A PINT FOR A BUSHEL AND A PECK: AN AGRICULTURAL FUND FOR CLIMATE ADAPTATION AND MITIGATION

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INTRODUCTION

Conventional agriculture in the United States is synonymous with an abuse and overuse of resources—from clearcutting forests for grazing animals and extracting water from ever-fragile ecosystems, to over-relying on chemical pesticides and overapplying fertilizers. Many agricultural policies foster the over-production of commodity crops like corn, wheat, and cotton, while undervaluing domestic production of "variety" crops like fruits and vegetables. These broad generalizations have some nuances; however, broadly speaking, the United States' attitude about agriculture is "get big or get out."[1]

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1. An aphorism by Earl Butts, Secretary of Agriculture from 1971–1976, who paved the way for major consolidation and industrialization at the expense of family farms and environmentally

Despite its bounty, the American agricultural sector relies heavily on the U.S. government for support. The 2018 Farm Bill budgeted billions of dollars in direct payments to farmers, primarily in the form of commodity insurance programs.[2] These programs fund commodity crop production and disproportionally assist large farms in concentrated areas across the U.S.[3] Socially disadvantaged farmers—especially those who do not own land, farm large acreages, or grow commodity crops—have difficulty accessing sufficient government subsidies.[4] Moreover, the longstanding policy of American agricultural exceptionalism largely absolves the industry of environmental degradation.[5] The field runs wild to the detriment of the American farmers, entire ecosystems, and the climate. As a counterbalance, a broad tax on agriculture would push growers towards better climate-conscious practices, while producing a revenue stream that would aid American farmers in their times of need.

This Article explores existing policy incentives for climate-conscious agricultural practices and proposes a sweeping taxation schema on agriculture to better address the climate crisis. It first addresses the state of agricultural harms to the environment with a broad breakdown of greenhouse gas emissions from farming. This involves a case example of a major source of greenhouse gas emissions directly connected to fossil fuel use: synthetic nitrogen-based fertilizer. It then discusses existing U.S. governmental assistance programs within the Department of Agriculture focused on conservation efforts, and highlights the Inflation Reduction Act's impact on climate-conscious policies. Finally, inspired by proposed carbon tax legislation in the U.S. and an enacted agricultural tax in Denmark, this paper

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conscious farming. *See* Noah Wurtz, *Butz's Law of Economics*, AGRARIAN TR. (Jan. 23, 2023), https://www.agrariantrust.org/butzs-law-of-economics.

2. JIM MONKE, CONG. RSCH. SERV., IF12233, FARM BILL PRIMER: BUDGET DYNAMICS 2 (2024).

3. NAT'L SUSTAINABLE AGRIC. COAL., UNSUSTAINABLE: STATE OF THE FARM SAFETY NET 15–20 (2024).

4. *Id.* at 7. "Socially Disadvantaged Farmer" is a statutory term. *See* 7 U.S.C. §§ 2003, 2279; *see also* RENÉE JOHNSON, CONG. RSCH. SERV., R46727, DEFINING A SOCIALLY DISADVANTAGED FARMER OR RANCHER (SDFR): IN BRIEF (2021).

5. A long-standing policy protecting agricultural production at all costs. For more information about exemptions for critical labor standards, *see* Autumn L. Canny, *Lost in A Loophole: The Fair Labor Standards Act's Exemption of Agricultural Workers from Overtime Compensation Protection*, 10 DRAKE J. AGRIC. L. 355 (2005). For the expansion of right-to-farm laws preventing nuisance complaints against concentrated animal feeding operations, *see* Danielle Diamond et al., *Agricultural Exceptionalism, Environmental Injustice, and U.S. Right-to-Farm Laws*, 52 ENV'T L. REP. 10727–47 (2022). For exemptions from environmental laws, *see* Ryan Levandowski, *Polluting 'til the Cows Come Home: How Agricultural Exceptionalism Allows CAFOs Free Range for Climate Harm*, 33 GEO. ENV'T L. REV. 151, 153 (2020).

proposes a tripartite tax schema to create a climate mitigation fund for farmers and incentives for adaptive climate-conscious practices.

I. CLIMATE CHANGE AND AMERICAN AGRICULTURE

The consequences of climate change on ecosystems are frightening, as is the projection of food security in the coming decades.[6] As global heat increases, heatwaves and droughts follow.[7] Poultry and livestock are susceptible to stress from excessive heat and humidity—dairy cows are particularly susceptible due to their high metabolism.[8] Heat stress not only harms the animals, but reduces their production of meat, milk, and eggs.[9] Unexpected freezes, elongated dry spells, and relentless floods kill crops and damage farm infrastructure.[10] Climate change is shifting water availability, from essential precipitation contributing to surface water (i.e., winter snow and summer rain) to the quality of that water from contaminated runoff (i.e., contamination from industrial zones or fields with excessive fertilizer).[11] The ecological costs are high, as are economic costs. The U.S. alone experienced 27 "billion-dollar" disaster events in 2024 with damages surpassing $180 billion.[12] By 2049, climate change will cost $38 trillion per year globally.[13]

Amidst this snapshot of threats to domestic food production, American agriculture is a hearty contributor to its own demise. The Environmental Protection Agency estimates that 10.5% of U.S. greenhouse gas emissions in 2022 were from the agricultural sector.[14] While carbon dioxide emissions hover around 11.6%, methane emissions accounted for 41.7%, and nitrous

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6. *See* Rachel Bezner Kerr et al., *2022: Food, Fibre, and Other Ecosystem Products*, *in* CLIMATE CHANGE 2022: IMPACTS, ADAPTATION AND VULNERABILITY 713, 717 (H.O. Pörtner et al. eds., 2022); *see also* June-Yi Lee et al., *2021: Future Global Climate: Scenario-Based Projections and Near-Term Information*, *in* CLIMATE CHANGE 2021: THE PHYSICAL SCIENCE BASIS 553, 557 (Valérie Masson-Delmotte et al. eds., 2021).

7. *See* Veronika Eyring et al., *2021: Human Influence on the Climate System*, *in* CLIMATE CHANGE 2021: THE PHYSICAL SCIENCE BASIS 423, 449 (Valérie Masson-Delmotte et al. eds., 2021).

8. NIGEL KEY ET AL., U.S. DEP'T OF AGRIC.: ECON. RSCH. SERV., ERR-175, CLIMATE CHANGE, HEAT STRESS, AND U.S. DAIRY PRODUCTION 3–15 (2014).

9. *Id.* at 1.

10. *Billion-Dollar Weather and Climate Disasters: Events*, NOAA: NAT'L CENTERS FOR ENV'T INFO., https://www.ncei.noaa.gov/access/billions/events (last visited Nov. 30, 2025).

11. ELIZABETH MARSHALL ET AL., U.S. DEP'T AGRIC.: ECON. RSCH. SERV., ERR-201, CLIMATE CHANGE, WATER SCARCITY, AND ADAPTATION IN THE U.S. FIELDCROP SECTOR 4 (2015).

12. *Billion-Dollar Weather and Climate Disasters: Events*, *supra* note 10.

