

Texas (Texas A&M University)

Plan of Work for 2023-2027

Status: Final (Approved 9/30/2022)

Executive Summary Overview

Texas is the second largest state in the nation with approximately 30 million citizens, and one of the fastest growing states. The size and scope of Texas poses unique challenges and opportunities with a wide range of diversity including both the agricultural and human sectors. The issues and needs of Texans vary by numerous factors and, in many cases, are complex. Texas is one of the most rural and most urban states in the nation with a majority of its citizens living in 20 of the 254 counties in the state. Texas A&M AgriLife Research (AgriLife Research) and the Texas A&M AgriLife Extension Service (AgriLife Extension) are the 1862 land-grant research and Extension components of the Texas A&M University System and are headquartered in College Station, Texas. Since its beginning in 1876 as a land-grant institution, Texas A&M University has been a recognized leader in agriculture, food, and natural resources. Today, Texas A&M University, AgriLife Research, and AgriLife Extension continue this legacy through important contributions to science through research and discovery, and improving lives by delivering innovative science based solutions and education at the intersection of health, agriculture and environment through Extension programs. The work of both AgriLife Research and AgriLife Extension is guided by strategic plans. AgriLife Research has recently developed a new strategic plan (2022-2027) to focus its resources on issues of highest importance as identified by agency scientists and other stakeholders. The following four broad priority areas were identified in the strategic plan:

- 1) Discover new innovations, technologies, and science-based solutions to enhance agricultural and ecological systems, and the life sciences.
- 2) Provide the translational research necessary to develop and produce high-quality, safe, and sustainable food and fiber systems with local, national, and global impacts.
- 3) Enhance the efficiency, profitability, and resiliency of agriculture, natural resources, and food systems in the state of Texas and the world.
- 4) Discover, disseminate, and facilitate the adoption of scientific evidence at the intersection of nutrition, human health, and agriculture.

AgriLife Research will emphasize over the coming years the above strategic priorities to make measurable progress toward enhancing the resilience of agricultural systems and ensuring an abundant supply of high quality nutritious foods for our citizens.

AgriLife Extension developed a strategic plan (2021-2025) to help communities engage, learn and flourish in the face of declining personnel, population changes and technology changes. In order to serve Texans for decades to come the plan focuses on how we do business to maximize effectiveness. The foundation of the plan focuses on five key themes:

- 1) Invest in appropriate technologies and train people to use those technologies skillfully;

- 2) Develop a program strategy that both ensures coordinated, integrated programs to serve Texans and that coordinate how we evaluate and promote those programs;
- 3) Retain and recruit outstanding people across AgriLife Extension;
- 4) Pursue operational efficiencies;
- 5) Ensure effective internal communications.

Work on issues of importance in the state is a joint endeavor by both AgriLife Research and AgriLife Extension. Research-based information is translated to practical best management practices and disseminated via multiple channels including the network of Extension agents in all 254 counties in the state. Both AgriLife Research and AgriLife Extension conduct identification of issues and needs at multiple levels. Grassroots involvement by citizens, advisory groups, and commodity and industry groups are just a few of the ways this information is generated. Work with other states on areas of shared interest is also of high priority. This Plan of Work addresses programs of primary importance in Texas. Specifically, AgriLife has identified the following critical issues for this Plan of Work:

- 1) Agriculture Production
- 2) Natural Resources and the Environment
- 3) Community and Economic Development
- 4) Connecting Agriculture and Health
- 5) Health and Wellness
- 6) Youth Development and Leadership
- 7) Adult and Community Leadership

Merit and Scientific Peer Review Processes

AgriLife Research and AgriLife Extension Administrative Leaders serve as merit and scientific reviewers for the Federal Plan of Work, Hatch projects, the Federal Report of Accomplishments and Results, and associated grants and contracts. This team is comprised of agency directors/associate directors, department heads, Extension associate department heads and Regional program leaders, and Research center directors. This leadership team is responsible for the oversight and management of all programs conducted by research and Extension faculty.

All proposed projects funded under the Hatch (research/Experiment Station) or Smith-Lever 3d (Extension) undergo a merit review process. Each proposal submitted for support is reviewed through an internal process for mission relevance and scientific merit.

