



# Communicating the Value of Texas Cooperatives

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COOPERATIVE MANAGEMENT PROGRAM

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*June 2009*



# Abstract

Motivated by the need for a comprehensive evaluation of agricultural cooperatives, the Texas Agricultural Cooperative Council (TACC) alongside Texas AgriLife Extension personnel created a survey to address this issue. The TACC Cooperative Assessment Survey compiled data from 96 locally owned TACC member cooperatives in order to evaluate their contribution to local communities and the Texas state economy. These findings will be used to educate state leaders as well as the TACC member community. We find that these cooperatives play a major role for Texas agriculture but are subject to unique challenges based on their cooperative structure. This study helps to identify those challenges and suggests ways to tell a better cooperative story. Furthermore, through the development of an economic input/output or SAM model, we provide an indication of economic contribution. Our findings indicate that these TACC member cooperatives potentially impact the lives of 1 out of 3 Texans and contribute more than \$825 million to Texas GDP. In addition, we show that the cooperative ownership of these businesses results in an additional 12% contributed to Texas GDP than if we assumed a traditional corporate structure. Cooperative managers are advised to use these findings as performance benchmarks to aid future decisions and as a tool for improved communications to members, directors, and state and local leaders.



Everyone likes a  
good **story**



# Communicating the Value of Texas Cooperatives

## Locally-Owned Agricultural Cooperatives

### 1 What's Your Story?

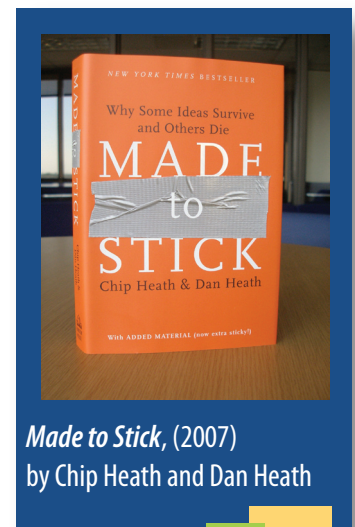
Modern agricultural cooperatives have a problem. Those familiar with cooperative business might enumerate the challenges of member commitment, misunderstanding of the cooperative structure (from both within and without the cooperative), and governance by individuals with potential conflicts of interest. However, even for those cooperatives that have dealt with these issues, there likely remains another problem to be addressed. Few cooperatives take the proper steps to communicate the value of their business, its purpose, and benefits to the general public. In short, *they fail to tell their story*. As a consequence, their business could face declining sales in an increasingly hostile business environment.

Everyone likes a good story. Whether it's about the one that got away, or a bedtime tale told to a child, stories are something we can relate to and share with little or no preparation. In a recent best seller among business literature, authors Dan Heath and Chip Heath (2007) discuss the factors that make certain stories stick in our minds.

As an example, they consider the Great Wall of China – a common story is that the Great Wall of China is the only man-made structure that is visible from space. However, this is not true. The wall is only 30-60 feet across, and even given its length, if it were visible, then so too would be the many miles of interstate across our country and the world. And yet, the story persists because it gives the hearer an emotional, credible story with a clear frame of reference.

Sometimes stories are told in a way to purposefully make them more relevant. When researchers at the Center for Science in the Public Interest wanted to help consumers grasp the dangers of movie theater popcorn cooked in coconut oil, they realized that simply revealing the 37 grams of saturated fat in a medium serving might not connect with all consumers. And so a more memorable story was created: the amount of saturated fat consumed by eating a medium-sized movie popcorn is the same from eating bacon and eggs for breakfast, a Big Mac and fries for lunch, and a full steak dinner combined (Heath and Heath 2007). The story was much more effective, and as a result movie theaters have stopped popping corn in coconut oil. An effective story made the difference.

When cooperatives fail to aggressively communicate their benefits, competitors' messages are the ones that take hold. Phrases such as "cooperatives keep your money for a long time before you get it back (if ever)", "cooperatives operate at an unfair advantage since they don't pay any taxes", and "cooperatives are inefficient, outdated, and drag down overall industry profitability" debilitate cooperative business. Re-



Regardless of the truth behind these statements, the simple fact is that individuals form opinions from the information at hand. Perhaps the risk averse nature of cooperation leads these businesses to focus more on internal issues like operational efficiency and equitable treatment of members, rather than on external issues related to the competitive positioning of the firm.

