024.<sup>132</sup>

While relationships with United States trading partners impacts their export and import balance, the United States trade is also inextricably linked with natural disasters.<sup>133</sup> Natural disasters can cause a decrease in crop and livestock production leading to rapid fluctuations in trade flows.<sup>134</sup> A Farm Bill cannot account for every trade disruption that will happen within the next five-year period, but Congress can anticipate the inevitable need for flexibility when estimating the budget for mandatory programs, such as FCIP and SNAP.<sup>135</sup>

In 2020, the onset of the COVID-19 pandemic posed unique and unprecedented challenges for agriculture on a local, national, and global scale.<sup>136</sup> The pandemic threatened food security, nutrition, and the livelihoods of producers and food supply chain workers across the globe.<sup>137</sup> In addition to managing the health crisis and its economic impact, the United States government took great measures to ensure the continued functioning of agriculture and food systems.<sup>138</sup>

Since 2020, the federal government has provided supplemental pandemic assistance totaling over \$30 billion to farmers and over \$60 billion for nutrition assistance.<sup>139</sup> Two COVID-19 relief bills—the Coronavirus Aid, Relief, and Economic Security Act and the Consolidated Appropriations Act of 2021—allocated billions in stimulus funds to respond to coronavirus.<sup>140</sup> These appropriations provided flexibility to SNAP and paid farmers who were affected by market shifts, low prices, and loss of sales—for example, the USDA paid dairy farmers who had to dispose of their milk when schools and restaurants closed due to COVID-19.<sup>141</sup> Additionally, the Biden Administration announced an additional

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132. KENNER ET AL., *supra* note 129.

133. See FOOD AND AGRIC. ORG. OF THE UNITED NATIONS, 2021: THE IMPACT OF DISASTERS AND CRISES ON AGRICULTURE AND FOOD SECURITY (2021), <https://doi.org/10.4060/cb3673en> [<https://perma.cc/FH3A-V65V>].

134. *Id.* at 67.

135. CROFT ET AL., *supra* note 72, at 8.

136. FOOD AND AGRIC. ORG. OF THE UNITED NATIONS, *supra* note 133, at 41.

137. *Id.*

138. See *id.* at 111.

139. BUDGET DYNAMICS, *supra* note 9, at 2.

140. Coronavirus Aid, Relief, and Economic Security Act, Pub. L. No. 116-136, 134 Stat. 505 (2020); Consolidated Appropriations Act, 2021, Pub. L. No. 116-260, 134 Stat. 1186 (2020).

141. *Billions in Covid-19 and Trade Relief for Farmers—How Was it Distributed?*, U.S. GOV'T ACCOUNTABILITY OFF. (Oct. 4, 2022), <https://www.gao.gov/blog/billions-covid-19-and-trade-relief-farmers-how-was-it-distributed> [<https://perma.cc/8R98-EFVN>].

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\$2 billion in supplemental spending for trade promotion and food aid from its authority to use the CCC.<sup>142</sup>

These ad hoc expenditures have created new debates within 2023 Farm Bill discussions. Congress must consider how the new bill will shore up the issues raised by the COVID-19 pandemic and its subsequent trade disruptions. Specifically, it must determine how the 2023 Farm Bill will respond to agricultural supply chain challenges, price inflation, the effects of international trade disputes, industry consolidation, and to what extent it will continue the temporary policies enacted in the pandemic relief bills.<sup>143</sup>

*2. The Bipartisan Infrastructure Law Provided \$2.9 Billion For USDA Wildfire and Flood Projects*

Aside from ad hoc supplemental spending, another major federal investment into agriculture since the 2018 Farm Bill includes the Bipartisan Infrastructure Law.<sup>144</sup> Unlike ad hoc spending, the \$5.5 billion in USDA appropriations included in the Infrastructure Investment and Jobs Act can be used to prevent environmental emergencies, rather than responding to them via direct payments.<sup>145</sup>

Included in the \$5.5 billion is about \$3 billion in investments to National Forest Service (FS) lands and resources.<sup>146</sup> This includes funding for wildfire management and ecosystem restoration.<sup>147</sup> The Infrastructure Investment and Jobs Act also includes \$918 million in funding for the Natural Resource Conservation Service (NRCS).<sup>148</sup> This money will go towards watershed infrastructure, encompassing the rebuilding and improvement of dams, water storage structures, flood management systems, and bank stabilization projects.<sup>149</sup> Funding for rural broadband and removing the cap on the Restoration Trust Fund, which gives the FS resources for efforts like post-wildfire reforestation, are also included.<sup>150</sup> Funding from the Infrastructure Investment and Jobs Act and the Restoration Trust Fund should help address the growing number of extreme wildfires in the United

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142. BUDGET DYNAMICS, *supra* note 9, at 2.

143. CROFT ET AL., *supra* note 72, at 4.

144. *Bipartisan Infrastructure Law*, U.S. DEP'T OF AGRIC. (Oct. 27, 2023, 10:33 PM), <https://www.usda.gov/infrastructure> [<https://perma.cc/FZR2-AT8T>].

145. *Id.*; Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, 135 Stat. 429 (2021).

146. *Bipartisan Infrastructure Law*, *supra* note 144.

147. *Id.*

148. *Id.*

149. *Id.*

150. *Id.*

States, such as the 2022 Hermit's Peak and Calf Canyon wildfire in New Mexico.<sup>151</sup> This was the largest wildfire in the state's history and was started as a prescribed burn by the FS.<sup>152</sup>

Without question, Congress will need to prioritize making sure wildfires are taken into account for the 2023 Farm Bill to prevent and respond to devastating fires like the ones in New Mexico. The same goes for flood management. Local communities, farmers, and foresters do not have the resources to combat rising temperatures, drought, overgrown forests, and floods alone.<sup>153</sup> Continued federal action is necessary to ensure the FS and NRCS have the requisite resources to tackle wildfire and flood management.