Stakeholder input: Action Taken to Seek Stakeholder Input

Both AgriLife Extension and AgriLife Research use multiple methods to reach stakeholder groups within the State of Texas. AgriLife Extension uses multiple sources of input including local clientele, commodity/special interest groups, trend data monitored by specialists, various county committees, elected officials, and emerging issues. Teams of Extension and research faculty meet to analyze these

issues, which lead to priority setting and development of programs to address the needs and issues raised by the various stakeholder groups and methods.

AgriLife Extension employs a statewide hybrid, in person and electronic needs assessment, coupled with an asset mapping process to gain community data from across the state. This process, called TexasSpeaks, allows all Texans an opportunity to provide input on their communities. Data will be used for decision making and program development and conducted on a bi-annual basis.

Local Leadership Advisory Boards (LABs) meet to validate issues raised in the local stakeholder input process in the off years of TexasSpeaks. Leadership Advisory Boards serve as a conduit to local citizens and their needs. These boards are comprised of community opinion leaders charged with providing long-term visioning and advocacy for the local Extension program. Approximately 2,500 individuals serve on Leadership Advisory Boards across the state. This process continues as the local process to raise and validate issues. Another 16,000 citizens serve on program area committees, task forces, coalitions, and youth boards. These volunteers represent specific areas of the local program and are involved in issues identification, program development and delivery, evaluation and interpretation of programs, and management of other volunteers. These volunteers represent all 254 counties in the state.

AgriLife Research Administration, Department Heads, and Resident Directors regularly meet with the major agricultural industries and commodity groups in Texas. AgriLife Research has encouraged the public to participate in helping set priorities, assess current program and process effectiveness, and determine future directions. These processes were open, fair, and accessible to encourage individuals, groups, and organizations to have a voice, and treated all with dignity and respect. Stakeholders were initially identified by membership in listed organizations, though all events were public and were announced in the press and other written notice. Input from these events was captured by AgriLife Research participants, and in some cases, was published for further public use. Stakeholder input has always been critical to AgriLife Research processes and programs, and listed events and organizations continue as essential partners in setting the AgriLife Research agenda and recognizing and addressing emerging issues. A concentrated effort was done for small grains, corn, sorghum, and cotton resulting in a jointly developed strategic plan. AgriLife Research also met with leading animal health companies, large cow-calf operators, stockers, cattle feeders, and leaders in high-throughput sequencing to develop a research strategy to benefit the beef industry. AgriLife Research also solicited input from various stakeholder groups in the development of the agency's new strategic plan.

Stakeholder input: Methods to Identify Individuals and Groups

The basis for AgriLife's relevance in the State of Texas is stakeholder participation and grassroots involvement. AgriLife Extension engages the local Leadership Advisory Board in the identification and validation of new and emerging issues. Information from other stakeholders is obtained in various ways. Regular meetings are held with various commodity and interest groups. These groups provide input into programmatic decisions including development of new efforts, modification of existing efforts, and termination of programs that are no longer relevant. Finally, various subject matter groups employ the use of surveys and other needs assessment processes to gain information specifically about their subject area. Data from these processes are used to develop programs to address issues.

AgriLife Research invites input from various stakeholders through Advisory Committees, Internal and External Focus groups, open listening sessions, needs assessments, and use of stakeholder surveys.

Stakeholder input: Methods for Collecting Stakeholder Input

Both AgriLife Extension and AgriLife Research use multiple methods to reach stakeholder groups within the State of Texas. AgriLife Extension uses multiple sources of input from various stakeholders. These include local clientele, commodity/special interest groups, trend data monitored by specialists, various county committees, elected officials, and emerging issues. Teams of Extension and research faculty meet to analyze these issues, which lead to priority setting and development of programs to address the needs and issues raised by the various stakeholder groups and methods.

Methods of data collection include surveys, focus group sessions, data collected as a result of program evaluations, expert panels, meetings with stakeholders, and open forum type meetings to solicit input. All data from all sources are considered when decisions are made regarding the future directions of Research and Extension efforts.

Coordinated Program Areas (CPA) are in place to assist with the coordination and collaboration of key program areas. Extension educators engage local program area committees and then transfer that data to an issue identification process of CPAs. Additionally Ag. Increment Reports, State of Health Reports, State of Kids Report and other trend data is collected.

Stakeholder input: A Statement of How the Input Will Be Considered

The relevance of AgriLife in the State of Texas is based on stakeholder support and grassroots involvement. Both AgriLife Extension and AgriLife Research utilize various methods to analyze and incorporate input from stakeholders. AgriLife Research uses stakeholder input in various ways including to identify research priorities and emerging issues, program budgeting, faculty/staff hirings, priority infrastructural needs, and development of strategic plans.