Furthermore, misconceptions about cooperation can have huge implications from a legislative standpoint. If legislators do not correctly understand the operation of cooperatives and the importance of cooperatives to rural communities, it is possible that they could foster new laws and regulations that could unintentionally damage these businesses.

### The Texas Agricultural Cooperative Council...

*"...is a voluntary, statewide industry association created by Texas cooperatives themselves in 1934 to serve as a collective voice, catalyst and clearing house on all co-op activities in the state."*

<http://www.texas.coop>

For these reasons, **Texas Agricultural Cooperative Council (TACC)**, approached Texas AgriLife Extension personnel for help with communicating the cooperative story. TACC desired to provide individual cooperatives with benchmarks to aid decisions, and the industry as a whole with a message for greater public awareness. The Texas Agricultural Cooperative Council is an industry association of cooperatives with 184 members. Forms of ownership among these cooperatives include locally or centrally owned cooperatives with direct farmer control as well as larger regional cooperatives with federated or representative control structures. Activities among TACC members include commodity marketing, farm supply, commodity and food processing, product distribution, logistics, financial services and utilities.

In the fall of 2007, extension personnel met with TACC to discuss expectations for the project. That meeting established the following objectives:

1. Gather better information of member cooperatives for the purpose of establishing benchmarks for greater insight to the needs of cooperatives.
2. Measure the economic contribution of local agricultural cooperatives that are TACC members.
3. Define the cooperative story for TACC to aid their efforts to educate cooperative leadership, members, directors, legislators, and other state leaders.

The cooperative story is one that yearns to be told. This project is only the first step of telling the cooperative story and will build a foundation for future efforts.

## 2 Other Storytelling Efforts

Studies of this nature have been completed in other states. A recent project in Wisconsin, "Assessing State and Community Impacts of Agricultural and Rural Cooperatives" measured the economic impact that cooperatives have on the local

and state economy (Zeuli et al 2003). Having little or no data on cooperatives, their first step was to collect data from more than 798 cooperatives including agricultural and food cooperatives, rural utilities, credit unions and others fitting the definition of the Wisconsin cooperative statute. Surveys sent to 426 cooperatives yielded a response rate of 76% (Zeuli et al 2003). Dissatisfied with the lack of completeness, follow-up telephone calls filled in missing information for 123 additional cooperatives, including 25 from the initial survey. Please note that within the 798 cooperatives surveyed, 350 are credit unions as well as 8 agricultural marketing cooperatives which are headquartered outside Wisconsin. It should be noted that a response rate of 76% is very high for this type of work.

Using a **Social Accounting Matrix** (SAM) model, a detailed scenario was created that explained purchases and sales in all sectors of the economy. From the information gathered, an economic impact analysis provided practical representation of relationships between various sectors within the economy. Findings from this study conclude that Wisconsin cooperatives sustain 30,000 full-time jobs while generating about \$1 billion in total income. Together, agricultural marketing and farm supply cooperatives represent \$517 million or 55 percent of the combined cooperative impact (Zeuli et al 2003). These findings are strictly on a state level and did not attempt to assess the value of cooperatives for their members and communities.

A similar study was conducted in Minnesota (Folsom 2003) in response to a Congressional mandate to USDA-Rural Development to analyze the contribution of cooperatives on rural and economic development. A list of 2,770 registered cooperatives was obtained from the Secretary of State's office. However, this list did not accurately reflect the current number of cooperatives operating in Minnesota (Folsom 2003).

Prior to 2001, the state of Minnesota had not required cooperatives to register with the Secretary of State's office. In 2001 the state required registration of these cooperatives, resulting in information gathered from 868 cooperatives. One hundred forty-five cooperatives responded to a mail survey. Follow-up calls and mailings focused on acquiring correct contact information, membership numbers, sales information, and sector data from 841 active cooperatives.