### *3. Congress's Appropriation Of \$25 Billion In the Inflation Reduction Act Will Aid Farmers, The White House, And the USDA In Expanding Climate-Smart Agriculture Practices*

From the start of the Biden Administration, the White House has prioritized climate change as a leading federal policy priority.<sup>154</sup> Just one week after taking office, President Biden issued an executive order entitled "Tackling the Climate Crisis at Home and Abroad."<sup>155</sup> The order directs each agency to work towards taking a government-wide approach to the climate crisis.<sup>156</sup> It placed the Secretary of Agriculture on the "National Climate Task Force" and used the phrase "climate-smart agricultural and forestry practices."<sup>157</sup> The term "climate-smart agriculture" (CSA) is now adopted across the globe, including by the United

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151. Tim Wallace & Nadja Popovich, *A 'Perfect Recipe for Extreme Wildfire': New Mexico's Record-Breaking, Early Fire Season*, N.Y. TIMES (June 1, 2022), <https://www.nytimes.com/interactive/2022/06/01/climate/new-mexico-wildfires.html>.

152. *Id.*

153. *Climate Change-Related Disasters a Threat to Food Security – FAO*, *supra* note 22.

154. *Fact Sheet: Prioritizing Climate in Foreign Policy and National Security*, THE WHITE HOUSE (Oct. 21, 2021), <https://www.whitehouse.gov/briefing-room/statements-releases/2021/10/21/fact-sheet-prioritizing-climate-in-foreign-policy-and-national-security/> [<https://perma.cc/GDZ6-75ZB>].

155. Exec. Order No. 14,008, 86 Fed. Reg. 7619 (Feb. 1, 2021).

156. *Id.* at 7622.

157. *Id.* at 7623, 7627.

Nations.<sup>158</sup> The use of this terminology is fairly new, considering “sustainable agriculture” was not defined in a Farm Bill until 1990.<sup>159</sup>

Following the executive order, the USDA requested information for a CSA and forestry strategy<sup>160</sup> and received over 400 comments from stakeholders.<sup>161</sup> This began the process of developing a new CSA and forestry partnership program.<sup>162</sup> After the USDA began taking these steps, Congress passed a broad reconciliation bill, titled the “Inflation Reduction Act of 2022” (IRA).<sup>163</sup>

The IRA is the largest climate change legislation passed by the federal government to date and includes massive subsidies for electric vehicles and clean power.<sup>164</sup> The bill included \$25 billion to augment forest management programs and climate-smart farming practices.<sup>165</sup> The agriculture title of the IRA amended portions of the Food Security Act of 1985, the Farm Security and Rural Investment Act of 2002, and the American Rescue Plan Act of 2021.<sup>166</sup> In doing so, it added over \$17 billion dollars in outlays for four programs in the Farm Bill’s conservation title and one program in the energy title.<sup>167</sup>

With the groundwork for a new program already laid by the USDA supported by its stakeholders and historic funding from the IRA, the USDA was able to create a new program titled “Partnerships for Climate Smart Commodities” (PCSC).<sup>168</sup> In September 2020, the USDA Secretary Tom Vilsack announced the USDA would be investing up to \$3.1 billion in 141 selected projects under the first pool of the PCSC funding opportunity.<sup>169</sup> On December 12, 2022, Secretary Vilsack announced \$325 million will be invested in an additional 71 projects under the

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158. *Climate-Smart Agriculture*, FOOD AND AGRIC. ORG. OF THE UNITED NATIONS (Oct. 29, 2023, 12:17 PM), <https://www.fao.org/climate-smart-agriculture/en/> [<https://perma.cc/9TUF-ZY7K>].

159. 7 U.S.C. § 3103(19) (originally enacted in Food, Agriculture, Conservation, and Trade Act of 1990, Pub. L. No. 101-624, § 1603, 104 Stat. 3359, 3705–06).

160. Request for Information, 86 Fed. Reg. 54149 (Sept. 30, 2021).

161. *Partnerships for Climate-Smart Commodities*, U.S. DEP’T OF AGRIC. (Oct. 30, 2023, 2:42 PM), <https://www.usda.gov/climate-solutions/climate-smart-commodities> [<https://perma.cc/3HNU-QF9K>].

162. *Id.*

163. Inflation Reduction Act of 2022, Pub. L. No. 117-169, 136 Stat. 1818.

164. *See* Stokstad, *supra* note 6.

165. *Id.*

166. Inflation Reduction Act §§ 20001–23005.

167. JOHNSON & MONKE, *supra* note 69, at 12–13, 15–16.

168. *See Partnerships for Climate-Smart Commodities*, *supra* note 161.

169. *Id.*

second funding pool.<sup>170</sup> Now, the USDA is selecting proposals based on projected benefits from GHG mitigation and carbon sequestration from on-farm practices associated with the production of climate-smart commodities, scalability, long-term viability of projects, and economic benefits for producers.<sup>171</sup> The IRA's funding is making this possible.

The projects selected using this funding came from all 50 states, two United States territories, 100 universities, and 20 tribal groups and will reach 60,000 farms and 25 million acres of working lands engaged in climate-smart production practices.<sup>172</sup> Over the lives of the selected projects, more than 60 million metric tons of carbon dioxide are expected to be sequestered.<sup>173</sup> Selected projects from corn and soy are expected to reduce GHG emissions by 47% for practices such as planting cover crops, utilizing conservation tillage, nutrient management, and other soil health practices.<sup>174</sup>

<b>Estimated GHG Benefits from First Pool of the USDA PCSC Projects</b> (50,000 million metric tons of carbon dioxide equivalent over lifetime of projects)		
<i>Major Commodity Group</i>	<i>% Estimated GHG Reductions</i>	<i>Climate-Smart Practices</i>
Corn and Soy	47%	Cover crops, conservation tillage, nutrient management (including biochar), and other soil health practices
Beef and Livestock	25%	Grazing optimization, silvopasture, range planting, nutrient

170. *Id.*

171. *Id.*

172. *Id.*; see also U.S. DEP'T OF AGRIC., PARTNERSHIPS FOR CLIMATE-SMART COMMODITIES BY THE NUMBERS (Oct. 30, 2023, 10:14 AM) [hereinafter PARTNERSHIPS FOR CLIMATE-SMART COMMODITIES BY THE NUMBERS], <https://www.usda.gov/sites/default/files/documents/pcsc-infographic-by-the-numbers.pdf> [https://perma.cc/264H-HPLJ].

