



FY2022 Appropriations Priorities

Agriculture, Rural Development, Food and Drug Administration, and Related Agencies

Agency	Account	APLU FY2022 Request*
USDA National Institute of Food and Agriculture (NIFA)	Hatch Act (State Agricultural Experiment Stations)	\$329 million
	Smith Lever Funds 3b&c (Cooperative Extension Activities)	\$400 million
	Evans-Allen Program (1890s Research and Education)	\$92.8 million
	1890 Institutions Extension Services	\$78.7 million
	McIntire-Stennis Cooperative Forestry	\$45.8 million
	Research Grants for 1994 Institutions	\$6 million
	Extension Services at 1994 Institutions	\$10 million
	Payments Funding for 1994 Institutions	\$6 million
	Agriculture and Food Research Initiative (AFRI)	\$700 million
	Partnerships to Build Capacity in International Agriculture (PL115-334, Section 7123)	\$10 million
	Multicultural Scholars, Graduate Fellowship, and Institution Challenge Grants	\$10.5 million
Education Grants for 1890 Institutions	\$28 million	

*APLU advocates for *at least* these sums

DEPARTMENT OF AGRICULTURE (USDA)

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE (NIFA)

APLU requests increases for capacity and competitive funding in priority accounts in the National Institute of Food and Agriculture (NIFA) for agricultural research, education, and Extension in FY2022 to:

- Advance critical research priorities such as human nutrition, animal diets, soil and crop health, biobased materials, zoonotic disease preparedness, farm profitability, and climate-smart agriculture.
- Support high-quality and diverse faculty, staff, Extension educators and agents, Post-docs, and undergraduate and graduate students.
- Provide support for Extension educators and agents to advance vital, practical information to agricultural producers, small business owners, consumers, families, and young people nationwide.

NIFA is the extramural research agency with authority over the federal-state partnership for securing the nation's food supply. While federal government research priorities solely drive research in many science areas, NIFA's founders recognized the perils of dictating priorities for agricultural and food challenges nationally. Capacity funded research has national implications but is prioritized at the state and multi-state levels. Competitive grant programs fund visionary federal priorities, while capacity

funding for colleges of agriculture enables innovations to be developed and deployed at a state and local level. The ways states use capacity funds at colleges of agriculture vary across the nation. However, for most states, capacity funds are instruments of support for faculty, staff, Extension educators and agents, and undergraduate and graduate students. The decentralized structure is paramount to U.S. domestic food security, agricultural entrepreneurship, and commerce. As a result, capacity funding is an invaluable compliment to competitive funding.

Over the last three decades, federal support for agricultural research, education, and Extension, which drives state and local investment via matching funds, has been flat in real dollar terms. According to adjustments on NIFA-appropriated dollars using the Biomedical Research and Development Price Index (BRDPI)¹, public investment in agricultural research and Extension is below 1990s levels. Meanwhile, investments by global competitors are growing at a rapid pace.² In 2016 alone, China outspent the United States in agricultural research and outreach investment by \$3 billion.³ The returns on investment of agriculture research are significant, averaging \$17 for every \$1 invested.⁴ This means if our stagnant investment in agricultural research, education, and Extension continues, the U.S. risks losing significant ground to global competitors. Congress has an opportunity to address this deficit by supporting NIFA with an increase in APLU priority lines in accordance with our request levels.⁵

**CAPACITY FUNDS PROGRAM: HATCH ACT (State Agricultural Experiment Stations at 1862s)
APLU FY2022 Request: \$400 million
FY2022 PBR = \$329; FY2021 = \$259 M; FY2020 = \$259 M**