An analysis of the 429 cooperative responses obtained yielded 943,450 members and \$6.47 billion in revenue (Folsom, 2003). National Credit Union Administration data revealed that Minnesota's 185 credit unions had 1.46 million members and generated \$746 million in revenues. Using SAM multipliers in conjunction with surveyed data, the researchers estimated indirect and induced contributions totaling \$10.89 billion to the Minnesota economy. Direct employment of Minnesota's cooperatives and credit unions estimated at 45,922 jobs, with total employment (including **direct, indirect, and induced** employment) at 79,363 jobs. The state's 189 responding agricultural cooperatives alone generated an estimated \$8.4 billion in economic contributions. These estimates were measured with the assumption that 100 percent of spending stays in the local economy with single taxation (Folsom

### Social Accounting Matrix

*A representation of the flows of all economic transactions that take place within an economy. It provides a single-year static picture of the economy.*

### Direct Effects

*The contribution from the initial round of sales of goods or services.*

### Indirect Effects

*The contribution from industries purchasing inputs from other local industries.*

### Induced Effects

*The contribution from households due to income received from all industry activity.*



2003). The economic contribution by cooperatives was accredited to their structure of being locally owned, with single-level taxation, and the ability to retain economic benefits in the form of profits and dividends to be used in their communities.

From these studies we can identify two salient facts to guide the development of a similar effort for TACC:

1. An accurate and meaningful economic assessment will require a complete accounting of the businesses in question.
2. From a story-telling standpoint, the inclusion of a wide variety of cooperatives may provide ambiguous results.

These findings combined with TACC's stated objectives resulted in the decision to conduct a focused effort that would have a greater chance of success and provide meaningful results as the basis for future work. From here, the decision was made to survey only agricultural cooperatives with direct, local ownership, that are TACC members (Engelke 2009).

Initially, this survey (see appendix for a full copy of the survey) was distributed to 105 member cooperatives. However, nine of these cooperatives reported that they were not in current operation and declined to participate. That being considered, 96 member cooperatives reported with nearly a 100% response rate. Gathering the data for a better story was not easy. Successful completion of the survey required a variety of methods to collect this data. Built as an online survey, cooperative managers were invited to participate via an email message from TACC Executive VP, Tommy Engelke. The survey was also promoted with periodic updates at various TACC meetings. In addition to the online survey, a great number of responses were obtained from mailed copies and personal interviews.

The purpose of the survey itself was two-fold in that the survey deliberately asked two types of questions. 1) questions related to the economic contribution that cooperatives have on local and state economy, and 2) questions to provide TACC leadership greater insight about its membership.

## 3 What We Learned from the TACC Survey

In our survey we asked cooperative managers specific questions about the operations of their cooperative. A complete report of all quantifiable questions can be found in table 1. Responses are presented here in aggregate to protect the confidentiality of participating cooperatives. In order to understand the service area covered by our respondents, we asked them to list the counties where they conduct business. A list of reported counties can be found in table 2 accompanied by a visual represen-

**Table 1. Complete Overview of Survey Responses**

<b>Response</b>	<b>Number Responding</b>	<b>Mean</b>	<b>Min</b>	<b>Max</b>	<b>Standard Deviation</b>
<b>Question 2: Give a definition of the radius of your membership from your headquarters</b>					
Miles to north	96	35.76	0	170	22.32
Miles to south	96	31.96	0	150	21.79
Miles to east	96	33.69	3	200	31.25
Miles to west	96	36.17	1	175	25.83
Calculated Sq Mi	96	6,030.18	228	93,750	10,493.89
<b>Question 3: Please list your branch locations</b>					
Number of branches	94	0.85	0	19	2.41
<b>Question 4: Membership</b>					
Number of stockholders	95	704.07	25.00	15,000.00	2,227.01
Active members	92	321.38	0	9,343	1,064.90
Non-Members	86	613.97	0	30,000	3,509.19
<b>Question 5: Acres served by the cooperative</b>					
Cotton	79	36,654.76	100	250,000	36,206.46
Grain Sorghum	46	19,402.28	50	80,000	18,859.31
Corn	32	32,652.41	250	450,000	86,684.47
Wheat	37	37,252.81	125	450,000	104,414.25
Other	11	5,854.55	500	20,000	5,766.99
Pastureland	43	37,929.67	0	450,000	96,063.03
<b>Question 6: What year was your cooperative chartered?</b>					
Year	92	1953	1913	2007	21.94
<b>Question 8: Number of cooperative employees</b>					
Fulltime employees	94	14.53	0	88	17.13
Part-time employees	94	27.90	0	100	19.54
<b>Question 9: What is your most difficult task regarding labor? Rate each with 1=most difficult, 3=least difficult</b>					
Finding people that can run a gin	77	1.81	1	3	0.84
Finding people that can run a grain elevator	66	2.44	1	3	0.80
Finding CDL drivers	84	1.62	1	3	0.79
Finding drug free, clean driving record personnel	87	1.70	1	3	0.77
Finding good office managers/ bookkeepers/ accountants	88	2.08	1	3	0.88