13. Seth Borenstein, *New Study Calculates Climate Change's Economic Bite Will Hit About $38 Trillion a Year by 2049*, AP (Apr. 17, 2024), https://apnews.com/article/climate-change-damage-economy-income-costly-3e21addee3fe328f38b771645e237ff9.

14. *Climate Change*, U.S. DEP'T AGRIC.: ECON. REVENUE SERV. (June 2, 2025), https://www.ers.usda.gov/topics/natural-resources-environment/climate-change/.

oxide accounted for 46.6% of emissions.[15] This is alarming because carbon dioxide is noxious enough on its own, and methane is nearly 30 times as powerful as carbon dioxide (though it remains in the atmosphere for only ten years post-emission).[16] Nitrous oxide, on the other hand, has approximately 273 times the warming power of carbon dioxide, and it remains in the atmosphere for more than 100 years.[17] Nitrous oxide emissions have increased 40% from 1980 to 2020.[18]

There is a myriad of ways the agricultural sector emits greenhouse gases into the atmosphere. Tractors, trucks, and other machinery use diesel and gasoline. Washrooms and temperature-sensitive storage require electricity, which is derived mostly from fossil-fuels.[19] Carbon dioxide emissions rise from the destruction of healthy soil by over-tilling and over-treating, as well as deforestation to make space for livestock and commodity crops.[20] An issue that has caught the American imagination is "cow burps," as methane is a natural byproduct of ruminants' digestive processes.[21] Improperly treated and stored manure also produces methane.[22] All of these emissions are direct consequences of the combustion of fossil fuels, human manipulation of the landscape, and the result of natural biological phenomena.[23]

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15. *Id.*

16. *Understanding Global Warming Potentials*, U.S. ENV'T PROT. AGENCY (Jan. 16, 2025), https://www.epa.gov/ghgemissions/understanding-global-warming-potentials.

17. *Id.*

18. *Nitrous Oxide Emissions Grew 40 Percent from 1980 to 2020, Accelerating Climate Change*, NOAA: RSCH. (June 12, 2024), https://research.noaa.gov/nitrous-oxide-emissions-grew-40-percent-from-1980-to-2020-accelerating-climate-change/ [hereinafter *Accelerating Climate Change*].

19. Fossil fuels still compose just over 60% of U.S. electricity. *Electricity Explained: Electricity Generation, Capacity, and Sales in the United States*, U.S. ENERGY INFO. ADMIN., https://www.eia.gov/energyexplained/electricity/electricity-in-the-us-generation-capacity-and-sales.php (last updated July 16, 2024).

20. *Sources of Greenhouse Gas Emissions*, U.S. ENV'T PROT. AGENCY, https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions#:~:text=Management%20of%20agricultural%20soils%20accounts,4%20and%20N2O (last updated Mar. 31, 2025); *see generally* U.S. Env't Prot. Agency, *Chapter 5, Agriculture*, *in* Inventory of U.S. Greenhouse Gas Emissions and Sinks, 1990-2022 (2024) [hereinafter *Inventory of U.S. Greenhouse Gas Emissions*].

21. *See, e.g.*, *Inventory of U.S. Greenhouse Gas Emissions*, *supra* note 20, at 5-1; Christopher Booker & Sam Weber, *Cow Burps Are a Major Contributor to Climate Change – Can Scientists Change That?*, PBS NEWS (Mar. 6, 2022), https://www.pbs.org/newshour/show/cow-burps-are-a-major-contributor-to-climate-change-can-scientists-change-that; Paul Hond, *How Farm Animal Burps Are Fueling Global Warming*, COLUM. MAG.: SCI. & TECH. (Apr. 17, 2024), https://magazine.columbia.edu/article/how-farm-animal-burps-are-fueling-global-warming.

22. *Inventory of U.S. Greenhouse Gas Emissions*, *supra* note 20, at 5-2.

23. The intensity by which the U.S. produces animals for meat and dairy is compounding the emissions of methane far beyond sustainable practices and therefore stretches the "natural" qualifier. Concentrated animal feeding operations produce excessive amounts of methane. For more information, *see* Lisa Held, *Methane from Agriculture Is a Big Problem. We Explain Why,* CIV. EATS (Oct. 6, 2021), https://civileats.com/2021/10/06/methane-from-agriculture-is-a-big-problem-we-explain-why/.

Agriculture's greenhouse gas emissions are not limited to direct emissions; its greenhouse gas footprint also involves petrochemicals. Petrochemical feedstocks—chemicals and compounds made from petroleum oil, natural gas, and coal—carry environmental detriments and impact the climate, despite not being direct sources of greenhouse gas emissions through combustion.[24] Plastics and fertilizers are two major substances made from petrochemicals. Combined, they contribute 7.4% of global greenhouse gas emissions in upstream production and processing.[25]

Plastics are commonplace in the agricultural sector—like most economic and social sectors. Seeds and pesticides use plastic packaging, and irrigation systems are flushed with plastic piping and hoses.[26] Farmers use plastic trays for seeding, plastic netting for row cover, and plastic facing for greenhouses.[27] Even organic farms use plastics, especially when using landscape fabric for weed control in lieu of synthetic pesticides.[28] Although plastic does not emit greenhouse gases in its final form, it does lead to major ecological issues such as polluting and leaching into soil and waterways, both as large refuse and microplastics contaminating our bodies.[29] Demand for plastics is only increasing, as is the demand for synthetic nitrogen-based fertilizers.[30] Plastic's ubiquity across industries and its complex lifecycle expands beyond the scope of this paper.[31] Because global nitrous oxide emissions primarily come from the use of nitrogen-based fertilizer in the agricultural sector, this Article focuses on synthetic nitrogen-based fertilizers.[32]

A. Fertilizer 101

Crop growth requires a medley of essential nutrients that need to be replaced through crop rotation or by application of organic or synthetic

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24. CTR. FOR INT'L ENV'T L., EMISSIONS UNLEASHED: THE CLIMATE CRISIS AND AMERICA'S PETROCHEMICAL BOOM 9 (2024).

25. *Id.*

26. *See* FOOD & AGRIC. ORG. OF THE U.N., ASSESSMENT OF AGRICULTURAL PLASTICS AND THEIR SUSTAINABILITY: A CALL FOR ACTION 2 (2021).

27. *Id.* at 12 tbl. 3.

28. *Id.*

29. Stephanie Dutchen, *Microplastics Everywhere*, HARV. MED. (Spring 2023), https://magazine.hms.harvard.edu/articles/microplastics-everywhere.

30. INT'L ENERGY AGENCY, OECD, THE FUTURE OF PETROCHEMICALS: TOWARDS MORE SUSTAINABLE PLASTICS AND FERTILIZER 3 (2018).

31. However, reduction of plastic use on farms can factor into the proposed tax deduction schemas. *See infra* Section I.C.