The Hatch Act capacity funds program, which extends grants to the 1862 Land-grant University (LGU) System, is a key federal-state partnership to address high-priority agricultural research needs. States provide a minimum one-to-one match for each federal dollar thus leveraging the federal investment. Hatch capacity funds enable translational research to address critical local, state, regional, and national problems. State Agricultural Experiment Stations (SAES) provide the LGU system with the fundamental capabilities to respond to critical issues that affect production, profitability, and sustainability such as invasive plant and animal species, biosecurity, sustainable land and water use, climate resilience strategies, timely economic analysis, and safety on farms. SAES faculty, staff, and graduate students, and research programs nationwide are supported by Hatch Act appropriations. Below are just some of the countless impacts of Hatch funding:

- More than 600 lines of hybrid wheat varieties in Nebraska and Texas alone
- Disease resistant [banana clones](#) in Hawaii
- [Soybean cultivars](#) that extend planting and growing season
- [Soil-moisture re-emergence](#) method to detect drought and rain conditions
- A process for turning [wastewater into biodiesel](#)

¹ The BRDPI indicates how much the NIH budget must change to maintain purchasing power. See link: <https://officeofbudget.od.nih.gov/gbipriceindexes.html>

² Mohamedshah F, Havlik S, and Velissariou M. (2020, January.) Food Research Call to Action on Funding and Priorities. IFT.

³ Beintema N, Pratt AN, Stads GJ (2020, September) Key Trends in Global Agricultural Research Investment. IFPRI

⁴ Baldos, Uris Lantz, Frederi G. Viens, Thomas W. Hertel, and Keith O. Fuglie. R&D Spending, Knowledge Capital, and Agricultural Productivity Growth: A Bayesian Approach. American Journal of Agricultural Economics. 101(1): 291–310; <https://doi.org/10.1093/ajae/aay039>.

⁵ Note that we request increases of more than eight percent for 1994 accounts due to the relative size of those programs and a need for support given COVID19 impacts to tribal communities.

APLU requests \$329 million in FY22 for Hatch funds at the 1862 institutions to retain experts at the land-grant university system to address plant and animal pest and disease, water quality and quantity, and food security and supply issues that exist across state, local, and national levels. The Hatch account has seen no increases in the past three years, resulting in a deeply concerning loss of purchasing power. Hatch program funding of \$329 million will allow the program to catch up in real dollar terms and allow for enhanced support of data-driven long-term research on local and regional agricultural systems that have greater environmental sustainability while maintaining profitability and productivity.

CAPACITY FUNDS PROGRAM: SMITH-LEVER FUNDS (Cooperative Extension System via 1862s)

APLU FY2022 Request: \$340 million

FY2022 PBR = \$315 M; FY2021 = \$315 M; FY2020 = \$315 M

APLU request support for Smith-Lever funds in FY22 of \$040 million. Smith-Lever funds support the Cooperative Extension System at 1862 land grant institutions. The Cooperative Extension System is a unique network of local educators who deliver vital, practical information to agricultural producers, small business owners, communities, youth, and families. Over 32,000 university- and county- based employees and 2.8 million volunteers support this partnership and multiply its impact across nearly all the 3,143 counties, parishes, and boroughs in the United States. Flat funding of Smith-Lever for multiple years has caused an erosion of personnel impacting the reach of Extension. Critical services to communities provided by Extension include support an out-of-the classroom educational network that combines the expertise and resources of federal, state, and local partners and land-grant university researchers to reach people at the local level. 4-H programs empower youth, through volunteerism, clubs, and camps, to reach their full potential, while promoting interest in agriculture and civic leadership. Below are just some of the countless impacts of Smith Lever funding:

- Connecting consumers to farmers via [‘Food Finder’](#) apps.
- Facilitating information during disasters via the [Extension Disaster Education Network \(EDEN\)](#).
- Providing farmers with access to research-based production guides.