CPAs prioritize issues identified at the local, regional and state levels and outline the future programmatic direction for each program area.

Critical Issues

Adult and Community Leadership (1862)

Initiated on: Nov 26, 2019

State: Texas

Term Length: Long-term (>5 years)

Adult and community leadership continues to be a major effort within Texas. Volunteers are one of the most important commodities to Texas Extension, ensuring that Extension maintains relevance and helping the agency deliver programs. Utilizing the Extension network with elected county officials, the agency provides professional development and continuing education for elected county officials across Texas. Communities in Texas continue to need trained leaders and to ensure viability and resiliency in the era of diminishing rural economies and disasters.

Science Emphasis Area

Education and Multicultural Alliances, Family & Consumer Sciences, Youth Development

Agriculture Production (1862)

Initiated on: Nov 26, 2019

State: Texas

Term Length: Long-term (>5 years)

Texas leads the nation in several areas including cattle, cotton, hay, sheep, goats and mohair. Twenty billion dollars annually is added to the Texas economy from agricultural. Agriculture production will focus primarily on livestock and crop production, and also includes economics, fruit and vegetable production, pest management, range management, wildlife, and horticulture.

Science Emphasis Area

Agroclimate Science, Bioeconomy, Bioenergy, and Bioproducts, Environmental Systems, Food Safety, Sustainable Agricultural Production Systems

Community and Economic Development (1862)

Initiated on: Nov 26, 2019

State: Texas

Term Length: Long-term (>5 years)

Efforts in community and economic development are designed to increase the capacity of targeted Texans to respond to rapidly changing socioeconomic and natural forces that impact their community and quality of life through increasing the understanding of these forces and potential responses from both an individual and community perspective. Specific issues include concerns about workforce development, emergency management, community and regional economic viability, and sustainable communities.

Science Emphasis Area

Education and Multicultural Alliances, Environmental Systems, Food Safety, Youth Development

Connecting Agriculture and Health (1862)

Initiated on: Nov 26, 2019

State: Texas

Term Length: Intermediate (1-5 years)

Today more than ever the connection of agriculture to the foods we consume is critical. Consumers must sift through a vast number of sources to find information on agriculture, food, and the connection of these for accurate and unbiased information. This area of work focuses on agriculture, our food, and the connection to health. Research and extension efforts will focus on producing a high-quality food supply, while providing consumers access to evidence-based information to make informed decisions.

Science Emphasis Area

Education and Multicultural Alliances, Family & Consumer Sciences, Food Safety, Human Nutrition, Sustainable Agricultural Production Systems, Youth Development

Health and Wellness (1862)

Initiated on: Nov 26, 2019

State: Texas

Term Length: Long-term (>5 years)

Chronic diseases continue to be the leading cause of morbidity and mortality in Texas. Health and nutrition related diseases such as heart disease, cancer, diabetes, and obesity will be the primary focus of this area. Basic and applied research, and educational programs will focus on prevention and management while helping individuals to understand the consequences of dietary and lifestyle choices. Additionally, the goal of outreach and education is to focus on healthy and safe community environments by creating and sustaining communities that promote health and wellness through prevention.

Science Emphasis Area

Education and Multicultural Alliances, Family & Consumer Sciences, Food Safety, Human Nutrition, Youth Development

Natural Resources and the Environment (1862)

Initiated on: Nov 26, 2019

State: Texas

Term Length: Long-term (>5 years)

This includes research and extension work to serve the needs of clientele through basic and applied research, and extension directed to the problems and their impacts on Texas' natural resources and environment. The focus of this area includes water, range management, wildlife, and environmental stewardship while being mindful of the need for producers to remain profitable.

Science Emphasis Area

Agroclimate Science, Environmental Systems, Sustainable Agricultural Production Systems

Youth Development and Leadership (1862)

Initiated on: Nov 26, 2019

State: Texas

Term Length: Long-term (>5 years)

The youth development and leadership program will focus on enhancing the skills needed for youth to become productive adults. Specifically, this program will serve to highlight the work in Texas associated with project experiences including club projects, curriculum enrichment, and special interests. These areas are represented by various subject matters through five areas of focus: family and community health, agriculture and livestock, leadership and citizenship, natural resources and STEM.

Science Emphasis Area

Education and Multicultural Alliances, Family & Consumer Sciences, Youth Development