173. PARTNERSHIPS FOR CLIMATE-SMART COMMODITIES BY THE NUMBERS, *supra* note 172.

174. *Partnerships for Climate-Smart Commodities Project Selection FAQs*, U.S. DEP'T OF AGRIC. (Jan. 30, 2023), <https://www.usda.gov/climate-solutions/climate-smart-commodities/faqs> [https://perma.cc/8PPG-F8F7].



		management, and other soil health practices
Dairy	6%	Manure management (not anaerobic digesters), enteric management, forest and shrub practices, and other soil health practices
Cotton and Peanuts	5%	Cover crops, conservation tillage, nutrient management, and other soil health practices
Rice	5%	Alternate wetting and drying and nutrient management
Fruit, Vegetables, Hemp, and Other Specialty Crops	4%	Forest and shrub practices, grazing and forage practices, nutrient management (including biochar, enhanced efficiency fertilizers and mulching/composting), and other soil health practices
Timber and Forests	3%	Forest and shrub practices and other soil health practices
Energy	3%	Forest and shrub practices, land conservation, cover crops, and conservation tillage
Sorghum Wheat and Grains	2%	Conservation tillage, cover crops, nutrient management (including biochar), and other soil health practices

Figure 3 – Source: USDA PCSC FAQs.<sup>175</sup>

The \$3.1 billion invested in 141 projects could impact climate mitigation programs by establishing base levels of program direction and achievement.<sup>176</sup> Interestingly, these selected projects are set to match, on average, 50% of the federal investment with non-federal funds.<sup>177</sup> From a budgetary perspective, the

175. *Id.*

176. PARTNERSHIPS FOR CLIMATE-SMART COMMODITIES BY THE NUMBERS, *supra* note 172.

177. *Id.*

IRA funding is not included in regular Farm Bill funding and is not permanent.<sup>178</sup> The authority is provided until Fiscal Year 2026, and the bill states the aforementioned \$17 billion in outlays may not occur after Fiscal Year 2031.<sup>179</sup> This is the start to what will be an impactful program. Its implementation, with funding from the IRA, is a reminder that with adequate funding in the right programs, the USDA can assist farmers in affecting significant climate mitigation and adaptation.

*E. The War in Ukraine Presents Ongoing Threats to United States Farm Input Costs, Trade, And Food Prices*

The ongoing war in Ukraine has also recently impacted the United States agriculture industry.<sup>180</sup> The war, unfolding in the breadbasket of Europe, has further strained the agricultural commodities market and caused the price of grain and oilseeds to reach record highs.<sup>181</sup> Russia is a major global producer of wheat and nitrogen-rich anhydrous ammonia fertilizers.<sup>182</sup> Ukraine and Russia's combined market share from 2015–2020 was 28% for wheat, 15% for corn, 66% for sunflower oil, and 16% for fertilizers.<sup>183</sup> Prior to the onset of the war in early 2021, Ukraine was the fourth largest corn exporter and the fifth largest wheat exporter—exporting up to three-quarters of its corn and wheat.<sup>184</sup>

Recent estimates suggest over \$6.6 billion in agricultural infrastructure in Ukraine has been destroyed as a result of the war, resulting in a drastic decrease in Ukrainian exports of grains and oilseeds.<sup>185</sup> By April 2022, the USDA reported Ukrainian corn and wheat exports were down 32% and 21%, compared to pre-war levels.<sup>186</sup> The United States has increased corn and wheat exports at high crop prices, which is good news for farmers, but the price of diesel fuel powering farm

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178. BUDGET DYNAMICS, *supra* note 9, at 2.

179. *Id.*

180. Thomas Glauben et al., *The War in Ukraine, Agricultural Trade and Risks to Global Food Security*, 57 INTERECONOMICS 157, 157 (2022).

181. *Id.*

182. *Id.*

183. *Id.*

184. *Id.*; Joe Janzen & Carl Zulauf, *The Russia-Ukraine War and Changes in Ukraine Corn and Wheat Supply: Impacts on Global Agricultural Markets*, UNIV. OF ILL. AT URBANA-CHAMPAIGN DEP'T OF AGRIC. AND CONSUMER ECON.: FARMDOC DAILY (Feb. 24, 2023), <https://farmdocdaily.illinois.edu/2023/02/the-russia-ukraine-war-and-changes-in-ukraine-corn-and-wheat-supply-impacts-on-global-agricultural-markets.html> [<https://perma.cc/QN6Q-MXS3>].

185. Janzen & Zulauf, *supra* note 184.

186. *Id.*

equipment and nitrogen fertilizers are also at an all-time high—accounting for greater than one-fifth of farm cash costs for producing that same wheat and corn.<sup>187</sup>

The war in Ukraine’s contribution toward declining farm income and rising input costs in the United States comes at a time where the supply chain is already stressed from the ramifications of COVID-19.<sup>188</sup> As for climate projects in the 2023 Farm Bill, the war in Ukraine poses a challenge.<sup>189</sup> Putting additional land into production and allowing for flexibility to the Conservation Reserve Program (CRP) contracts could provide relief but is contrary to furthering a climate agenda.<sup>190</sup> As the war in Ukraine continues, input costs, food prices, and inflation continue weighing on American farmers, and the Farm Bill cannot ignore this ongoing crisis—even in pursuit of promoting climate-smart resource conservation.<sup>191</sup>

*F. Two Versions of the 2023 Farm Bill Will Be Drafted as the 118<sup>th</sup> Congress Is Politically Divided*

While this Article does not delve deeply into the politics of Farm Bill passage, to ignore the political dimensions of the Farm Bill debate would be to ignore the elephant in the room. The 118th Congress is divided for the 2023 Farm Bill.<sup>192</sup> After the 2022 midterm elections, Republicans have a slight majority in the House of Representatives and the Democrats retain control of the Senate.<sup>193</sup>

The last time one party fully controlled a Farm Bill’s passage was in 2008 when Democrats controlled the House and the Senate.<sup>194</sup> The 2014 Farm Bill was passed under a Republican-led House and a Democratic-led Senate; however, it was passed after a two-year impasse due to prolonged negotiations over spending

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187. Kane Farabaugh, *Ukraine War Creates Risks, Benefits for US Farmers*, VOICE OF AM. (Oct. 20, 2022, 3:04 PM), <https://www.voanews.com/a/ukraine-war-creates-risks-benefits-for-us-farmers-/6796886.html> [<https://perma.cc/D2HV-43VT>].