As farm, business, supply chain, markets, family, and community stresses remain unyielding, CES offers options for developing rural businesses or pivoting current businesses to weather the downturn. CES’s educators and agents have reduced the negative economic impact of COVID-19 by connecting farmers with new buyers, elucidating the uncertain global agricultural marketplace, assisting local health agencies and hospitals, and distributing educational materials on COVID-19 and other topics to 4-H youth and adults. However, CES has lost considerable revenue from COVID-19 disruptions, causing budget shortfalls that are creating uncertainties for personnel and constraints resulting from limited access to new and needed technology.

APLU requests \$400 million in FY22 for Smith Lever funds at the 1862 institutions, which will support Cooperative Extension System researchers, agents, educators, and staff in fulfilling the mission of bringing vital, practical information to agricultural producers, small business owners, consumers, families, and young people nationwide. Extension professionals support a wide-variety of functions, from coordinating on-farm research trials to facilitating volunteer activities for youth or adult education, all with a focus on community. Smith Lever accounts have seen no increases over the past three years, resulting in a deeply concerning loss of purchasing power.

CAPACITY FUNDS PROGRAM: EVANS-ALLEN PROGRAM (Agricultural Research at 1890s)

APLU FY2022 Request: \$92.8 million
FY2022 PBR = \$92 M; FY2021 = \$73 M; FY2020 = \$67 M

APLU requests \$92.8 million in FY22 for the Evans Allen program, which is the foundation of agricultural research at the 1890s land-grant universities and Tuskegee University. Research conducted under the Evans-Allen Program has led to hundreds of scientific breakthroughs benefitting stakeholders of 1890s Institutions and the global agricultural economy. As an example, researchers at an 1890s institution developed post-harvest technology to eliminate the problem of allergens in peanuts and are expanding their studies to address wheat allergens and tree nut allergens. Peanut allergies, which have tripled in the past two decades, are the leading cause of food allergy related deaths in children.⁶ Investments in Evans-Allen also supports training of undergraduate and graduate students. An increase in funding will address small farmer challenges, food security and nutrition, climate change, and workforce development.

CAPACITY FUNDS PROGRAM: 1890 INSTITUTIONS EXTENSION SERVICES

APLU FY2022 Request: \$78.7 million
FY2022 PBR = \$62 M; FY2021 = \$62 M; FY2020 = \$57 M

APLU requests \$78.7 million for the Extension Services of 1890s land-grant universities. This program supports adoption of new approaches farm production and management through on-site demonstrations. 1890s Extension leads to more successful small and medium-size family farms and enhance the marketing skills of farmers aiding in placing products in local, national, and global markets. 1890s Extension programs in business and entrepreneurship enhance the ability of minority farmers and landowners to acquire capital, integrate new technologies, and use estate planning and tax incentive programs to retain operations and increase profitability. The 1890 Institution Extension Services coordinate with the 1862 Extension System to fill gaps and support underserved populations. The 1890s are a critical part of the land grant institution system. APLU requests an increase for 1890 Institutions' extension to bring vital, practical information to agricultural producers, small business owners, consumers, families, and young people.

CAPACITY FUNDS PROGRAM: McINTIRE-STENNIS COOPERATIVE FORESTRY

APLU FY2022 Request: \$46 million
FY2022 PBR = \$46 M; FY2021 = \$36 M; FY2020 = \$36 M

APLU requests \$46 million to support the McIntire-Stennis Cooperative Forestry program in FY22. McIntire-Stennis funding supports university-based research and education that protects our forests and watersheds, preserves environmental resources, and trains the next generation of natural resource scientists. McIntire-Stennis funds are heavily leveraged with state and private dollars, often as much as 6 to 1. These capacity funds support research, confront new environmental or disease challenges, and design management innovations that assist landowners with striking a balance between production of ecosystem products and services and environmental stewardship. Research from McIntire-Stennis enables development of new technologies to monitor forest fires, approaches to carbon sequestration, biobased products and energy sources, expansion of outdoor recreational activity, and mitigation techniques for impacts from invasive species. The increase in McIntire Stennis Cooperative Program funds will support research on: understanding new forest stressors; adaptation to and mitigation of

⁶ [The Economic Impact of Peanut Allergies by H. Eric Cannon, PharmD, FAMCP](#)

climate change; utilization of wood and new applications for forest products; strengthening forestry program and support new initiative in multi cropping (agroforestry); management of forest and related rangeland and grassland for livestock, game and wildlife; and increasing the use of agroforestry by landowners and communities, with a priority on underserved and minority audiences.