**Table 1. Complete Overview of Survey Responses (Continued)**

Response	Number Responding	Mean	Min	Max	Standard Deviation
<b>Question 10: Employee compensation</b>					
Total employee expense	85	992,405.31	7,500	3,877,112	856,806.31
Percent of all expenses	85	33.30	5	60	11.79
<b>Question 14: What is the size of your board of directors?</b>					
Number of people	95	7.31	5	25	2.61
<b>Question 15: What is your cost for membership?</b>					
Dollars	90	45.27	0	1,000	132.13
<b>Question 16: Provide a three-year average for the following</b>					
Gross sales	96	12,313,775.54	50,666	125,000,000	19,732,045.33
Bales ginned	84	37,890.20	0	157,000	34,522.08
Bushels handled	53	1,694,516.98	0	30,000,000	4,993,667.70
<b>Question 17: What is the total member equity investment in the cooperative?</b>					
Dollars	81	3,032,453.40	9,000	25,000,000	3,864,597.81
<b>Question 18: What is the age of oldest stock outstanding?</b>					
Years	71	17.58	0	70	16.14
<b>Question 19: Percentage of sales by category</b>					
Cotton ginning	81	61.43	0	100	41.72
Grain elevator	54	25.71	0	100	30.99
Fertilizer/ chemicals	53	10.57	0	55	14.18
Fuel	54	12.49	0	75	16.10
Feed and seed	47	6.75	0	70	11.11
Farm supply	58	9.38	0	100	17.04
Nursery/home and garden	45	1.06	0	20	4.03
Other	12	24.74	1.90	100	38.46

tation in figure 1. To have a measurable indication of cooperative service, we asked that cooperative managers give specific numerical answers to how far north, south, east, and west they operate from their headquarters. These numbers allow us to approximate the overall square miles served by the cooperative. Our findings conclude that on average, our respondents conduct business 35.76 miles north, 31.96 miles south, 33.69 miles east and 36.17 miles west for an estimated average area of 6,030.18 square miles. Various characteristics of the average respondent are presented on table 3. Respondents reported 704.07 stockholders on average, who currently have invested a total of \$245,628,726 in the Texas agricultural sector. In terms of patrons, respondents report an average active member base of 321.38 people (charging \$45.27/share on average) and an average non-member base of 613.97 (figure 2). On average, respondents have 14.53 full-time employees and 27.90 part-time employees, spending \$992,405.31 for total employee compensation. Cooperative leadership

sits with a board of 7.21 individuals on average.

By comparing responses to statistics from USDA-NASS, we see that agricultural cooperatives play a large part in the agricultural industry in Texas. This is demonstrated by survey responses, where cooperatives influence 60% of cotton acres (figure 3), 48% of sorghum acres (figure 4), 59% of corn acres (figure 5) and 50% of wheat acres (figure 6) for the state of Texas. Average acres for each category can be found in table 1. We asked respondents to report a three-year average of gross sales with an average response of \$12,313,775.54. Further, respondents reported three-year averages for ginning of 37,890.20 bales and handling of 1,694,516.90 bushels of grain on average.

Concerned with the challenges of its member cooperatives, TACC wanted to know the level of importance for five labor related tasks. Respondents were asked to rate each on a scale of one to three, with one denoting “most difficult” and three denoting “least difficult.” Respondents deemed that finding personnel with a commercial drivers license (CDL) was of upmost importance among these issues. This is followed by finding drug-free personnel with clean driving records, personnel that can run a gin, finding good managers, bookkeepers, and/or accountants, and finally, personnel that can run a grain elevator (figure 7). We asked managers for a breakdown of their cooperative operation by category on a percentage basis. Among all respondents, 61.43% of sales came from cotton ginning followed by 25.71% from grain elevators and 12.49% from fuel. A complete breakdown can be found in figure 8.