188. Jenna Hoffman, *Factors That Will Shape the 2023 Farm Bill*, AG WEB (Mar. 31, 2022), <https://www.agweb.com/news/policy/politics/factors-will-shape-2023-farm-bill> [<https://perma.cc/KY8Z-89ZD>].

189. *Id.*

190. *Id.*

191. *Id.*

192. *Id.*

193. Shane Goldmacher, *Republicans Capture Control of the House After Falling Short of Midterm Expectations*, N.Y. TIMES (Nov. 16, 2022), <https://www.nytimes.com/2022/11/16/us/politics/house-control-congress.html>.

194. See David Stout, *Farm Bill, in Part and in Full, Wins Passage*, N. Y. TIMES (May 23, 2008), <https://www.nytimes.com/2008/05/23/washington/23farm.html>.

priorities.<sup>195</sup> The 2018 Farm Bill was passed under a Democratic-led House and a Republican-led Senate.<sup>196</sup> Thus, the Farm Bill is no stranger to a divided Congress.

The Farm Bill is one of many pieces of federal legislation made stronger with a bipartisan effort as the politics of a Farm Bill passage are not always cut along basic partisan lines.<sup>197</sup> Unifying commodity and nutrition programs into one piece of legislation has maintained a rural-urban coalition for years, allowing both sides to claim victory over the passing of a Farm Bill.<sup>198</sup> Even so, 2023 poses unique political challenges for the Farm Bill.

The 2023 Farm Bill will serve as a test for whether climate advocates can ride on the success of the IRA in a split Congress.<sup>199</sup> The new Chairman for the House Committee on Agriculture, Representative G.T. Thompson, has made clear the “next Farm Bill should not be framed as a climate bill.”<sup>200</sup> He has vowed to “not prioritize climate over every other resource concern” or “overemphasize climate within the conservation or research titles” of the 2023 Farm Bill.<sup>201</sup> Despite this climate skepticism, the Farm Bill does not need to be a “climate bill” to drive innovation.<sup>202</sup>

A split Congress will force both parties to merge separate versions of the Farm Bill into one that takes a balanced and pragmatic approach.<sup>203</sup> Regardless, Democrats in the Senate are likely to focus on protecting SNAP and ensuring the USDA has the tools it needs to help farmers respond to the climate crisis, while Republicans are likely to focus on protecting the farm safety net and believe the IRA has already done enough for climate.<sup>204</sup> Public funding for agricultural education, research, and development will likely find broad support across the board.<sup>205</sup> Relative to total spending in a Farm Bill, these smaller investments in

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195. Heiligenstein, *supra* note 2.

196. Jeff Stein, *Congress Just Passed an \$867 Billion Farm Bill. Here's What's in It.*, THE WASH. POST (Dec. 12, 2018, 5:03 PM), <https://www.washingtonpost.com/business/2018/12/11/congresss-billion-farm-bill-is-out-heres-whats-it/> [https://perma.cc/E2JV-7KN6].

197. KEENEY, *supra* note 8, at 4.

198. *See id.*

199. Emily Bass, *In a Split Congress, is a Climate Farm Bill Really Best?*, THE HILL (Jan. 17, 2023, 4:00 PM), <https://thehill.com/opinion/energy-environment/3816674-in-a-split-congress-is-a-climate-farm-bill-really-best/> [https://perma.cc/N4EL-J4NM].

200. *Id.*

201. *Id.*

202. *Id.*

203. *Id.*

204. KEENEY, *supra* note 8, at 3.

205. Bass, *supra* note 199.

education and research are rarely debated. No matter the politics, improving conservation and energy programs, boosting research funding, and reauthorizing the farm safety net can all be done without filling the bill with climate buzzwords.<sup>206</sup> The programs can do the talking.

### III. DISCUSSION

Every Farm Bill involves many moving parts, and while climate adaptation is deeply embedded in the Farm Bill's history, climate mitigation has yet to make its way into any Farm Bill in a significant way.<sup>207</sup> The events of the last five years and the amount of supplemental funding authorized since the 2018 Farm Bill are sure to influence policy expectations surrounding the 2023 bill.

Typically, a successful Farm Bill is dependent on the presence of a few crucial items, including the four titles accounting for 99% of anticipated Farm Bill mandatory outlays—Nutrition, Crop Insurance, Commodity Programs, and Conservation.<sup>208</sup> No matter what, the allotment of mandatory spending usually dominates the Farm Bill debate.<sup>209</sup> Mandatory spending takes up the largest portion of spending in the bill and determines whether a bill is budget neutral, meaning it has a zero score relative to its baseline.<sup>210</sup>

Consideration for advancing climate-focused provisions in the Farm Bill is subject to a few realities which include: (1) the baseline for mandatory spending, (2) limits on discretionary spending, (3) differing political priorities of the House and Senate agriculture committees, and notably, (4) what United States farm policy stakeholders expect out of the Farm Bill.<sup>211</sup> The following analysis discusses each of these realities in determining how the 2023 Farm Bill can make realistic progress towards agricultural climate adaptation and mitigation.