32. *Sources of Greenhouse Gas Emissions*, *supra* note 20.

fertilizers.[33] Synthetic fertilizers are made through industrial processes that create highly concentrated nutrients essential for plant growth, such as nitrogen, phosphorus, and potassium.[34] Many synthetic fertilizers are blends that include all three nutrients.[35] Organic fertilizers include compost, manure, and bones, which consist of these essential nutrients (and much more) in lower concentrations.[36]

Synthetic fertilizers are incredibly efficient; they are cheaper than organic fertilizer for the value of nutrients compared to the amount necessary for crop growth.[37] Unfortunately, synthetic fertilizers are often overused, which leads to leaching into groundwater, runoff into surface water, and emission from the soil to the air.[38] This overuse reduces water quality and can lead to soil acidity—an environment inhospitable to many crops.[39]

This Article focuses on the negative environmental impacts of nitrogen-based fertilizer as one example, but there are two other notable mass-produced fertilizers that have negative impacts on the climate as well. Phosphorus fertilizers are derived from phosphate rock, either through mining and grinding the rock into a fine powder, or by treating the rock with ammonia.[40] Potassium fertilizers are made from potash (potassium-containing ore), which is mined and refined into potassium chloride.[41] Both phosphorous rock and potassium ore require mining and processing,[42] which emits greenhouse gases from forces exerted to conduct the mining itself.[43]

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33. For crop rotation generally, *see* SUSTAINABLE AGRIC. RSCH. AND EDUC, PLANT & LIFE SCIS. & EDUC., CROP ROTATION ON ORGANIC FARMS: A PLANTING MANUAL 93 (Mohler & Johnson eds., 2009).

34. *Fertilizers & Pesticides*, U.S. DEP'T AGRIC.: ECON. RSCH. SERV., https://www.ers.usda.gov/topics/farm-practices-management/fertilizers-pesticides/ (last updated Nov. 13, 2025).

35. *Id.*

36. Kim Pokorny, *Choosing the Right Fertilizer for Your Garden*, OR. STATE UNIV: EXTENSION SERV. (Mar. 2025), https://extension.oregonstate.edu/news/choosing-right-fertilizer-your-garden.

37. Vassilis D. Litskas, *Environmental Impact Assessment for Animal Waste, Organic and Synthetic Fertilizers*, 4 NITROGEN 16 (2023).

38. *Fertilizers & Pesticides*, *supra* note 34.

39. KEITH O. FUGLIE ET AL., U.S. DEP'T AGRIC.: ECON. RSCH. SERV., EIB-268, WORLD AGRICULTURAL PRODUCTION, RESOURCE USE, AND PRODUCTIVITY, 1961–2020, at 19–20 (2024).

40. Stephen M. Jasinski, *Phosphate Rock*, *in* U.S. GEOLOGICAL SURVEY, MINERAL COMMODITY SUMMARIES 2025, at 134 (2025); *see also* Daniel E. Kaiser & Paulo Pagliari, *Understanding Phosphorous Fertilizers*, UNIV. OF MICH. EXTENSION, https://extension.umn.edu/phosphorus-and-potassium/understanding-phosphorus-fertilizers#water-soluble-619560 (last updated 2018).

41. Jasinski, *supra* note 40, at 138.

42. Nat'l Mins. Info. Ctr., *Potash Statistics and Information*, USGS, https://www.usgs.gov/centers/national-minerals-information-center/potash-statistics-and-information (last visited Nov. 29, 2025).

43. Antione Allanore & Elizabeth Gribkoff, *Mining and Metals*, MIT CLIMATE PORTAL (Oct. 19, 2020), https://climate.mit.edu/explainers/mining-and-metals.

B. Ecosystem and Climate Impacts of Nitrogen-Based Synthetic Fertilizer

The most common nitrogen-based fertilizers are produced using the Haber-Bosch process,[44] where nitrogen is extracted from the air and combined with hydrogen (usually derived from natural gas) under high pressure and temperature in the presence of a catalyst.[45] This produces ammonia, which is further processed into stable compounds like urea or ammonium nitrate.[46] Both are extremely effective fertilizers.

The Haber-Bosch process relies heavily on natural gas and the production process itself emits carbon dioxide.[47] In 2010, 451 million metric tons of carbon dioxide were emitted by the production of ammonia alone.[48] By 2018, this jumped to 1.25 billion tons.[49] As of 2021, ammonia production accounts for over 2% of global emissions, and its supply chain alone accounts for just over a fifth of agricultural emissions.[50]

When applied to fields, microbes in the soil break down the nitrogen fertilizer, creating nitrous oxide as a byproduct.[51] As stated above, nitrous oxide is a potent greenhouse gas with a global warming potential nearing 300 times that of carbon dioxide.[52] Synthetic fertilizers are economically advantageous over organic fertilizers: they do not take as much time to produce and are highly concentrated.[53] However, they are systematically over-applied to farmland, with nitrous oxide emissions and other negative

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44. For more detailed information, *see* VACLAV SMIL, ENRICHING THE EARTH: FRITZ HABER, CARL BOSCH, AND THE TRANSFORMATION OF WORLD FOOD PRODUCTION (2001).

45. Leigh Krietsch Boerner, *Industrial Ammonia Production Emits More CO_2 Than Any Other Chemical-Making Reaction. Chemists Want to Change That*, C&EN (June 15, 2019), https://cen.acs.org/environment/green-chemistry/Industrial-ammonia-production-emits-CO2/97/i24.

46. *How Fertilizers Are Made*, FERTILIZERS EUR., https://www.fertilizerseurope.com/fertilizers-in-europe/how-fertilizers-are-made/ (last visited Nov. 29, 2025).

47. Giuliana Viglione, *Q&A: What Does the World's Reliance on Fertilisers Mean for Climate Change?*, CARBON BRIEF (July 11, 2022), https://www.carbonbrief.org/qa-what-does-the-worlds-reliance-on-fertilisers-mean-for-climate-change/.

48. Boerner, *supra* note 45.

49. INST. FOR AGRIC. AND TRADE POL'Y, GREENPEACE INT'L, GRAIN, NEW RESEARCH SHOWS 50 YEAR BINGE ON CHEMICAL FERTILISERS MUST END TO ADDRESS THE CLIMATE CRISIS 1 (2021).

50. Gosia Wozniacka, *The Greenhouse Gas No One's Talking About: Nitrous Oxide on Farms, Explained*, CIV. EATS (Sept. 19, 2019), https://civileats.com/2019/09/19/the-greenhouse-gas-no-ones-talking-about-nitrous-oxide-on-farms-explained.

51. *Id.*

52. *Accelerating Climate Change*, *supra* note 18.

53. Litskas, *supra* note 37, at 16.

side effects[54] vastly outperforming the value of the fertilizers themselves.[55] Moreover, the growing use of synthetic fertilizers since the Green Revolution[56] of the 1950s has undercut food sovereignty worldwide, interrupted regenerative practices, and poses an ever increasing threat to sustainable and secure food systems in the future.[57]

II. EXISTING CONSERVATION PROGRAMS AND THE INFLATION REDUCTION ACT

There is little in the way of regulations around the amount of fertilizer a farmer may distribute on their land; however, there are programs through the U.S. Department of Agriculture (USDA) funded primarily through the Farm Bill, with additional funding from the Inflation Reduction Act (IRA) that assist farmers who voluntarily shift their practices. Domestic subsidies can support farmers' efforts to change their practices for the betterment of their land, businesses, and the environment at large. There are government programs and support for nutrient management efforts to reduce excessive fertilizer use, as well as programs to help farmers shift towards more sustainable models entirely (i.e., USDA Organic). The following provides an insight into a brief history of the U.S. federal government's support of conservation efforts, available programs through the USDA, and a mention of the IRA's contribution to climate-conscious practices in agriculture.

