

Funding Climate-Smart Research

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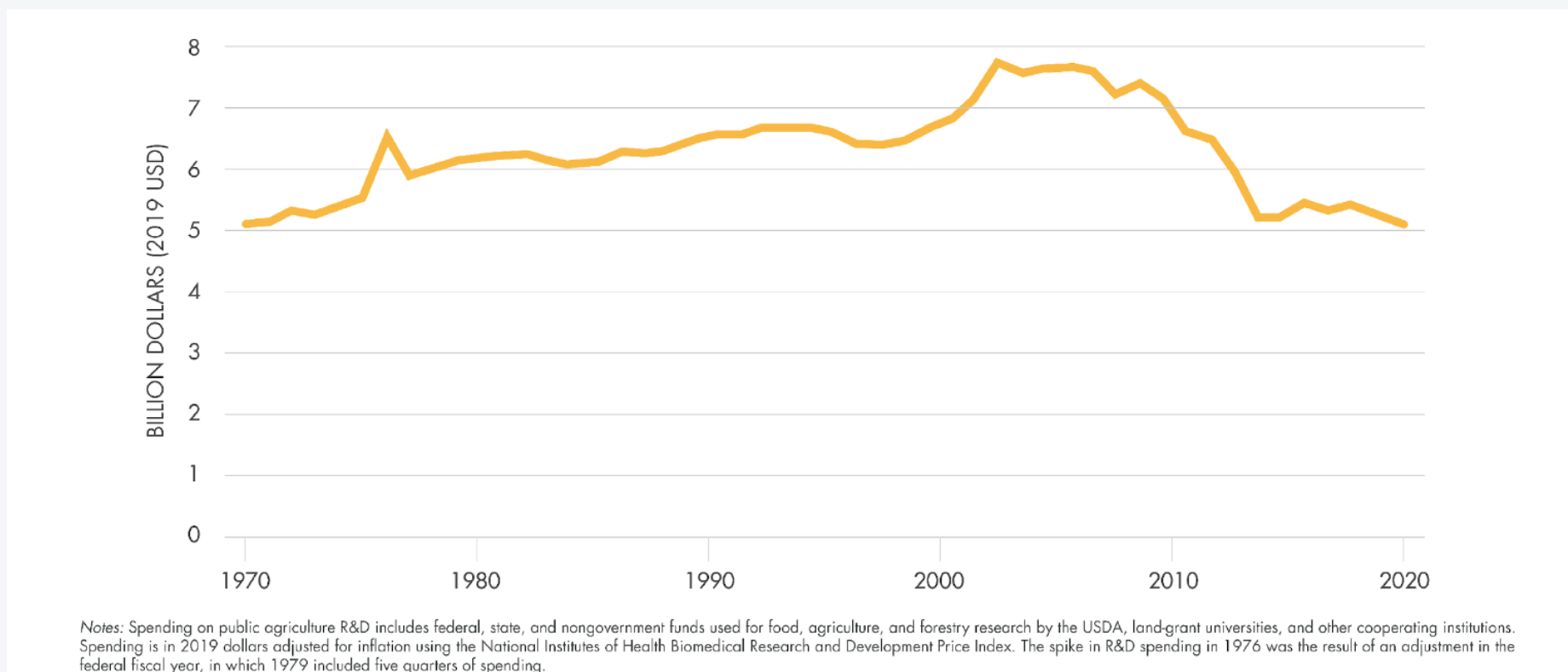
Director of Food and Agriculture