Providing for the highest levels of mandatory farm support possible and incorporating incentivization for climate-smart practices may be the most feasible route to further agricultural climate adaptation.<sup>212</sup> Because such high levels of mandatory spending may curb the addition of any new climate-focused provisions,

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206. *Id.*

207. *Id.*

208. JOHNSON & MONKE, *supra* note 69, at 4.

209. *Id.*

210. *See id.*

211. KEENEY, *supra* note 8, at 4.

212. *See id.* at 3.

the greatest support for agricultural climate mitigation as it relates to agriculture likely resides in the bill's discretionary programs.<sup>213</sup>

*A. Cbo's Baseline for Mandatory Spending Shows That The 2023 Farm Bill Will Be the First Trillion-Dollar Farm Bill, Reflecting Both Post-2018 Ad Hoc Spending and The Current Economy*

In May 2023, CBO released its latest projections and analysis for the federal debt and the statutory debt limit along with a new five and 10-year baseline for the 2023 Farm Bill.<sup>214</sup> The most recent CBO baseline is an important indicator of what the upcoming bill's budget is shaping up to be.<sup>215</sup> Prices for certain commodities and high food prices linked to inflation indicate the 2023 Farm Bill will likely be the most expensive Farm Bill passed by Congress to date.<sup>216</sup>

The May 2023 CBO baseline projects outlays for mandatory Farm Bill programs will cost \$725 billion over five years and nearly \$1.5 trillion over 10 years.<sup>217</sup> This totals over \$140 billion dollars each fiscal year.<sup>218</sup> The Nutrition title alone is expected to cost \$1.223 trillion over 10 years, comprising 84% of the baseline, 8% higher than when the 2018 Farm Bill was enacted.<sup>219</sup> All other mandatory programs (e.g., crop insurance, conservation, and commodity support) are expected to cost \$240 billion over 10 years, also higher than the 2018 Farm Bill by 14%.<sup>220</sup> For farmers, the largest share is crop insurance.<sup>221</sup>

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213. *See id.*

214. BUDGET DYNAMICS, *supra* note 9.

215. *Id.*

216. *See id.*

217. *Id.*

218. Coppess, *supra* note 88.

219. BUDGET DYNAMICS, *supra* note 9.

220. *Id.*

221. Coppess, *supra* note 88, at 2.

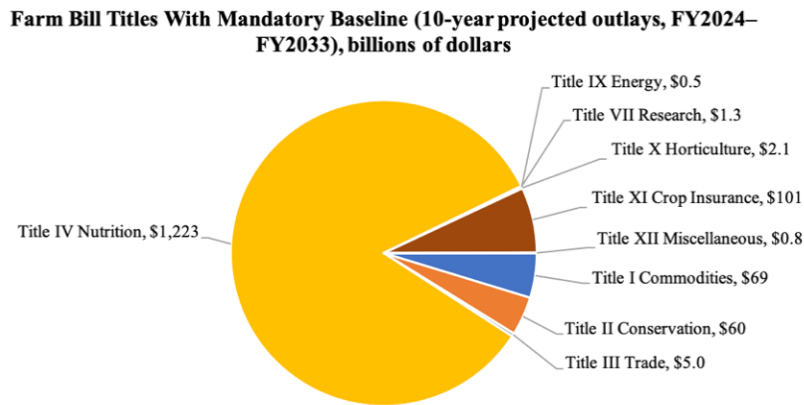


Figure 4 – Source: CBO May 2023 Baseline Projection for the USDA Farm Programs<sup>222</sup>

The magnitude of supplemental spending in recent years has influenced this high baseline.<sup>223</sup> The \$15 billion for ad hoc disaster relief, \$23 billion for trade relief, and combined \$91 billion for COVID-19 farm support and nutrition programs made separate from the Farm Bill baseline demonstrated the 2018 Farm Bill was unprepared for the events following its passage.<sup>224</sup> Furthermore, the \$2.9 billion for USDA broadband and watershed programs in the Bipartisan Infrastructure Act and the IRA's \$17 billion dollars in outlays for Farm Bill programs showed Congress's willingness to invest in agriculture separate from the 2018 Farm Bill.<sup>225</sup>

Some may argue the sheer amount of supplemental funding in the last several years exposed weaknesses in the Farm Bill system. Others might say the effects of natural disasters, the Trump Administration's trade policies, and the COVID-19 pandemic could not have been predicted at the time Congress passed the 2018 Farm Bill. Either way, there is concern regarding how supplemental funding since 2018 has altered the effectiveness of Farm Bill programs.<sup>226</sup> A reliable, consistent Farm Bill equipped to tackle a crisis yet to occur is necessary. The USDA must be prepared to respond without the White House's intervention when unanticipated

222. BUDGET DYNAMICS, *supra* note 9.

223. JOHNSON & MONKE, *supra* note 69, at 4.

224. *Id.* at 5.

225. *See id.* at 6.

226. *See generally* CROFT ET AL., *supra* note 72.

events occur. Such a high baseline for mandatory spending is a reflection of that—and the current economy.

*B. To Achieve a Budget-Neutral Bill That Strengthens Agriculture's Climate Response, Increased Spending on Farm Programs and Reductions in Nutrition Spending May Be Necessary*

Under the current budget rules, any increase in one program's funding in the 2023 Farm Bill will likely need to be offset by reductions elsewhere. Deliberation regarding nutrition assistance spending from 2024–2033 is already occurring.<sup>227</sup> The debate between providing additional funding for nutrition programs versus farm programs is to be expected, especially when Congress is split during a reauthorization year. The 2014 Farm Bill's passage was delayed for months because of this fight.<sup>228</sup>

Climate change, commodity support, conservation, and crop insurance programs are some of the best established "climate" measures that the Farm Bill provides.<sup>229</sup> Providing extra cushion for commodity-based revenue support programs and crop insurance is crucial to give farmers the capability to adapt when climate-related disasters occur. Likewise, increasing funding for conservation programs is necessary if a greater number of farmers are to mitigate GHG emissions on working lands.