54. Including eutrophication of waterways from leaching and runoff. *See Sources and Solutions: Agriculture*, U.S. ENV'T PROT. AGENCY, https://www.epa.gov/nutrientpollution/sources-and-solutions-agriculture (last updated Mar. 20, 2025).

55. From impacts to climate change to toxic algal blooms to nitrate-related illnesses, *see Four Reasons Why the World Needs to Limit Nitrogen Pollution*, UN ENV'T PROGRAMME (Jan. 16, 2023), https://www.unep.org/news-and-stories/story/four-reasons-why-world-needs-limit-nitrogen-pollution.

56. The Green Revolution is characterized as a time of rapid changes in industrialized agriculture in the post-WWII era, including repurposing chemical infrastructure to create fertilizer instead of bombs. It is also characterized as a time of breeding high-output crops that fed hundreds of thousands of people, but only through overdependence on chemical fertilizers. *See Fueling the Green Revolution*, U.S. DEP'T AGRIC.: AGRIC. RES. SERV. (Oct. 18, 2023), https://www.ars.usda.gov/oc/timeline/green/; *see also* Ray Offenheiser, *The Green Revolution: Norman Borlaug and the Race to Fight Global Hunger*, PBS AM. EXPERIENCE (Apr. 22, 2025), https://www.pbs.org/wgbh/americanexperience/features/green-revolution-norman-borlaug-race-to-fight-global-hunger/.

57. *See* Michael Fakhri (Special Rapporteur), *Interim Report of the Special Rapporteur on the Right to Food*, at 3–12, U.N. Doc. A/76/237 (July 27, 2021).

A. The Farm Bill

The Farm Bill is comprehensive legislation governing agricultural and food policy in the United States.[58] It is not one piece of legislation, but an omnibus law that is painstakingly assembled and codified approximately every five years.[59] The Agriculture Improvement Act of 2018 is the most recent Farm Bill.[60] The Farm Bill originated in 1933 to assist farmers struggling after the First World War and the Great Depression.[61] Its purpose was to stabilize the price of crops by raising prices and subsidizing farmers to reduce production of commodity crops.[62]

Conservation practices within U.S. Agriculture are over 85 years old.[63] Central to U.S. agricultural environmental policy, conservation provisions have evolved significantly to address changing environmental priorities and agricultural practices.[64] Conservation efforts began with the Soil Conservation Act in 1938 to address Dust Bowl-era erosion, creating what is now the Natural Resource Conservation Service.[65]

Sustainable practices beyond Dust Bowl lessons were not brought to the fore until the 1985 Farm Bill introduced the Conservation Reserve Program.[66] This program paid farmers to retire environmentally sensitive land from agricultural production, marking a foundational shift toward integrating environmental stewardship with agricultural policy.[67] The 1996 Farm Bill established the comprehensive Environmental Quality Incentives Program (EQIP),[68] which provided financial and technical assistance for

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58. For an excellent overview of the history of the Farm Bill, *see* Jonathan Coppess, THE FAULT LINES OF FARM POLICY: A LEGISLATIVE AND POLITICAL HISTORY OF THE FARM BILL (2018).

59. JIM MONKE & RENÉE JOHNSON, CONG. RSCH. SERV., IF12047, FARM BILL PRIMER: BACKGROUND AND STATUS (2024).

60. The 2018 bill was set to expire after five years (in 2023). Due to political gridlock, Congress extended its provisions three times. Congress implemented the most recent extension on November 12, 2025, through the "Continuing Appropriations, Agriculture, Legislative Branch, Military Construction and Veterans Affairs, and Extensions Act, 2026." *See* H.R. 5371, 119th Cong. (2025). This extension runs through September 30, 2026.

61. *History of the United States Farm Bill*, LIB. OF CONG., https://www.loc.gov/ghe/cascade/index.html?appid=1821e70c01de48ae899a7ff708d6ad8b&bookmark=Farm%20Bills (last visited Nov. 29, 2025).

62. *Id.*

63. *Id.*

64. *Id.*

65. *See* H.R. REP. NO. 74–1973, at 82 (1936).

66. *See* Food Security Act of 1985, Pub. L. No. 99–198, 99 Stat 1354.

67. U.S. DEP'T AGRIC.: FARM SERV. AGENCY, CONSERVATION RESERVE PROGRAM 1 (2025).

68. *See* Federal Agriculture Improvement and Reform Act of 1996, Pub. L. 104–27, 110 Stat. 888.

farmers who voluntarily initiate conservation projects within their farm.[69] The 2002 Farm Bill initiated the Conservation Stewardship Program (CSP)[70] to support farmers who voluntarily engage in preservation of natural resources as they farm.[71] These two main conservation programs for "working lands"[72] are vital components of USDA's conservation efforts and are models for an agricultural tax credit.

1. Environmental Quality Incentives Program

EQIP provides financial and technical assistance to farmers, ranchers, and forest landowners to implement conservation practices that address natural resource concerns.[73] It aims to improve soil, water, plant, air, and animal resources on agricultural and forest lands.[74] Key aspects of EQIP include support for conservation practices such as irrigation efficiency, nutrient management, and habitat improvements.[75] It also includes special initiatives to address specific resource concerns, like the Air Quality Initiative, which enumerates practices that improve air quality through the reduction of dust and carbon emissions.[76] Moreover, EQIP offers advanced payments and increased rates for socially disadvantaged, beginning,[77] and veteran farmers who are historically underserved within the USDA.[78] EQIP is only available to individuals who own and or have documented control over the land they farm.[79] Payment contracts may not exceed ten years[80] and payments are capped at $450,000 (aggregated between 2019–2023).[81]

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69. MEGAN STUBBS, CONG. RSCH. SERV., R40197, ENVIRONMENTAL QUALITY INCENTIVES PROGRAM (EQIP): STATUS AND ISSUES 1 (2011).

70. *See* Farm Security and Rural Investment Act of 2002, Pub. L. No. 107–71, 116 Stat. 134.

71. *Stewarding Success: Conservation Stewardship Program*, NAT'L SUSTAINABLE AGRIC. COAL. (Oct. 9, 2024), https://sustainableagriculture.net/blog/stewarding-success-conservation-stewardship-program/.

72. Meaning the land is still used for farming rather than removed from agricultural production altogether.

73. U.S. DEP'T AGRIC.: NAT. RES. CONSERVATION SERV., ENVIRONMENTAL QUALITY INCENTIVES PROGRAM (EQIP): IS EQIP RIGHT FOR ME? 1 (2022).

74. *Id.*

75. *Id.*

76. *Air Quality Initiative*, U.S. DEP'T AGRIC.: NAT. RES. CONSERVATION SERV., https://www.nrcs.usda.gov/programs-initiatives/eqip-air-quality-initiative (last visited Nov. 30, 2025).

77. "Beginning" farmer refers to farmers who have not been in operation for more than 10 years. *See* LISA S. BENSON, ET AL, CONG. RSCH. SERV., R48269, BEGINNING FARMERS OR RANCHERS (BFRS): CHALLENGES AND OPPORTUNITIES 1 (2024).