COMPETITIVE PROGRAM: AGRICULTURE AND FOOD RESEARCH INITIATIVE (AFRI)

APLU FY2022 Request: \$700 million

FY2022 PBR = \$700 M; FY2021 = \$435 M; FY2020 = \$425 M

APLU requests funding of the Agriculture and Food Research Initiative (AFRI), USDA's flagship competitive grants program, at the authorized level of \$700 million. The program provides funding for six Farm Bill federal priority areas:

- Plant Health and Production and Plant Products;
- Animal Health and Production and Animal Products;
- Food Safety, Nutrition, and Health;
- Bioenergy, Natural resources, and Environment;
- Agriculture Systems and Technology;
- and Agriculture Economics and Rural Communities.

Competitive research is an essential part of funding national priorities in agricultural research, education, and Extension. As examples, awards from AFRI are going towards rapid detection of cattle disease, cutting greenhouse gases from cows, and understanding heat impacts on bees. Additional funding will help address the backlog of highly ranked applications that go unfunded (in 2016 AFRI applications had a 20% success rate⁷) because of limited appropriations. An increase in AFRI will allow more meritorious applications to receive funding, boosting the impact and advancements from the program.

COMPETITIVE PROGRAM: 1994 INSTITUTION RESEARCH PROGRAM

APLU FY2022 Request: \$6 million

FY2022 PBR = TBD; FY2021 = \$4 M; FY2020 = \$3.8 M

The Tribal College Research program helps the 1994s build scientific research capacity and provide a strong foundation in research knowledge for students. The 1994s often serve as the primary institution of scientific inquiry, knowledge and learning for tribal communities. The modest research funding received by the 1994s helps protect reservation forests, woodlands, grasslands, and crops, and monitoring of the quality of soil, water, and other environmental factors. 1994 land-grant university research projects range from studying bison herd productivity to efforts focused on promoting traditional plants and diets, controlling invasive species, and revitalizing tribal economies. Current research funding for the 1994s is inadequate to build the institutional research capacity to fully meet the needs of tribal communities and lands.

⁷ <https://nifa.usda.gov/afri-annual-review-funding-portfolio>

COMPETITIVE PROGRAM: 1994 INSTITUTION EXTENSION PROGRAM

APLU FY2022 Request: \$10 million

FY2022 PBR = TBD; FY2021 = \$8.5 M; FY2020 = \$8 M

The Tribal College (also known as the 1994 land-grant institutions) Extension program supports community-based learning on topics such as farmer education, youth development, diet and nutrition, and rural entrepreneurship. Outreach, technical assistance, and continuing education through traditional Cooperative Extension programs are limited in many tribal communities, often due to remote rural settings and funding limitations. The coronavirus pandemic has exposed the desperate need for basic public health education, food security initiatives, and economic development. The 1994s lack the funding they need to develop and deliver appropriate extension programming in these underserved tribal communities. With adequate funding, the 1994s can provide relevant, local community extension services that are innovative and provide important opportunities to tribal communities.

COMPETITIVE PROGRAM: 1994 INSTITUTIONS EQUITY PAYMENT

APLU FY2022 Request: \$6 million

FY2022 PBR = TBD; FY2021 = \$4.5 M; FY2020 = \$4 M

The Tribal College Education Equity Grants program promotes and strengthens higher education instruction in the food and agricultural sciences at the 1994 land-grant institutions. Equity programs focus on undergraduate and/or graduate studies in the food and agricultural sciences in curricula design and development, faculty development, instruction delivery systems, student experiential learning, equipment and instrumentation for teaching, or student recruitment and retention. Current funding levels awarded to the 35 1994s are insufficient to develop the capacity to deliver high-quality instruction and student support services.

