

Economic Impacts of Closure of the Subtropical Agricultural Research Center in Texas

CNAS Issue Brief 2011-03



June 20, 2011

Introduction

The Kika de la Garza Subtropical Agricultural Research Center (SARC) is located in the heart of the Rio Grande Valley of Texas. In 1931, the U.S. Department of Agriculture (USDA) placed a single scientist at Weslaco, Texas to conduct research on citrus and vegetable processing. Today, the Center operated by the Agricultural Research Service, USDA has more than 100 permanent employees who work on critical issues facing 21st century agriculture.

The Lower Rio Grande Valley (LRGV) of Texas is one of the most diverse and dynamic agricultural systems in the United States, undergoing constant change in crop diversity as well as the flow of imported products from Mexico and Central America. Texas is ranked third in value of U.S. agricultural production and Hidalgo county, where the SARC is located, is ranked 7th among the 254 counties in Texas. The value of agriculture in the LRGV is estimated to be \$732 million with a statewide economic impact of \$1.6 billion.

In addition, about 60 percent of the produce shipped within Texas is imported from Mexico and the LRGV is only slightly behind Arizona as the largest fruit and vegetable point of entry to the U.S. market. Consequently, the Kika de la Garza Subtropical Agricultural Center serves as a strategic defense against the accidental or intentional introduction of invasive species that could potentially harm U.S. agriculture, disrupt international commerce or contaminate the food supply. Scientists at the Center have historically responded quickly and effectively to pest and disease problems associated with these conditions.

Scientists at SARC are on the leading edge of research to eliminate carrizo cane, an invasive thirty-foot tall grass growing along the Rio Grande River, which conceals smugglers and illegal aliens, causes riverbank erosion, and uses enormous amounts of water in a region with critically limited water supplies. Center scientists also develop methods to prevent threats from the introduction of new insects and diseases. SARC serves as an early warning location for wheat rust fungus. Furthermore, in many parts of Mexico, drug-related violence inhibits pest/disease survey work and intervention, placing the SARC at a strategic location to stop the entry and spread of harmful pathogens into the United States.

SARC is the only facility on the U.S. mainland that researches quarantine issues related to tropical pests and one of only four that does work on honey bees. Scientists at the Center are engaged in such critical research as citrus greening, zebra chip in potatoes, fever tick eradication in cattle, control and eradication of invading tropical fruit flies, especially the Mexican fruit fly, which infests 250 kinds of fruits and vegetables, eradication of cotton boll weevil, the development of bio-fuels from sugar, hot water dips for importation of certain produce items and setting international standards for radiation and quarantine.

Without the efforts of the Center's scientists, the risk of invasive pests would be greatly increased, threatening the viability of agricultural production and food safety not only in the region, but nationwide. The Kika de la Garza Center is on the front line in the battle to preserve the health and economic viability of U.S. agriculture and the safety of the American public.

The economic impacts of Center closure on the LRGV were estimated using IMPLAN. IMPLAN is an input/output model that utilizes economic multipliers for each sector of the economy to estimate how a change in one particular sector affects economic output, income and employment in other sectors of the economy that supply inputs and services to the affected sector. It is among the most widely used models for economic impact analysis and is well accepted in scientific literature.

Current Situation and Economic Baseline for Cameron, Hidalgo and Willacy Counties

Total federal non-military employment in the three county region is reported to be 5,805, with employee compensation of \$622.7 million. Average employee compensation is \$107,270. Total economic output attributed to this sector is estimated to be \$720.5 million. Each federal employee in the three county region contributes an additional \$16,847 over and above their average salary to the overall economy of the LRGV. This economic impact is especially important to the LRGV where the average annual per capita income is \$27,000.

The SARC employs 113 people and has a payroll of \$6.3 million. All Center employees work and live in the three county region of Cameron, Hidalgo and Willacy, with 92 of those employees located in Hidalgo county. SARC payroll and employee expenditures account for 3.8 percent of total economic output of the federal non-military sector in the three county region.

Economic Impacts of Closure of the Kika de la Garza Subtropical Agricultural Research Center

Closure of the SARC would result in the loss of 227 jobs, 113 of those would be directly associated with Center operations and scientific research and 114 are attributed to the loss of purchases by the SARC or its employees. Sectors with the largest estimated employment losses would include: travel and educational services, 21; community services/amusements, 15; legal, accounting, architecture, 13; health care and related services, 12; telecommunications and related business, 11; and state/local government services, 6.

These employment losses would also result in the loss of \$10.2 million in income, \$6.3 million of which is attributed directly to salaries and wages at the Center. These losses in employment and income are estimated to subsequently reduce total economic output in the LRGV by a total of \$27.1 million. The large majority of these economic losses would occur in the three county region.

Approximately \$15.7 million in lost economic output is attributable directly to the loss of SARC. An additional \$11.4 million in lost economic output is attributed to reduced purchases by the Center or its employees. The sectors experiencing the largest potential losses due to SARC closure are: real estate, \$1.4 million; health care, \$1.3 million; wholesale/retail sales, \$1.1 million; finance/insurance, \$1.1 million; accounting, architecture and legal services, \$852,000; maintenance/repair services, \$727,000; food services/beverage sales, \$577,000; state/local government services, \$435,000; telecommunications, \$418,000; transportation, \$377,000; and scientific/technical services, \$243,000.

The Kika de la Garza Subtropical Agricultural Research Center located at Weslaco, Texas provides a critical national service for the agricultural industry located there and throughout the United States, Mexico and Central America. The Center also serves as the last line of defense against the accidental or intentional introduction of insects or diseases into the United States. SARC closure would not only have a substantial negative economic impact on the region, but also on agricultural production, international commerce and food safety nationwide.

For more information, please contact Parr Rosson, Professor/Extension Economist and Director, Center for North American Studies, Department of Agricultural Economics, Texas A&M University, College Station, Texas. Tel: 979-845-3070 or E-mail: prosson@tamu.edu. Contributing to this report were Luis Ribera (Weslaco) Assistant Professor/Extension Economist, Rebekka Dudensing, Assistant Professor/Extension Economist, Dan Hanselka, Extension Associate, Texas AgriLife Extension Service, and Flynn J. Adcock, International Program Coordinator, Texas AgriLife Research.