78. IS EQIP RIGHT FOR ME?, *supra* note 73, at 2.

79. U.S. DEP'T AGRIC., FAQ: ENVIRONMENTAL QUALITY INCENTIVES PROGRAM 1 (2017).

80. 7 C.F.R. § 1466.21(b)(2) (2025).

81. *Id.* § 1466.24(a).

2. Conservation Stewardship Program

CSP assists producers in enhancing and maintaining conservation practices on working lands.[82] The program rewards participants who already practice effective conservation and supports the adoption of additional improvements.[83] CSP is open to farmers and ranchers managing working lands, including cropland, pastureland, and nonindustrial private forestland; it is not limited to landowners.[84] The purpose of CSP is to support conservation efforts like improving soil quality, efficient water management, and energy efficiency.[85] Notably, CSP contracts provide annual payments based on performance, enabling producers to implement and maintain advanced conservation activities.[86] Payment contracts periods last for up to five years and are subject to renewals.[87] CSP payments are limited to $200,000 over the contract period.[88]

The 2018 Farm Bill[89] allocated approximately $9.2 billion for EQIP and $7.7 billion for CSP over its five-year span.[90] Originally set to expire at the end of 2023, Congress has extended 2018 Farm Bill provisions twice due to an inability to pass a new Bill.[91] Generally, funding for EQIP and CSP projects would cease upon the original expiration; however, the IRA's additional funding has supported both programs in the interim.[92]

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82. *Conservation Stewardship Program (CSP)*, U.S. DEP'T AGRIC.: NAT. RES. CONSERVATION SERV., https://www.nrcs.usda.gov/programs-initiatives/csp-conservation-stewardship-program (last visited Nov. 29, 2025).

83. *Id.*

84. *Id.*

85. *Id.*; *see* U.S. DEP'T AGRIC., CONSERVATION STEWARDSHIP PROGRAM: FOR CROP GROWERS (2022); U.S. DEP'T AGRIC., CONSERVATION STEWARDSHIP PROGRAM: FOR ORGANIC PRODUCERS (2022).

86. *Conservation Stewardship Program (CSP)*, *supra* note 82.

87. 7 C.F.R. § 1470.21(b)(1).

88. *Id.* § 1470.24(g).

89. Agriculture Improvement Act of 2018, Pub. L. No. 115–334, 132 Stat. 4490.

90. MEGAN STUBBS, CONG. RSCH. SERV., R45698, AGRICULTURAL CONSERVATION IN THE 2018 FARM BILL (2019).

91. Kristine A. Tidgren, *The 2018 Farm Bill Has Expired: What Does That Mean?* IOWA STATE UNIV.: CTR. FOR AGRIC. L. & TAX'N (Oct. 2, 2024), https://www.calt.iastate.edu/blogpost/2018-farm-bill-has-expired-what-does-mean.

92. *Id.*

B. Inflation Reduction Act[93]

The IRA allocated specifically $19.5 billion to enhance various agricultural conservation programs.[94] EQIP received $8.45 billion and CSP received $3.25 billion, aiming to support climate-smart agriculture and forestry practices.[95] This was done by mitigating greenhouse gas emissions, enhancing carbon sequestration, and improving soil health.[96]

In fiscal year 2023, over $2.8 billion was invested to support more than 45,000 contracts through the USDA's Natural Resources Conservation Service, the highest in agency history.[97] In the 2024 fiscal year, allocations included $1.65 billion for EQIP and $472 million for CSP.[98] The USDA announced in October of 2024 plans to allocate up to $7.7 billion from the IRA for climate-smart conservation practices in 2025, marking a significant increase compared to previous years.[99]

As incredible as the IRA has been thus far, it has a ten-year lifespan. Additionally, as amazing EQIP and CSP are, their funding is subject to bipartisan agreement on a massive omnibus bill. The 2018 Farm Bill expired in late 2023.[100] While Congress extended the provisions twice[101]—preventing punitive permanent law provisions from stepping up in its absence[102]—they are two years late in passing a substantive successor. Meanwhile, tens of thousands of farmers are suffering from the U.S. government's chaotic

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93. There have been changes to the Inflation Reduction Act since the first drafts of this Article. The Trump Administration passed an Executive Order on January 20, 2025, directing all agencies to stop disbursing funds allocated by the Inflation Reduction Act. *See Unleashing American Energy,* Exec. Order No. 14,154, 90 Fed. Reg. 8353 (2025). On July 4, 2015, the Congress implemented Pub. L. No. 119-21 (also known as the "One, Big, Beautiful Bill"), which removed tax credits and rescinded funds previously granted through the Inflation Reduction Act (see specifically Section 10601 for adjustments to EQIP and CSP). *See* H.R. 1, 119th Cong. (2025).

94. JIM MONKE ET AL., CONG. RSCH. SERV., IN11978, INFLATION REDUCTION ACT: AGRICULTURAL CONSERVATION AND CREDIT, RENEWABLE ENERGY, AND FORESTRY 1 (2022).

95. *Id.*

96. *Id.*

97. U.S. DEP'T AGRIC., RELEASE NO. 0163.24, FACT SHEET: CELEBRATING TWO YEARS OF THE INFLATION REDUCTION ACT (2024).

98. *Id.*

99. *Press Release: Biden-Harris Administration Makes up to $7.7 Billion Available for Climate-Smart Practices on Agricultural Lands as Part of Investing in America Agenda*, U.S. DEP'T AGRIC.: NAT. RES. CONSERVATION SERV. (Nov. 18, 2024), https://www.nrcs.usda.gov/news/biden-harris-administration-makes-up-to-7.7-Billion-Available.

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

101. Further Continuing Appropriations and Other Extensions Act, Pub. L. No. 118–22, § 102, 137 Stat 112, 114–19 (2023); American Relief Act, Pub. L. No. 118–58, § 4101, 137 Stat. 1722, 1767–72 (2024).

102. JIM MONKE ET AL., CONG. RSCH. SERV., R47659, EXPIRATION OF THE 2018 FARM BILL AND EXTENSION FOR 2025, at 5–10 (2024).

cancellation of EQIP and CSP funds and IRA grants in early 2025.[103] Many of these contracts have been revoked as part of the Trump Administration's attack on diversity, equity, and inclusion.[104] Socially disadvantaged farmers—especially Black farmers—are particularly harmed by these cuts.[105]

It is increasingly evident that the support networks in place are not as sturdy as they need to be, especially for historically disadvantaged and small farmers who are essential in feeding the nation. A self-fueling trust for farmers based on a broad tax can provide a reliable pool of funds for these farmers, ensuring support for sustainable practices and insurance in times of climate-fueled crises.

III. A TAX ON AMERICAN AGRICULTURE—BOUNTY FROM BOUNTY

Existing taxes on American agriculture are limited. As of 2024, there were no taxes on American agricultural activity specifically, just standard income tax.[106] An estimated 2.4% of all U.S. farms are subject to corporate taxation.[107] The remaining 97.6% pays only individual income tax.[108] Schedule F of Form 1040 (the standard income tax return) is tailored specifically for individuals, trusts, partnerships, S Corps, and LLCs that cultivate, operate, or manage farms for gain or profit.[109] Schedule F applies to those who own the land or merely rent the land, and accounts for all profits and losses related to farming income.[110] Importantly, the agricultural sector's wealth of government support—primarily price-loss/agriculture-risk coverage payments, insurance subsidies, and cost share payments—must be reported as income.[111]

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103. *Broken Promises: Over 30,000 Farmers Denied Funds*, NAT'L SUSTAINABLE AGRIC. COAL. (Feb. 26, 2025), https://sustainableagriculture.net/blog/trump-denies-over-2-billion-in-payments-owed-to-30000-farmers/.

