

Cooperative Agricultural Research Center



The Cooperative Agricultural Research Center (CARC) has organizational responsibility for coordinating agricultural research within the College of Agriculture and Human Sciences at Prairie View A&M University. The mission of CARC is to conduct basic and applied research in the Agricultural, Environmental, Food, Natural Resources, Plants, and Social Sciences to provide research based information and technological developments, which improves the socioeconomic conditions of the clientele it serves in Texas, the Nation, and the World, with emphasis on the historically underserved.

NEW STRATEGIC INITIATIVES

Strategic realignment of the sub-unit's mission with a focused agenda towards 2050.

Evaluate each unit's current and proposed Research Plan of Work to make sure it aligns with the mission, goals, and objectives of PVAMU, CAHS, CARC and the USDA-NIFA.

Develop a more synergistic relationship with CAHS academic faculty, CEP Extension staff, and other PVAMU faculty who have a common interest.

Develop a tactical action strategy to facilitate a forum to enhance working relationships across duty assignments/job responsibilities.

Facilitate the improvement of infrastructure, protocols, and workflow processes to enhance efficiency and productivity.

Develop a procedural guideline to facilitate a more efficient workflow process that takes away some uncertainties of managing daily tasks.

Focus Areas

Animal Systems – Research is dedicated to advancing the science and understanding of the physiological mechanisms affecting the reproductive performance of grazing ruminants (goats and cattle). The use of this information serves to improve the livelihoods of the people of Texas, the gulf coastal region, the nation, and the world, through its international mission.

Food Systems – The working group has focused efforts on issues of regional and national importance of enhancing nutrition, food safety/quality, food security/insecurity, and the related impacts on the quality of incidences of nutritional related illnesses and diseases, such as diabetes and obesity, as well as the increase in foodborne illnesses and food-borne pathogens.

Plant Systems – Dedicated to developing a body of knowledge using a multi-disciplinary approach to examining the efficacy of producing high-value, low-volume medicinal and nutritional products. The aim is to provide nutritionally based information regarding the relationship between proper nutrition and health.

Natural Resources and Environmental Systems (NRES) – Evaluating the impact of land-use and climate changes on groundwater storage; the interactions between land-use, climate change, and carbon cycling using satellite measurements; and interactions of hydrologic and hydraulic modeling of watersheds. Information developed through this unit has been used by municipalities, such as the City of Houston to focus on the impact of climate change on weather patterns.

Social Systems and Allied Program – Examining factors impacting the quality of life in rural communities. An understanding of these factors is vital in setting policies and programs that promote socioeconomic well-being. These factors are multidimensional and include some key indicators, such as: 1) Food security/insecurity, 2) Health disparities, 3) Unemployment and income disparities, 4) Education/vocational, 5) Rural Infrastructure, 6) Emergency management, 7) Housing, and 8) Family resilience.