Increasing outlays for Title I Commodities programs like Price Loss Coverage (PLC), Agricultural Risk Coverage (ARC), and disaster relief for livestock producers is necessary as natural disasters will continue to haunt farmers nationwide over the coming years.<sup>230</sup> A farmer's financial response to natural disasters often depends on these federal programs.<sup>231</sup> Increased funding for Title XI Crop Insurance is also important so farmers may remain in business if their crop is lost from natural circumstances out of their control.<sup>232</sup>

Furthermore, increasing outlays for Title II Conservation programs like the CRP, the Environmental Quality Incentives Program (EQIP), and the Conservation

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227. See *SNAP and Other Nutrition Assistance in the Farm Bill: Hearing Before the S. Subcomm. on Food and Nutrition, Specialty Crops, Organics, and Rsch.*, 118th Cong. (2023), <https://www.agriculture.senate.gov/hearings/snap-and-other-nutrition-assistance-in-the-farm-bill>.

228. JIM MONKE, CONG. RSCH. SERV., R45210, *FARM BILLS: MAJOR LEGISLATIVE ACTIONS, 1965–2018*, at 1 (2018).

229. See *Agriculture Improvement Act of 2018*, Pub. L. No. 115-334, 132 Stat. 4490.

230. See generally *Agriculture Improvement Act*, Title I.

231. See generally *id.*

232. See generally *Agriculture Improvement Act*, Title XI.



Stewardship Program (CSP) will be crucial to support further engagement with cost-share assistance for implementing conservation practices on working lands.<sup>233</sup> To balance the scales and avoid producing a bill with a positive score (spending more relative to the baseline), nutrition programs like SNAP would have to see decreases in funding.<sup>234</sup>

The debate between funding farm and nutrition programs is sure to ensue as the House and the Senate are drafting two separate bills.<sup>235</sup> As inflation keeps food prices high across the United States, calling for reductions in nutrition funding to make room for other priorities is a difficult argument to make.<sup>236</sup> However, the House is likely to take on this fight, although not in pursuance of a climate-related win.<sup>237</sup> No matter the political reasoning, increasing outlays for farm programs is a smart move. The weather is unpredictable, and natural disasters are only becoming more frequent.<sup>238</sup> However, Congress likely will not pass a bill that decreases nutrition spending in a time where nearly a quarter of Americans struggle with food insecurity.<sup>239</sup> Boosting funding for mandatory farm programs like CRP and PLC seems simple when the only consideration is climate adaptation and mitigation. However, these types of mandatory spending decisions are morally challenging because of the need to alleviate food insecurity in the United States. Another option is to carve out incentives for farmers within mandatory farm programs that do not increase spending.

*1. Incentivizing Climate-Smart Practices Within Mandatory Farm Programs Requires No Additional Funding and Could Provide Climate Benefits*

It is unlikely any new mandatory programs focused on climate mitigation will be established in the 2023 Farm Bill. A historically high baseline and new debate surrounding SNAP work requirements will likely control budget discussions.<sup>240</sup> There is simply not enough room in the budget without cutting out

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233. *Id.*

234. See Lubben, *supra* note 108.

235. See Jones, *supra* note 78.

236. See Aimee Picchi, *Nearly a Quarter of U.S. Adults Sometimes Don't Get Enough to Eat*, CBS NEWS (Mar. 21, 2023, 5:01 AM), <https://www.cbsnews.com/news/one-in-four-americans-food-insecure/> [<https://perma.cc/T7Y3-DTMC>].

237. See Jones, *supra* note 78.

238. See *Billion-Dollar Weather and Climate Disasters*, *supra* note 21.

239. Picchi, *supra* note 236.

240. See Lubben, *supra* note 108.

substantial funding from essential programs integral to a modern Farm Bill.<sup>241</sup> Unlike forecasts for commodity markets and food prices, farmers find it difficult to lobby the Congressional agriculture committees for aid when climate disasters of the future have yet to occur. Realistically, this makes passing significant increases in mandatory spending for new climate-specific programs almost obsolete. Thus, Congress's focus should be on maximizing levels of farm support within the bill's established programs. While there are no current programs specific to climate change adaptation or mitigation, several existing "programs can integrate climate-related goals within their current structures."<sup>242</sup>

Congress can take steps to support climate measures within existing programs without the need for additional funding. Under Title XI, a change to crop insurance could include offering insurance premium rebates for farmers who voluntarily implement climate-smart practices.<sup>243</sup> Financial incentives such as this may encourage farmers who are not enrolled in traditional crop insurance to do so. Under Title II Conservation, a new provision could be included to relieve landowners who enroll their acreage in conservation easements from federal estate taxes.<sup>244</sup> Income tax deductions are already established incentives behind conservation easements.<sup>245</sup> Additionally, Congress could include an amendment that absolves participating landowners from estate tax liabilities that are often associated with inheriting assets fixed in land, livestock, and equipment.<sup>246</sup> While these potential inclusions would score on the revenue side, provisions like these could have the potential to keep smaller family farms in business and allow working lands to recharge and regain biodiversity.<sup>247</sup>

Modifying existing programs by including incentives may ease some of the financial hesitations farmers and landowners have towards implementing climate-smart practices and participating in voluntary land conservation. Mandatory farm programs are inherent adaptation measures. Programs like PLC

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241. See Lena Beck, *The Farm Bill Expired. What Happens Now?*, MODERN FARMER (Oct. 2, 2023), <https://modernfarmer.com/2023/10/the-farm-bill-expired-what-happens-now/> [<https://perma.cc/D2HE-YLW9>].

242. CROFT ET AL., *supra* note 72, at 28.

243. See SARAH DEWEY ET AL., OPPORTUNITIES TO ADDRESS CLIMATE CHANGE IN THE FARM BILL 19 (2017), [http://clinics.law.harvard.edu/environment/files/2018/02/Farm-Bill-Paper-FINAL\\_12-20-17.pdf](http://clinics.law.harvard.edu/environment/files/2018/02/Farm-Bill-Paper-FINAL_12-20-17.pdf) [<https://perma.cc/RXB3-3GH7>].