## 4 All About Economic Contribution

Telling the cooperative story includes a discussion of their economic contribution. To begin, we turn to a brief theoretical framework of the local economy. Export base theory (also called econom-

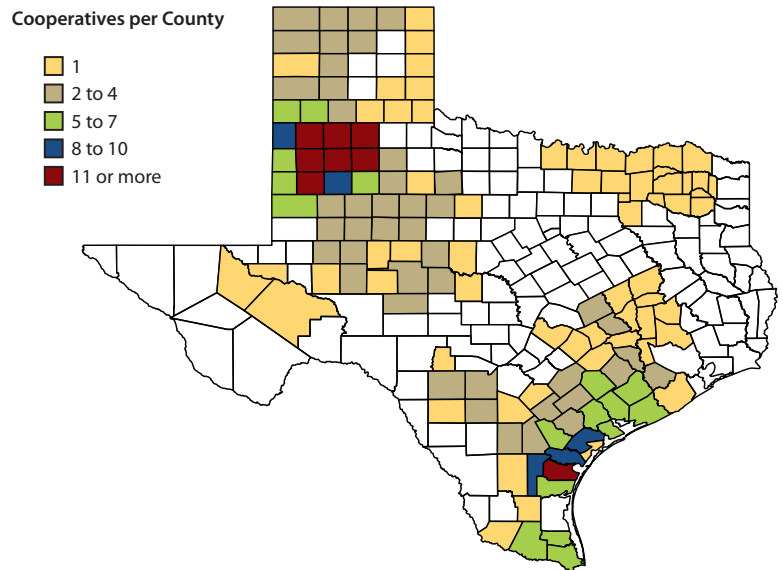


Figure 1. Number of respondent cooperatives operating per county

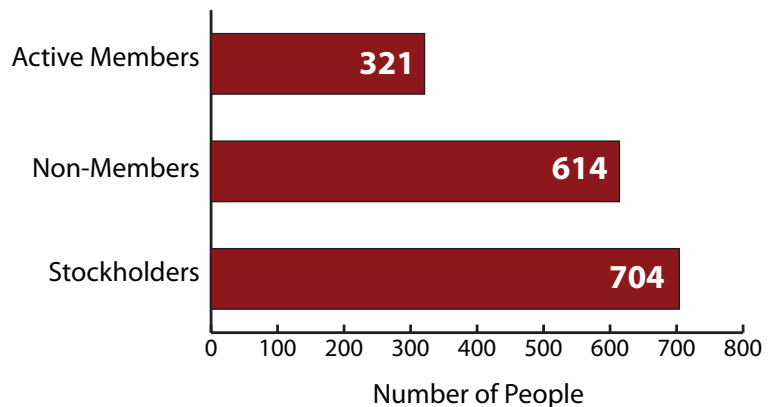


Figure 2. Average membership breakdown

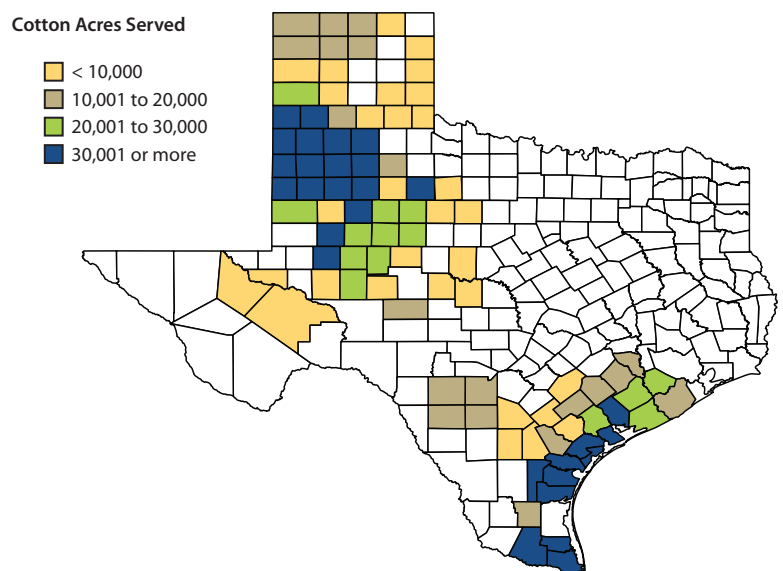
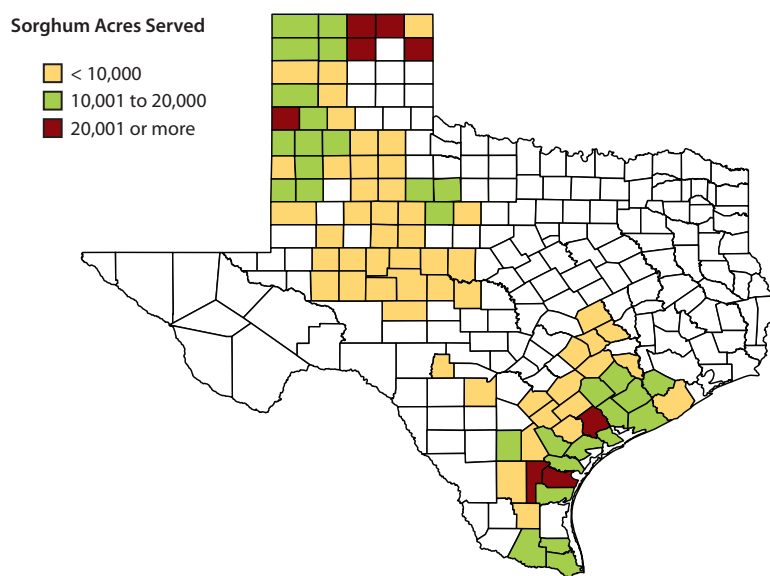