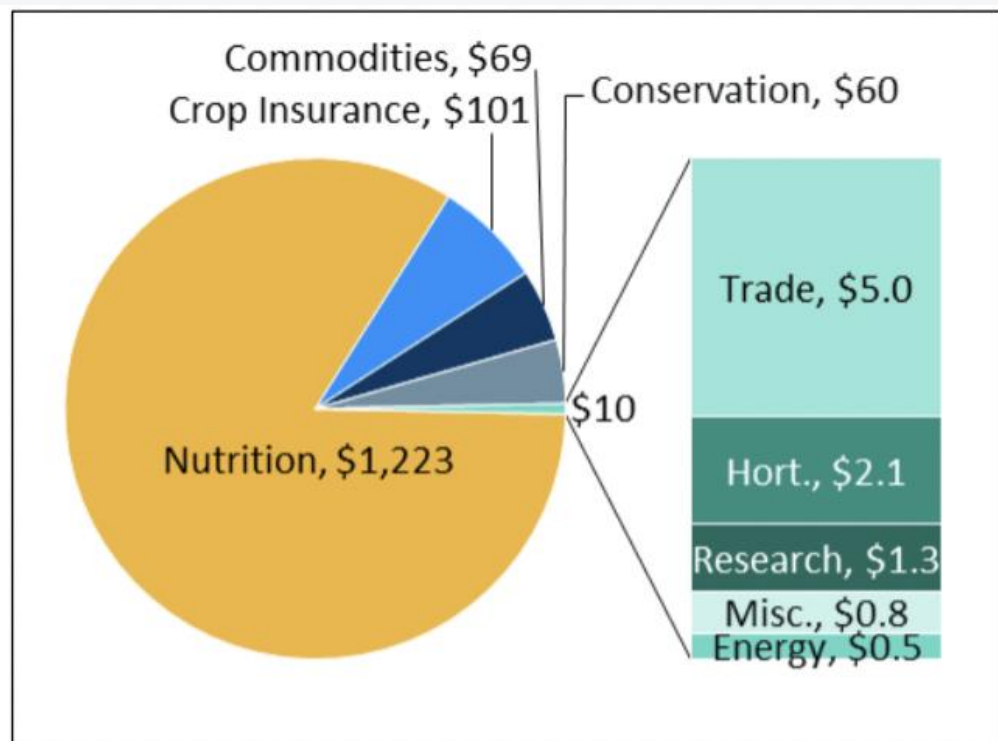
The Value of Public Agricultural R&D

- Key driver of productivity growth, keeping US farmers competitive
- Reduces food prices
- Crowds-in private investment, rather than crowding it out
- \$20 benefit-cost ratio
- Develops practices and technologies to address environmental issues
- Reduces greenhouse gas emissions for as low as \$12/tCO₂e

Public Spending on Agricultural R&D has Fallen by One-Third Since 2002



Farm Bill Title 7: Research, Extension and Related Matters

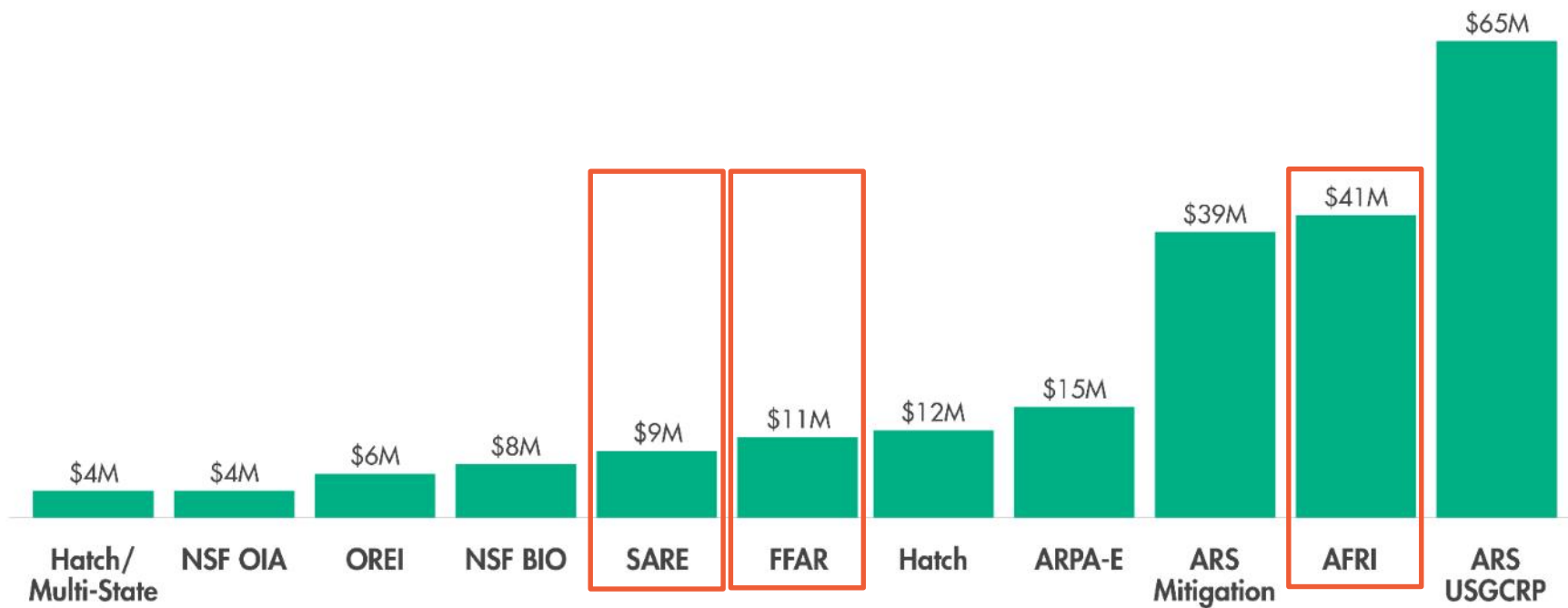


Source: CRS using the CBO Baseline (May 2023) for the five largest titles, and amounts in law for programs in other titles.