244. Amy Blake, Comment, *How a New Farm Bill with a Twist on Conservation Easements Can Save the Environment and the Family Farm*, 54 TEX. TECH L. REV. 755, 784 (2022).

245. *Id.* at 759–60.

246. *Id.* at 778–80.

247. See generally *id.* at 776–77.

and ARC often serve to allow farmers to adapt to financial struggles when utilized after climate-related disasters.<sup>248</sup> With built-in incentives, programs like CRP and CSP could have the potential to influence climate mitigation without having to fight for additional funding.<sup>249</sup> Because the budget for mandatory spending is where the largest debates occur, focusing on funding smaller discretionary programs is crucial if the 2023 Farm Bill is to make a significant dent in agricultural emissions.

*C. Discretionary Spending, Particularly for Programs Housed in the Energy and Research Titles, Are the Most Critical for Helping Farmers Mitigate GHG Emissions*

Given that most of the debate surrounds the allocation of mandatory spending, great opportunity for climate progress lies within the Farm Bill's much smaller discretionary spending programs.<sup>250</sup> For the Farm Bill to make the maximum amount of impact on agricultural climate mitigation, it is useful to remember the major sources of agricultural GHG emissions (i.e., nitrous oxide and methane) and promote programs affecting changes in these areas.<sup>251</sup> The Farm Bill contains a number of existing programs useful for mitigating further emissions with increased participation from farmers, ranchers, and landowners.<sup>252</sup>

Some of the programs with opportunity for climate progress are housed within the Energy title (Title IX) and the Research title (Title VII).<sup>253</sup> The Farm Bill's Energy title is centered around developing agriculture-based renewable energy through use of technologies such as anaerobic digesters, corn-based ethanol, and wind farms.<sup>254</sup> Energy programs that receive discretionary funding include the Rural Energy for America Program (REAP), the Rural Energy Savings Program (RESP), and the Sun Grant Program (SGP).<sup>255</sup> Agriculture-based renewable energy not only fits into the energy portfolio of the United States but also helps address climate goals.<sup>256</sup>

Finding ways to engage producers, especially feedlot operators and dairy farmers, in programs like REAP is essential to mitigating methane emissions from

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248. See CROFT ET AL., *supra* note 72, at 12.

249. See *id.* at 27.

250. See *id.* at 3–5.

251. Steele & Hatfield, *supra* note 17.

252. See CROFT ET AL., *supra* note 72, at 3.

253. See *id.*

254. *Id.* at 47–48.

255. *Id.*

256. *Id.*

the livestock industry. Another way to mitigate methane emissions is by establishing a new discretionary program providing grants to qualifying concentrated animal feeding operations to advance and improve their manure management and storage methods.<sup>257</sup> Implementing practices to mitigate methane emissions often requires farm operators to obtain education and technical assistance.<sup>258</sup> Extending these services to a greater number of farmers can be made possible by providing funding for extension services in Title VII.<sup>259</sup>

Title VII has an important role to play if the 2023 Farm Bill is to address climate change in an impactful way.<sup>260</sup> It authorizes funding for research and outreach activities conducted at land-grant universities and other nonfederal institutions, as well as research conducted by federal researchers.<sup>261</sup> Most Farm Bill research programs require annual discretionary appropriations, and a few receive mandatory spending.<sup>262</sup> There is significant opportunity here considering \$3.4 billion in discretionary appropriations were given to USDA research agencies in 2021 alone.<sup>263</sup> Increasing funding for research is one of the most promising moves Congress can make for carbon capture. The more access farmers have to information relating to how they can alter their practices to reduce emissions on their individual operations, the more they can contribute by implementing these practices.<sup>264</sup>

In drafting the 2023 Farm Bill, Congress should recognize the effectiveness of the USDA's new PCSC program.<sup>265</sup> The PCSC program should help expand markets and revenue streams for producers while tackling agricultural emissions, thus creating a strong incentive for agricultural entities to participate in climate mitigation.<sup>266</sup> Other authors have suggested that Congress establish a "Climate-Smart Certification" program, similar to that of the USDA's organic certification.<sup>267</sup> This could be a way to supplement the PCSC program and open a new market opportunity for producers through the Farm Bill. Regardless, the 2023 Farm Bill should use every opportunity to provide opportunities for education and

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257. See MacKenzie Thurman, Note, *Climate-Smart Agriculture Certification: A Call for Federal Action*, 122 COLUM. L. REV. F. 37, 38, 55 (2022).

258. See *id.* at 46–47.

259. See CROFT ET AL., *supra* note 72, at 43–45.

260. See *id.*

261. *Id.* at 43.

262. *Id.* at 44.

263. *Id.*

264. See Thurman, *supra* note 257, at 57–58.

265. See *Partnerships for Climate-Smart Commodities*, *supra* note 157.

266. See *id.*

267. Thurman, *supra* note 257, at 39.

access to PCSC grant funding. In light of the program's potential for significant climate mitigation, Congress should give heavy prioritization to discretionary funding for institutional research, as the PCSC program creates a need for continued research on climate-smart agricultural practices.

Funding is vital to conducting further research on climate-smart mitigation strategies and increasing their adoption through tailored communication and education.<sup>268</sup> Broadening access to important climate data and increasing support for agricultural climate research and development is fundamental to addressing climate change in the agriculture sector.<sup>269</sup> The 2023 Farm Bill can advance these measures if the House and Senate committees can come together on this issue. Not only will they need to come together for the 2023 Farm Bill's passage, but they also will need to remain committed to authorizing higher levels of funding for these programs in 2024 and 2025 under limitations set by the Fiscal Responsibility Act of 2023.<sup>270</sup>

*D. Incentive-Based Programs That Compensate Producers for Implementing Mitigation Measures Are Politically Feasible*

Realistically, unless climate adaptation and mitigation measures are incentive-based, they are unlikely to pass Congress and unlikely to be used by farmers.<sup>271</sup> A voluntary, incentive-based Farm Bill provision might include establishing a carbon bank financed through the CCC.<sup>272</sup> Through such an authorization, the USDA could finance GHG reduction and carbon sequestration practices by purchasing carbon credits from farmers and foresters.<sup>273</sup> Compensating producers for their sustainability efforts is politically feasible when compared to imposing regulations. Moreover, it gets farmers socially on board.

