

## 8.6 Rural and Community Development

The goal for this program is to develop and commercialize new technology, products, processes and services that will: (i) enhance the efficiency and equity of public and private investment in rural communities; (ii) build a diversified workforce to meet the needs of the present and for the future; (iii) enhance resilience to both natural and human disasters; and (iv) enhance economic vitality of rural communities and, in turn, reduce rural poverty.

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## 8.7 Aquaculture

The long term goals of this program are to achieve improved aquaculture production and competitiveness of private sector aquaculture resulting from improved reproductive efficiency in fish and shellfish, genetic improvement in fish and shellfish, improved animal health, food processing safety, reduced water usage and improved production efficiencies, and cost-effective production of microalgae for use as aquaculture feed and as a source of valuable human food supplements.

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## 8.8 Biofuels and Biobased Products

This program promotes the use of biofuels and non-food biobased products by developing new or improved technologies leading to increased production of industrial products from agricultural materials, and new opportunities to diversify agriculture and enhance agriculture's role as a reliable supplier of raw materials to industry.

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## 8.12 Small and Mid-Sized Farms

Research in this area is focuses on promoting and improving the sustainability and profitability of small and mid-size farms and ranches by encouraging the development of new specialty farm products, both plant and animal, including organic and natural products, improving farm management including enhanced farm safety, increased efficiency of farm operations and economies of scale, and conservation of natural resources..

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## 8.13 Plant Production and Protection - Engineering

Improve crop production and protection by reducing the impact of harmful agents and developing effective crop production, post-harvest and storage systems that are economically and environmentally sound.

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## MISSION:

Supporting scientific excellence and technological innovation through the investment of federal funds in critical American priorities to build a strong nation economy, one small business at a time.

The USDA-SBIR program is designed to provide the opportunity for the most innovative ideas from the small business sector by offering the resources to succeed in providing significant public benefit through federal R&D funds for research in 10 agricultural research topic areas.

More information on the federal SBIR program can be found at [www.sbir.gov](http://www.sbir.gov) or at [www.sba.gov/sbir/](http://www.sba.gov/sbir/)



## Program Objectives:

1. Stimulate technological innovation in the private sector.
2. Strengthen the role of small businesses in meeting Federal research and development needs.
3. Increase private sector commercialization of innovations derived from USDA-supporting research and development efforts.
4. Foster and encourage participation by women-owned and socially and economically disadvantaged small business firms in technological innovation.

Phase I projects last 6-8 months with a budget of \$100,000 to determine the scientific and technical feasibility of ideas for innovative solutions to scientific problems and opportunities that could lead to the pursuit of commercialization objectives. Phase II projects last 2 years, and receive up to \$460,000 of funding to stimulate technological innovation and the national return on investment from

## OVERVIEW:

SMALL BUSINESS INNOVATION RESEARCH (SBIR) IS A HIGHLY COMPETITIVE FEDERAL GRANT PROGRAM FOR AMERICAN-OWNED AND INDEPENDENTLY OPERATED FOR-PROFIT BUSINESSES OF 500 EMPLOYEES OR LESS. USDA IS ONE OF ELEVEN FEDERAL AGENCIES REQUIRED TO RESERVE 2.5% OF THEIR EXTRAMURAL RESEARCH AND DEVELOPMENT DOLLARS FOR SMALL BUSINESSES. SINCE ITS INCEPTION IN 1983, SBIR HAS FUNDED THOUSANDS OF RESEARCH AND DEVELOPMENT PROJECTS ACROSS THESE ELEVEN AGENCIES THAT HAVE ENHANCED AMERICAN AGRICULTURE, THE ENVIRONMENT, HEALTH CARE, OUR NATION'S DEFENSE AND HAVE IMPROVED RURAL COMMUNITIES.

THE PROGRAM SUPPORTS HIGH-QUALITY RESEARCH AND DEVELOPMENT THAT COULD STIMULATE TECHNOLOGICAL INNOVATION IN THE PRIVATE SECTOR, STRENGTHEN THE ROLE OF SMALL BUSINESSES IN MEETING FEDERAL RESEARCH AND DEVELOPMENT NEEDS, INCREASE PRIVATE SECTOR COMMERCIALIZATION OF INNOVATIONS DERIVED FROM USDA-SUPPORTED RESEARCH AND DEVELOPMENT, AND FOSTER PARTICIPATION BY WOMEN-OWNED AND SOCIALLY AND ECONOMICALLY DISADVANTAGED SMALL BUSINESS FIRMS. THE PARTICIPATION OF UNIVERSITY RESEARCHERS AS COLLABORATORS, CONTRACTORS, OR CONSULTANTS IS STRONGLY ENCOURAGED.

ADDITIONALLY, THE USDA SBIR PROGRAM PROVIDES SUPPORT SERVICES TO BOTH PHASE I AND PHASE II GRANTEES IN DEVELOPING A COMMERCIALIZATION STRATEGY TO SECURE FUTURE PHASE III FUNDING AND TO SUCCESSFULLY COMMERCIALIZE THE TECHNOLOGY, PROCESS OR PRODUCT BEING DEVELOPED UNDER USDA SBIR FUNDING. THESE SUPPORT SERVICES ARE PROVIDED AT NO COST TO THE GRANTEE AND HAS PROVEN TO BE AN EFFECTIVE SERVICE AND TOOL FOR THE COMPANIES WHO HAVE PARTICIPATED.



## 8.1 Forests and Related Resources

Projects focusing on the health, diversity and productivity of our Nation's forests and grasslands through new technologies with sound environmental approaches to increase productivity and meet the needs of the public, improving the sustainability of forest resources, developing value-added materials, nano-materials, addressing the influence of climate change on forest health and productivity, and protection to ensure the continued existence of healthy and productive forest ecosystems.

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## 8.2 Plant Production and Protection - Biology

Enhance crop production and protection by applying biological approaches to reducing the impact of harmful agents, developing new methods for plant improvement, and developing new food and specialty-use crop plants.

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## 8.3 Animal Production and Protection

Research projects that develop knowledge enabling producers of animals of agricultural importance to increase production efficiency, prevent diseases or disease outbreaks and to assure a reliable, safe supply of animal protein and other animal products, while conserving resources and reducing costs of production.

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## 8.4 Air, Soil and Water

Research in this area is focused on developing technologies for conserving and protecting air, water and soil resources while sustaining optimal farm and forest productivity by reducing soil erosion, enhancing water quality and conservation, developing improved irrigation technologies, monitor air quality and reduce air pollution stemming from agricultural enterprises, and promoting technologies that enhance soil properties while restricting environmental perturbations.

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## 8.5 Food Science and Nutrition

The food science and nutrition research program develops products and processes from new knowledge and a better understanding of the characteristics of the foods we eat and their nutritional impact, improved methods for the processing and packaging of foods for better quality and nutritional value, and develop programs or products that increase the consumption of healthy foods and reduce childhood obesity.

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