104. Lisa Held, *USDA Has Begun Canceling Contracts Based on Trump's DEI Order*, CIV. EATS: FOOD POL'Y TRACKER (Feb. 26, 2025), https://civileats.com/2025/02/26/usda-has-begun-canceling-contracts-based-on-trumps-dei-order/.

105. Iris M. Crawford, *Black Farmers Face Setbacks over Trump Budget Cuts: 'We Are in Survival Mode'*, THE GUARDIAN (Mar. 20, 2025), https://www.theguardian.com/environment/2025/mar/20/black-farmers-trump-usda-budget-cuts.

106. Estate taxes and property taxes are irrelevant for the purposes of this paper. Importantly, many farmers are liable for these taxes if they inherit land or own land.

107. TIA M. MCDONALD & RON DURST, U.S. DEP'T AGRIC.: ECON. RSCH. SERV., ERR-328, AN ANALYSIS OF THE EFFECT OF SUNSETTING TAX PROVISIONS FOR FAMILY FARM HOUSEHOLDS 5 (2024).

108. *Id.*

109. *See* U.S. DEP'T OF TREASURY: INTERNAL REVENUE SERV., FARMER'S TAX GUIDE 9 (2024).

110. "Farm" applies to a myriad of growing and raising activity, including livestock, poultry, fruit, and produce. *See* 26 C.F.R. § 1.61–4(d) (2025); 26 C.F.R. § 1.175–3 (2025).

111. Farmers would need to fill out an additional form, 1099-G. *See Lines 4a and 4b – Agricultural Program Payments*, IOWA STATE UNIV.: CTR. FOR AGRIC. LAW & TAX'N, https://www.calt.iastate.edu/lines-4a-and-4b-agricultural-program-payments (last visited Nov. 30, 2025).

Significant portions of the tax code benefit an array of business owners, including farmers. A tax deduction already exists for money expended toward conservation efforts.[112] This Section 175 deduction applies specifically to taxpayers engaging in soil and water conservation expenses before or during the taxpayer's farming activity on the land.[113] It is limited to 25% of the taxpayer's gross income from farming on the portion of land the farmer implemented conservation practices, and can only apply to non-depreciable additions or items.[114] Furthermore, conservation cost-share exclusions are available.[115] The 2017 Tax Cuts and Jobs Act installed permanent provisions increasing the expensing allowance for small businesses to $1 million, and shortening the depreciation of farm equipment from seven years to five.[116]

While raising taxes on corporations and high-income households is gaining popularity, Americans are generally troubled when it comes to paying income tax.[117] Roughly half of American adults feel that they pay more than their fair share.[118] Farmers' disdain may only increase if the 2017 Tax Cuts and Jobs Act's sunset provisions lapse, as farms face a $4.5 billion tax liability.[119] This pales in comparison to the agricultural sector's $222.3 billion gross domestic product contribution to the U.S. economy.[120] Nevertheless, given agriculture's contributory role in climate change, implementing a tax on the agricultural sector is crucial in nudging farmers into better practices, or otherwise charging them a sliver of the ultimate costs.

A. Denmark's Green Tripartite Agreement: An "Agricultural" Tax

In June of 2024, Denmark introduced a carbon tax on agriculture—the first nation in the world to do so.[121] With agriculture contributing to a quarter

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112. 26 U.S.C. § 175; 26 C.F.R § 1.175–2(a)(1) (2025).

113. 26 CFR § 1.175–7 (2025).

114. *Id.*

115. 26 U.S.C. § 126(b)(1)(A).

116. *Agriculture and Tax Reform*, FB, https://www.fb.org/issue/tax-reform (last visited Nov. 30, 2025).

117. Andy Cerda, *Most Americans Continue to Favor Raising Taxes on Corporations, Higher-Income Households*, PEW RSCH. CTR. (Mar. 19, 2025), https://www.pewresearch.org/short-reads/2025/03/19/most-americans-continue-to-favor-raising-taxes-on-corporations-higher-income-households/.

118. Anna Jackson, *7 Facts About Americans and Taxes*, PEW RSCH. CTR. (Apr. 9, 2024), https://www.pewresearch.org/short-reads/2024/04/09/7-facts-about-americans-and-taxes/.

119. MCDONALD & DURST, *supra* note 107.

120. KATHLEEN KASSEL ET AL., U.S. DEP'T AGRIC.: ECON. RSCH. SERV., APN-121, SELECTED CHARTS FROM AG AND FOOD STATISTICS: CHARTING THE ESSENTIALS, 2024, at 5 (2024).

121. Lena Hunter, *Denmark Announces World-first Climate Tax on Agriculture – Earmarks Billions for Rewilding*, COPENHAGEN POST (June 25, 2024), https://cphpost.dk/2024-06-

of Denmark's total carbon and carbon equivalent emissions, the nation has entered into a Green Tripartite Agreement with the desire for the government, environmental groups, and the agricultural industry to address climate solutions together.[122] Talks of the agricultural tax started with the goal to make it more expensive for farmers to pollute, thereby covering a broad range of greenhouse gas emissions—including methane from animal production and nitrous oxide from excessive use of synthetic fertilizers.[123]

However, as of November 2024, it appears that the execution of the tax rests only on farmers involved in animal production, rather than all producers.[124] This carbon equivalency tax targets a single facet of the Danish agricultural sector's greenhouse gas emissions.[125] It does not cover other emissions, namely, nitrous oxide emissions that arise from the overuse of synthetic nitrogen-based fertilizers. Nevertheless, the tax is simple: after a basic deduction of 60%, farmers will have to pay $18 per ton of carbon dioxide equivalent emitted each year starting in 2030, and will increase to $44 per ton in 2035.[126] Though the agricultural qualifier to the tax may be somewhat of a misnomer, it does open a revenue stream to fund adaptive and restorative projects related to agriculture.[127]

Other nations are discussing carbon taxes on agriculture as well. The European Union already has a carbon border adjustment mechanism, which puts a tax on the production of carbon-intensive goods.[128] The tax is placed on petrochemical feedstocks and the production of plastics and ammonia—not agricultural production specifically.[129] The European Union Climate Advisory Board has recommended emissions pricing for agricultural and land use sectors.[130] Similar to Denmark, New Zealand floated an agricultural

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25/news/climate/denmark-announces-world-first-climate-tax-on-agriculture-earmarks-billions-for-rewilding/.

122. Tim Searchinger & Richard Waite, *Denmark's Groundbreaking Agriculture Climate Policy Sets Strong Example for the World*, WORLD RES. INST. (Nov. 12, 2024), https://www.wri.org/insights/denmark-agriculture-climate-policy.