Note: Total estimated at \$1,463 billion.

- Title 7 supports agricultural research and extension programs to expand academic knowledge and help producers be more productive.
- Research accounted for <0.2% of all 2018 Farm Bill mandatory spending.
- Many research programs are authorized to receive mostly discretionary (appropriated) funds.

Research Program Funding for Climate Mitigation (2017–2021 average)



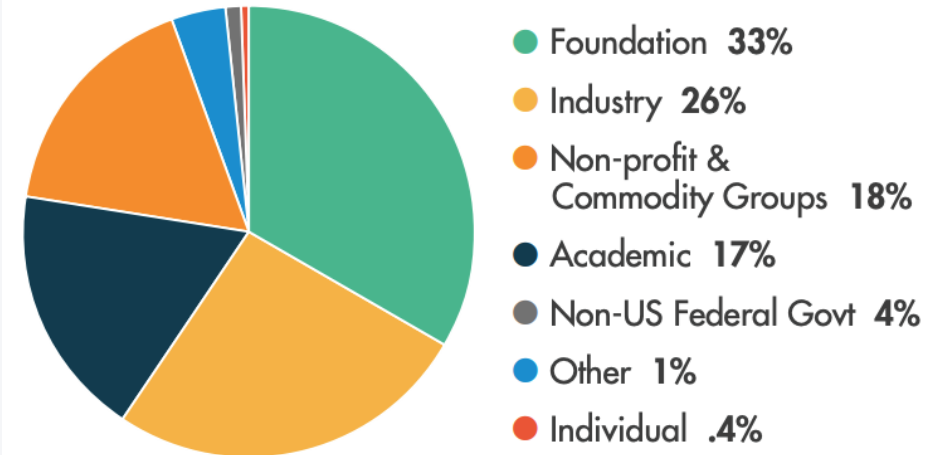
Notes: ARS mitigation and USGCRP reflect USDA estimates of enacted funding for FY21. Funding by mitigation area is not calculated owing to data limitations. Other funding is calculated based on analysis of project descriptions over 2017–2021.

Foundation for Food and Agriculture Research

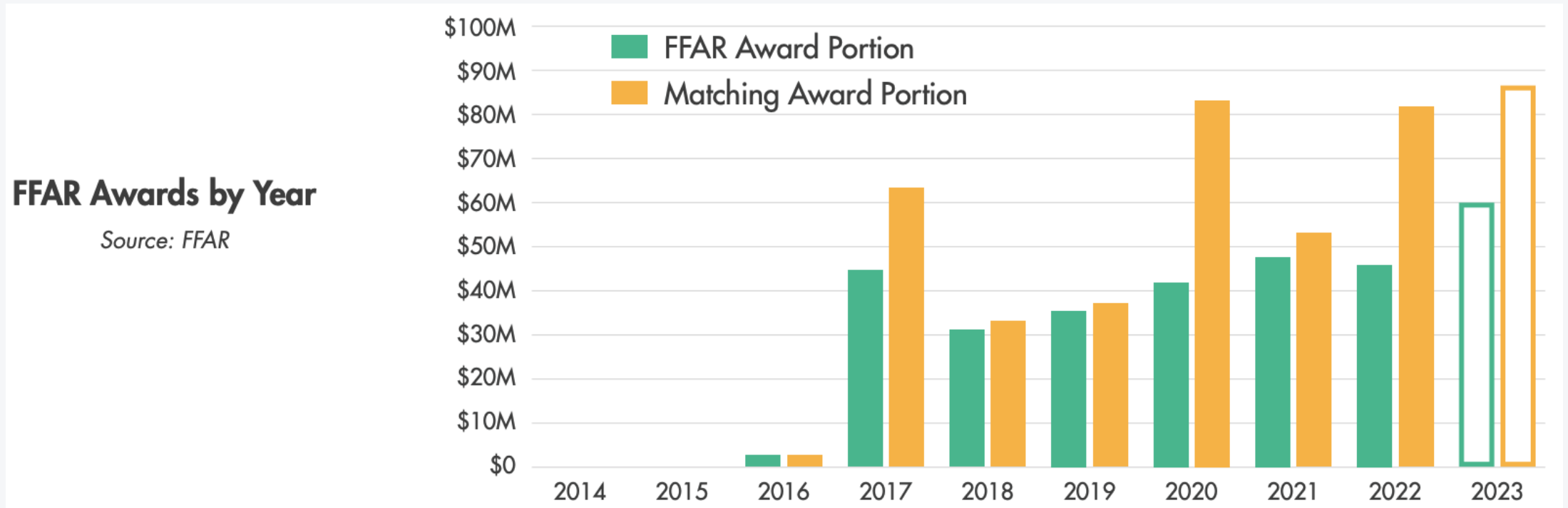
- \$600+ million awarded and matched to-date
- \$1.40 in non-federal matching funding for every \$1 awarded
- Up to 40% of awards support climate-smart agriculture
- Over 40% of projects develop tools for immediate use

