



FY 2010-2011 Exceptional Item:
**Equipping Texas to Participate in
a Potential Carbon Economy**

Requested Amount: \$6 million (biennial amount)

Program Description

Goals are to develop best management practices, quantify sources of carbon, and develop background information for the design of scientifically sound carbon-trading guidelines that accommodate Texas industrial and agricultural characteristics, while providing relatively low-cost offsets to Texas industry.

- Develop Texas-based background information needed for design of a carbon-equivalent trading framework to allow farmers, agribusinesses, and the industrial sector to fully participate in dynamic carbon-trading markets being proposed and implemented by national governments, U.S. federal agencies, and private interests.
- Evaluate the efficacy of agricultural practices (e.g., tillage, animal diet management, and pasture management) on carbon storage in soils and plants.
- Position Texas industry to utilize Texas sequestration in a free-market manner in the event of a regulatory environment related to carbon.

Benefit to the State / Results

- Carbon trading could easily translate into billions of dollars traded worldwide between net emitters and net reducers of carbon. Stable, sound, balanced, and fair trading policies are needed to protect the interests of Texas agricultural producers and industry. These policies must be based on science and account for the diverse production systems and regions of Texas.
- This effort supports the state's goal of increased economic development by providing research-based background information needed for developing a framework for the trading of carbon as a commodity. In this framework, industrial interests would be able to purchase carbon credits with assurance of legitimacy and agricultural producers would be justly compensated for sequestered carbon.



Background Information

- Research must quantify the contributions of agricultural sources of carbon, such as crops, livestock, and forests.
- Research addressing both the direct and indirect effects of climate change, and addressing ways to reduce carbon emissions, will provide value to Texas and will position the Texas economy to respond to these escalating natural and political forces.
- Texas AgriLife Research has the scientific expertise in economic, environmental, and agricultural systems to address this topic in a logical, factual manner.
- The climate of Texas and the world may be changing for several reasons, including natural climatic variability and increased atmospheric concentrations of carbon. These changes could have significant economic impacts on agriculture in Texas, both directly and indirectly. For example, higher temperatures and increased rainfall variability could directly affect agricultural production, as could the indirect effects of higher energy costs and new national farm and energy policies, such as carbon trading.
- Because of its geographic diversity and diverse climatic regimes, Texas may be particularly vulnerable to global climate change, which will increase pressures on agriculture.
- Best practices related to climate change would include creation of new crop cultivars with greater tolerance to drought and salinity as well as optimal cropping patterns and innovative livestock production practices to both deal with varying climates and reduce carbon emissions.
- This activity would be a substantial complement to AgriLife Research's current significant research efforts to develop alternative fuels based on bioenergy sources.

For more information, contact:

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