123. Lena Hunter, *Explainer: Denmark's CO2 Tax on Farming*, COPENHAGEN POST (Feb. 20, 2024), https://cphpost.dk/2024-02-20/news/climate/explainer-denmarks-co2-tax-on-farming/.

124. *See* Searchinger & Waite, *supra* note 122.

125. *See id.*

126. Orla Dwyer & Yanin Quiroz, *Q&A: How Denmark Plans to Tax Agriculture Emissions to Meet Climate Goals*, CARBONBRIEF (July 7, 2024), https://www.carbonbrief.org/qa-how-denmark-plans-to-tax-agriculture-emissions-to-meet-climate-goals/.

127. Searchinger & Waite, *supra* note 122.

128. *Carbon Border Adjustment Mechanism*, EUR. COMM'N: TAX'N & CUSTOMS UNION (Nov. 4, 2024), https://taxation-customs.ec.europa.eu/carbon-border-adjustment-mechanism_en.

129. *Id.*

130. EUROPEAN SCI. ADVISORY BD. ON CLIMATE CHANGE, TOWARDS EU CLIMATE NEUTRALITY: PROGRESS, POLICY GAPS AND OPPORTUNITIES: ASSESSMENT REPORT 2024, at 156–67 (2024).

tax relating to livestock emissions; unfortunately, it failed due to political unviability.[131]

Denmark's agricultural tax is ambitious, but it only applies to methane emissions from animal agriculture. Denmark is 16,585 square miles,[132] with approximately 10,112 square miles devoted to agriculture as of 2022.[133] The United States is 3,809,525 square miles[134] with approximately 1,375,158 square miles devoted to agriculture.[135] Although Denmark utilizes more land for farming in relation to its size, the United States is a behemoth in comparison. The vastness of American farmland must be considered when addressing any agricultural tax, not just one subsector (i.e., livestock). Between Denmark's tax on livestock and the European Union's tax on petrochemical feedstocks, some greenhouse gas emissions are "captured" by a tax; however, a true agricultural tax needs to take on an omnibus ambition.

B. Climate Tax Proposals in the U.S.

The 2021–2022 Congress presented three carbon tax bills—H.R. 2307, H.R. 3311, and S. 2085—marking a piqued interest in addressing the climate crisis. Congress introduced the Energy Innovation and Carbon Dividend Act on April 1, 2021.[136] It creates a carbon fee on fuels like oil, natural gas, and coal based on their greenhouse gas emissions. It also includes rebates for carbon sequestration and border adjustments for carbon-intensive imports and exports.[137] The revenue from the fee goes into a Carbon Dividend Trust Fund to cover administrative costs and provide dividend payments to U.S. residents.[138] This Bill specifically exempts agricultural fuel use.[139]

The America Wins Act was introduced on May 18, and imposes an excise tax on the carbon dioxide content of fossil fuels sold by the manufacturer, producer, or importer.[140] The Bill collects revenues into the

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131. Lucy Craymer, *New Zealand Ends Plans to Price Agricultural Emissions*, REUTERS (June 10, 2024), https://www.reuters.com/business/environment/new-zealand-ends-plans-price-agricultural-emissions-2024-06-11/.

132. Christian Nokkentved et al., *Denmark*, BRITANNICA (Nov. 26, 2025), https://www.britannica.com/place/Denmark.

133. DANISH AGRIC. & FOOD COUNCIL, DENMARK – A FOOD AND FARMING COUNTRY: FACTS & FIGURES 58 (2023).

134. Adam Gopnik et al., *United States*, BRITANNICA (Nov. 30, 2025), https://www.britannica.com/place/United-States.

135. U.S. DEP'T AGRIC.: NAT'L AGRIC. STAT. SERV., ACH22-3, 2022 CENSUS OF AGRICULTURE HIGHLIGHTS: FARMS AND FARMLAND (2024).

136. H.R. 2307, 117th Cong. (2021).

137. *Id.* §§ 9905, 9908.

138. *Id.* § 9512.

139. *Id.* § 9902(e)(1).

140. H.R. 3311, 117th Cong. § 4691 (2021).

Build America Trust Fund and directs the revenues toward infrastructure projects including transportation, water, health care, housing. It also creates an energy refund program to alleviate costs on low-income households.[141] The Bill includes funding for U.S. Department of Agriculture (USDA) water and waste disposal programs and $1.5 billion toward agricultural research and mitigation, but imposes no burden on the agricultural sector.[142]

The Save Our Future Act, introduced on June 16, imposes a fee on coal, petroleum products, natural gas, and fluorinated greenhouse gas imports.[143] The Bill creates cost mitigation grants to assist in the transition from a high-carbon economy to a low-carbon economy.[144] It includes rebates for rural household energy expenses and attuned assistance for displaced coal workers through 2031.[145] This Bill also imposes fees on greenhouse gas production from other processes, but specifically exempts emissions from any agricultural entity growing crops or raising livestock.[146]

These proposed bills utilize a stick and carrot approach in their climate tax schemas. They all impose a fee on greenhouse gas emissions at some point in the emissions timeline (the stick). And they all create a trust fund to alleviate the transition from carbon intensive economies, ranging from direct payments to research grants (the carrot). Notably, none of these proposed bills include agriculture into their taxation schema. H.R. 3311 names the sector as a beneficiary of funds for conservation and research purposes, while H.R. 2307 and S. 2085 specifically exempt agriculture. This oversight reiterates and reproduces the myth of American agricultural exceptionalism. Although none of these bills progressed beyond introductions to their respective floors, they serve as useful templates for what they include—and what they leave out.

C. "A Pint for a Bushel and a Peck"[147]

A tripartite taxation plan including a blanket tax on all agricultural activity, a set of voluntary deductions, and a trust fund for climate mitigation efforts can fund and reward farmers with conservation and adaptive practices. The *Pint* is a standard tax rate scaled in accordance with the existing typology used by the USDA's Economic Research Service (ERS). The *Bushel* is a trust fund established to provide emergency aid for small

141. *Id.* § 36C.
142. *Id.* § 9512(F), (L).
143. S. 2085, 117th Cong. §§ 4691–4692 (2021).
144. *Id.* § 202.
145. *Id.* § 301.
146. *Id.* § 4693.
147. Please bear the metaphor: there are sixteen pints in a peck and four pecks in a bushel.

family farms from damage resulting from floods, fire, and other natural disasters. It also reserves funds for medium and large family farms to utilize in their transition efforts away from harmful agricultural practices. The *Peck* is a set of deductions that correspond with the Environmental Quality Incentives Program (EQIP) and the Conservation Stewardship Program (CSP).