Matching Funds by Donor Type
Inception through 2022

Source: FFAR



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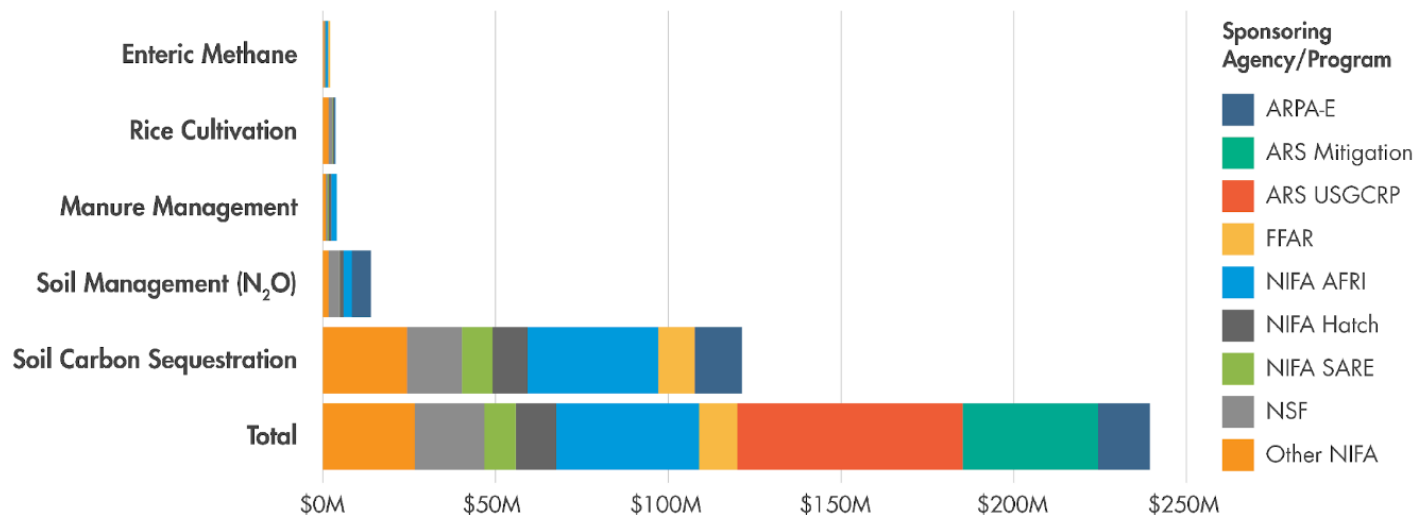
Agriculture Advanced R&D Authority

- Long-term, high-risk, high-return R&D
- Modeled after successful ARPA-style agencies
- Authorized in 2018 Farm Bill for \$50M but appropriated \$1 million per year

Program	Department	FY 2023 Appropriations
DARPA (Defense Advanced Research Projects Agency)	Defense	\$4.1 billion
ARPA E (Advanced Research Projects Agency Energy)	Energy	\$470 million
ARPA I (Advanced Research Projects Agency Infrastructure)	Transportation	\$3.2 million
ARPA H (Advanced Research Projects Agency Health)	HHS	\$1.5 billion
AGARDA (Agriculture Advanced Research and Development Authority)	USDA	\$1 million

Gaps in Mitigation-Related R&D Spending

Agricultural R&D Spending on Climate Mitigation (2017–2021 Average)



Notes: ARS mitigation and USGCRP reflect USDA estimates of enacted funding for FY21. Funding by mitigation area is not calculated owing to data limitations. Other funding is calculated based on analysis of project descriptions for 2017–2021. Columns do not sum to equal total because funding for projects can fall under multiple categories.

Thank you

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