COMPETITIVE PROGRAMS: Partnerships to Build Capacity in International Agriculture

APLU FY2022 Request: \$10 million

FY2022 PBR = TBD; FY2021 = \$0 M; FY2020 = \$0 M

Investments in international agriculture strengthen U.S. standing in global markets and support a culturally competent domestic agricultural workforce. In practice, both knowledge and experience are key to the success of graduating students and professionals in agricultural science, business, and finance. APLU supports investment in the program to develop critical research and outreach partnerships between land-grant universities, non-land grant colleges of agriculture, cooperating forestry schools, and international partner institutions in developing countries.

NIFA Education Funding

USDA projects that each year between 2021 and 2025, there will be more job opportunities (59,400) for college graduates in food, agriculture, natural resource, and environmental (FANRE) fields than it has graduates from those disciplines (36,112). Experts continue to prove the business case for why diversity in employees matters for a company's profitability by stirring more innovation, better anticipating consumer needs and consumption patterns, and enhancing company resilience. The U.S. agricultural industry will benefit from a college graduating class that reflects the larger population in their age bracket. Census data demonstrates that younger U.S. populations are increasingly diverse, but to date, the demographics of individuals graduating in FARNE fields has not matched this increasing diversity. Increased investment in the following NIFA education programs for food, agriculture and natural

resources will increase the chance of meeting the nation’s talent needs for the future. APLU requests support for two programs in FY22 to address diversity, equity, and inclusion issues in agricultural education issues.

Multicultural Scholars, Graduate Fellowship, and Institution Challenge Grants⁸

APLU FY2022 Request: \$10.5 million

FY2022 PBR = TBD; FY2021 = \$9.5 M; FY2020 = \$9 M

This Multicultural Scholars Grants support scholarship programs leading to either baccalaureate degrees within the Food, Agriculture, Natural Resources, and Human (FANH) Sciences or Doctor of Veterinary Medicine (DVM) degrees. Both 1862 and 1890 Land-grant Universities, as well as other public and private non-profit colleges and universities are eligible for these grants.

Education Grants for 1890 Institutions

APLU FY2022 Request: \$28 million

FY2022 PBR = TBD; FY2021 = \$26 M; FY2020 = \$23 M

The Education Grants for 1890 Institutions strengthen research, teaching, and extension capacity needed to advance fundamental sciences, as well as translational research and development in support of agriculture, and to coordinate opportunities to build on these discoveries.

Bill Language Request: WAIVER AUTHORITY

APLU requests the following language in the FY22 appropriations bill to allow the Secretary of Agriculture to waive the matching requirement for the Specialty Crop Research Initiative (SCRI) and Emergency Citrus Disease Research and Extension (ECDRE) programs authorized in the 2018 Farm Bill: “The Secretary of Agriculture may waive the matching funds requirement under Section 412(g) of the Agricultural Research, Extension, and Education Reform Act of 1998 (7 U.S.C. 7632(g)).”

About the Association of Public and Land-grant Universities

APLU is a research, policy, and advocacy organization dedicated to strengthening and advancing the work of public universities. With a membership of 201 U.S. public research universities, land-grant institutions, state university systems, and affiliated organizations, APLU's agenda is built on the three pillars of increasing degree completion and academic success, advancing scientific research, and expanding engagement. Annually, its 201 U.S. member campuses enroll 4.2 million undergraduates and 1.2 million graduate students, award 1.2 million degrees, employ 1.1 million faculty and staff, and conduct \$46.8 billion in university-based research.

⁸ 7 U.S.C. 3152 (b) (Section 1417 (b) of the National Agricultural Research, Extension and Teaching Act of 1977