Even so, where the funding lies for incentives like carbon crediting in a budget-neutral bill remains the question. Agriculture is regulated in certain areas, but not directly through the Farm Bill.<sup>274</sup> Some significant examples of regulation include the USDA's vast oversight of food safety standards and food quality grades

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268. *See id.* at 57.

269. *See id.* at 50.

270. *See* Lubben, *supra* note 108.

271. *See* Thurman, *supra* note 257, at 43.

272. *See* Sellars, *supra* note 55.

273. *Id.*

274. *See generally* David Saxowsky, *History of US Government Response*, N.D. STATE UNIV. DEP'T OF AGRIBUSINESS AND APPLIED ECON. (Jan. 5, 2008), [https://www.ndsu.edu/pubweb/~saxowsky/aglawtextbk/chapters/foodlaw/HistoryFS\\_000.html](https://www.ndsu.edu/pubweb/~saxowsky/aglawtextbk/chapters/foodlaw/HistoryFS_000.html) [<https://perma.cc/Z422-UYZV>].

as well as the EPA's regulation of the environmental impacts on water from livestock waste and pesticide application.<sup>275</sup>

For the most part, the Farm Bill is not designed to direct government agencies to regulate agricultural production practices.<sup>276</sup> Even after 18 reauthorizations since its genesis in 1933, most of the Farm Bill remains a safety net.<sup>277</sup> It would be unprecedented for a Farm Bill to direct the USDA to regulate how farmers manage their individualized operations, especially concerning GHG emissions.<sup>278</sup> Therefore, all climate-focused Farm Bill provisions apt to pass Congress need to be incentive-based, and the most promising ones will allow farmers to make a profit.

#### IV. CONCLUSION

Overall, there are great opportunities to improve agriculture's climate change adaptation and mitigation measures in the Farm Bill. However, Congress is challenged in its capacity to do so. The baseline for the 2023 Farm Bill shows Congress simply does not have the capacity to do what the IRA did again.<sup>279</sup> Throwing undefined money at the USDA, especially after the IRA and the Bipartisan Infrastructure Act, is probably not an option, considering the 2023 Farm Bill will be the most expensive on record.<sup>280</sup> A priority for the forthcoming bill should be getting back to a reliable, consistent Farm Bill after all the supplemental spending since the 2018 bill.

Congress can focus on better preparing for future climate-related challenges by maximizing farm support in the bill's mandatory spending programs and by

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275. *Id.*

276. *Sen. Marshall Announces Introduction of EATS Act to Ensure State's Autonomy over Agricultural Practice*, DOC MARSHALL — U.S. SENATOR FOR KANSAS (June 15, 2023), <https://www.marshall.senate.gov/newsroom/press-releases/sen-marshall-announces-introduction-of-eats-act-to-ensure-states-autonomy-over-agricultural-practices/#:~:text=Consistent%20with%20that%20duty%2C%20this%20bill%20prevents%20states> [https://perma.cc/DL2U-ZZLW].

277. *Farm Bill 101: Protecting Food Access for Families*, U.S. SENATE COMM. ON AGRIC., NUTRITION, & FORESTRY (July 25, 2023), <https://www.agriculture.senate.gov/newsroom/dem/press/release/farm-bill-101-protecting-food-access-for-families> [https://perma.cc/8PZ7-KV8Y].

278. *See generally History of the United States Farm Bill*, *supra* note 5.

279. *Inflation Reduction Act Leaves Farmers and Traditional Conservation Programs Behind*, U.S. SENATE COMM. ON AGRIC., NUTRITION, & FORESTRY (Sept. 14, 2023), <https://www.agriculture.senate.gov/newsroom/minority-blog/inflation-reduction-act-leaves-farmers-and-traditional-conservation-programs-behind> [https://perma.cc/NU6S-YLKW].

280. KEENEY, *supra* note 8, at 3.

carving out incentives. In a way, disaster programs, ARC, PLC, CRP, and crop insurance already serve as successful adaptation measures.<sup>281</sup> They make producers whole during periods of market disruptions and devastating weather events—crisis often attributed to climate change.<sup>282</sup> These programs are far from perfect in that they often allow producers to keep doing what they have always done, but this bodes the question, “where would United States agriculture be without these federal resources?”

These types of farm supports represent what the Farm Bill was designed to accomplish amidst the Dust Bowl and the Great Depression almost a century ago.<sup>283</sup> Still, these programs must improve to help producers adapt to and mitigate climate impacts of the future. Regarding climate-focused provisions, the reality is nutrition programs are going to comprise at least 80% of the 2023 Farm Bill.<sup>284</sup> Congress can work around this budget barrier and still produce a budget-neutral bill by amending mandatory farm programs to create financial incentives so farmers will continue implementing climate-smart practices.

Tweaking existing Title IX Energy programs to encourage further engagement in biofuel production and improved livestock manure management is one of the best ways the Farm Bill can support reducing methane emissions. Additionally, one of the greatest rooms for climate success lies within the Farm Bill’s discretionary funding for Title VII’s research, development, extension, and education programs. This is a policy item on which both the House and Senate committees can find compromise.

Lastly, the Farm Bill has a great responsibility to support farm profits and food security in the United States. The Farm Bill already contains a variety of programs equipped to integrate climate-related goals within their current structures. With participation from farmers, ranchers, landowners, and foresters nationwide, the 2023 Farm Bill will be a crucial tool in agriculture’s ability to adapt to and mitigate climate-related crisis over the next 10 years.

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281. CROFT ET AL., *supra* note 72, at 16.

282. *Id.* at 15.

283. *History of the United States Farm Bill*, *supra* note 5.

284. Coppess, *supra* note 88.