1. The Pint

The tax rate would have three levels based off the ERS designations of gross cash farm income (GCFI). The ERS uses a "family farm" definition to delineate its typology.[148] A family farm is defined as farm ownership of the farm, the occupation of the principal operator, and the farm's annual revenue.[149] There are four primary categories: small family farms with GCFI less than $350,000 (with retirement farms, off-farm occupation, and low sales farming-occupation making less than $150,000 as subcategories); midsize family farms with a GCFI between $350,000 and $999,999; large-scale family farms with a GCFI of $1,000,000 or more; and nonfamily farms, regardless of GCFI, where any operator and related workers bear no familial relation.[150]

The tax rate would correspond with the small, medium, and large income categories. Nonfamily farms would be placed in the small, medium, or large category based on their GCFI, but they would pay a slightly higher rate than the family farms. The tax will apply to all farms making over $150,000 GCFI. This is to avoid adding another barrier of entry for socially disadvantaged, historically underserved, and beginning farmers.[151]

By creating an agricultural tax tied to income, it ensures smoother incorporation into the existing Internal Revenue Code. It also provides a higher degree of administrative feasibility than alternatives because farmers already fill out Schedule F for income made from the farm. Moreover, federal income taxes are well understood by the American public, as everyone needs to file them. When it comes to political viability—any proposed tax has an uphill battle—the American voter can better understand the relationship between the tax and the taxpayer, unlike estate taxes or taxes on intangibles (like greenhouse gases).

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148. CHRISTINE WHITT ET AL., U.S. DEP'T AGRIC.: ECON. RSCH. SERV., ERB-263, AMERICA'S FARMS AND RANCHES AT A GLANCE: 2023 EDITION 1 (2023).

149. *Id.* at 2.

150. *Id.* at 3.

151. *See generally* JESSICA E. TODD ET AL., U.S. DEP'T AGRIC.: ECON. RSCH. SERV., ERB-266, AN OVERVIEW OF FARMS OPERATED BY SOCIALLY DISADVANTAGED, WOMEN, AND LIMITED RESOURCE FARMERS AND RANCHERS IN THE UNITED STATES (2024).

Because one of the many forms farming takes is business, this tax would need to be calculated prior to any business-related deductions (i.e., business related expenses, capital investments, and deductions).[152] Many businesses report low income, despite making high profits because of lenient and creative pro-business tax provisions—like the 2017 Tax Cuts and Jobs Act increase of the small business expense allowance, and favorable depreciation rates.[153] This tripartite tax schema would be rendered moot if agricultural businesses, especially large businesses, could avoid the agricultural tax through simple income tax shelters.

Nevertheless, an alternative would be a property tax, but that may lead to inequities between farms. For instance, a concentrated animal feeding operation uses a small floor plan, compared to a free-range farm where animals can roam, but applying the same tax rate per acre would put the free-range farm at a significant disadvantage. Another example is the use of nitrogen-based fertilizers—the overuse of fertilizers in a 400-acre farm has much more impact on local waterways than the overuse of fertilizers in an 11-acre farm.

Another alternative could be a partitioned carbon equivalent tax. Unfortunately, this has little to no political viability because of how partisan the climate crisis is within American politics. It also may lead to inequities between industries: livestock emits methane through their biological processes; conventional commodity crop production contributes nitrous oxide through synthetic fertilizers; and all farms emit carbon dioxide in the disturbance of soil through tilling. Though it may be better, environmentally speaking, to tax each emission according to its potency, it is not administratively feasible or economically sensible.

Farming is a critical sector. People need to eat. Farming is also a way to conduct business, and it cannot become unviable lest the millions of farms[154] in existence evaporate from the high cost of the taxes.[155] Because all agriculture involves some greenhouse gas emissions, whether they be carbon dioxide, methane, or nitrous oxide, all farms need to be subject to the agricultural tax.

152. *See* CHRIS NEWMAN, FIRST GENERATION FARMING 38 (2024).

153. *Agriculture and Tax Reform*, *supra* note 116.

154. WHITT ET AL., *supra* note 148, at 4.

155. This is not to ignore a government-owned model of production; that will just lead down a tangent of no return.

2. The Bushel

The revenue of this tax would be secured in a trust fund and serve the American farmer in two major ways. First, with climate change wreaking havoc on weather patterns, floods will increase in some areas while others will languish in droughts. Crises will continue, and this fund would be able to assist in the aftermath. The beneficiaries will be tiered corresponding to the ERS designation but receive the inverse of what they contribute. This means that payouts will be set at a higher rate for small family farms than medium and large family farms. Additionally, although the low-sales small farms would not pay the tax until they surpass the $150,000 threshold, they would nevertheless be beneficiaries of the trust.

Second, the revenue would support conservation efforts. It will subsidize conservation programs for working lands. It could also be a resource for nonemergency mitigation efforts and adaptation research. In assessing the changing climate against growing populations, funding for research and development is necessary to keep such populations fed in the decades to come.[156] Research and development into adaptation measures, as well as insurance for climate-related catastrophes and other mitigation efforts, require stability. Rather than relying on Congress to pass a Farm Bill every five years with the hope that funding will expand for conservation efforts, implementing a tax schema on agricultural production will provide some stability for an immutably crucial industry in the face of climate instability.

3. The Peck

The Peck portion of the tax would sweeten the deal even further. It could include deductions earned by consistently incorporating better practices and apply that against income made from farming. These deductions would correspond with existing EQIP and CSP programs. The deductions do not usurp the programs' purposes. EQIP and CSP are cash-in-hand programs to share the expenses of transitioning from one practice to another. The Peck deductions will reduce the income tax liability of the farm.

Fundamentally, the deductions recognize the consequences of incorporating climate-conscious practices and reward farmers year after year for choosing better practices. For efficient collaboration between EQIP and CSP, the deductions will start upon the expiration of the programs' contracts.

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156. *See generally* JAYSON BECKMAN ET AL., U.S. DEP'T AGRIC.: ECON. RSCH. SERV., ERR-333, CLIMATE-INDUCED YIELD CHANGES AND TFP: HOW MUCH R&D IS NECESSARY TO MAINTAIN THE FOOD SUPPLY (2024).

This will function as a second-wave incentive to maintain climate-conscious practices.

An example of a deduction pertinent to nitrogen-based synthetic fertilizers would be one that follows the implementation of the CSP Nutrient Management 590 Standard.[157] This involves creating a plan with the National Resources Conservation Service around the four Rs of nutrient stewardship: right nutrient source, right rate, right time, and right place. It does not require the elimination of synthetic fertilizers, but it provides farmers with assistance in limiting their use, thereby preventing further degradation of the ecological and environmental value of their land. A farmer may choose to incorporate other practices, like cover cropping and reduced tilling—both of which CSP recognizes as well. A farmer may pledge to cease usage of synthetic nitrogen-based fertilizers altogether or become a USDA-certified organic farm. In any case, these deductions can be stacked.

CONCLUSION

American agriculture needs incentives to incorporate climate conscious practices into existing farms and to maintain better practices in the long term. A carbon equivalency tax on agriculture needs to be implemented, but it must have a larger vision than just greenhouse gas emissions. A tax on agriculture, not greenhouse gases specifically, will be more politically viable, environmentally and economically effective, and more equitably distributed. *The Pint for a Bushel and a Peck* taxation schema would create a trust fund for farmers in vulnerable times to come. Given its rate brackets, the Pint will collect from corporate agri-businesses (who benefit vastly from existing supports) and redistribute the Bushel to small and socially disadvantaged farmers (who are systemically underserved by present funds). The Peck's deductions would also provide enduring incentives for farmers to divorce themselves from poor practices—like the overuse of synthetic nitrogen-based fertilizers, which contribute to ecosystem degradation and climate change.

157. U.S. DEP'T AGRIC., CONSERVATION PRACTICE OVERVIEW: NUTRIENT MANAGEMENT (CODE 590) (2019).