Figure 3. Texas cotton acres served by responding cooperatives

**Table 2. Counties Represented by the TACC Survey**

Aransas	Coke	Ector	Hartley	Lamb	Montgomery	Runnels	Walker
Atascosa	Coleman	Fannin	Haskell	Lavaca	Moore	San Patricio	Waller
Austin	Collin	Fayette	Hemphill	Lee	Motley	Schleicher	Ward
Bailey	Collingsworth	Fisher	Hidalgo	Leon	Nolan	Scurry	Washington
Bastrop	Colorado	Floyd	Hockley	Lipscomb	Nueces	Shackelford	Wharton
Bee	Concho	Fort Bend	Hopkins	Live Oak	Ochiltree	Sherman	Wheeler
Borden	Cooke	Franklin	Howard	Lubbock	Oldham	Starr	Willacy
Brazoria	Crosby	Frio	Hunt	Lynn	Parmer	Sterling	Wilson
Brazos	Dallam	Gaines	Hutchinson	Madison	Pecos	Stonewall	Wood
Briscoe	Dawson	Garza	Irion	Martin	Potter	Swisher	Yoakum
Brooks	Deaf Smith	Glasscock	Jackson	Matagorda	Rains	Terry	Zavala
Burleson	Delta	Goliad	Jim Wells	McCulloch	Randall	Titus	
Calhoun	Denton	Gonzales	Jones	McMullen	Reagan Real	Tom Green	
Cameron	DeWitt	Grayson	Karnes	Medina	Red River	Travis	
Camp	Dickens	Grimes	Kaufman	Midland	Reeves	Upshur	
Castro	Donley	Hale	Kent	Milam	Refugio	Upton	
Childress	Duval	Hall	Kleberg	Mitchell	Robertson	Uvalde	
Cochran		Hansford	Lamar	Montague	Rockwall	Victoria	



**Figure 4. Texas sorghum acres served by responding cooperatives**

ic base theory) is a useful tool to describe a local economy and provides a framework to analyze the impacts from changes in economic activity. Thus, the method is often used to assess the “economic impact” of a new business activity within a defined region. We will use this method to assess the “economic contribution” of an existing set of businesses. However, the general framework remains the same. See Mulkey and Hodges (2003) and Leistritz (2004) for a more complete treatment of this method.

## How to Interpret the Economic Base Model

The local economy is described as being comprised of two parts: the basic sector and the non-basic sector (sometimes called the local trade and service sector). The basic sector is defined as those firms that sell their goods and services to markets outside

the defined local economy. The non-basic sector is composed of local businesses and households that provide goods and services within the defined economy. Money is circulated within the local economy by the spending and re-spending of firms in the non-basic sector and employees residing within the economy (figure 9).

To summarize, the basic sector brings in new money to the local economy which circulates to households and firms within the non-basic sector. Eventually some of these dollars leave the economy through taxes, savings, earnings to non-residents, and payments for goods and services outside the economy. This makes for a nice clean explanation, but in practice it can be difficult to define these sets of firms. In fact, some firms might participate in both sectors. In this way, each economic con-



tribution analysis is unique. These unique qualities are dealt with by the analyst through a careful construction of relationships on how firms in different industries are affected by the actions of others. For example, increased activity at a local feed mill could impact the manufacturers of packaging material. The analyst would need to consider the use of inputs (like packaging) by the feed mill and the distribution of their output (e.g. bagged feed) in relation to the defined geographic study area.

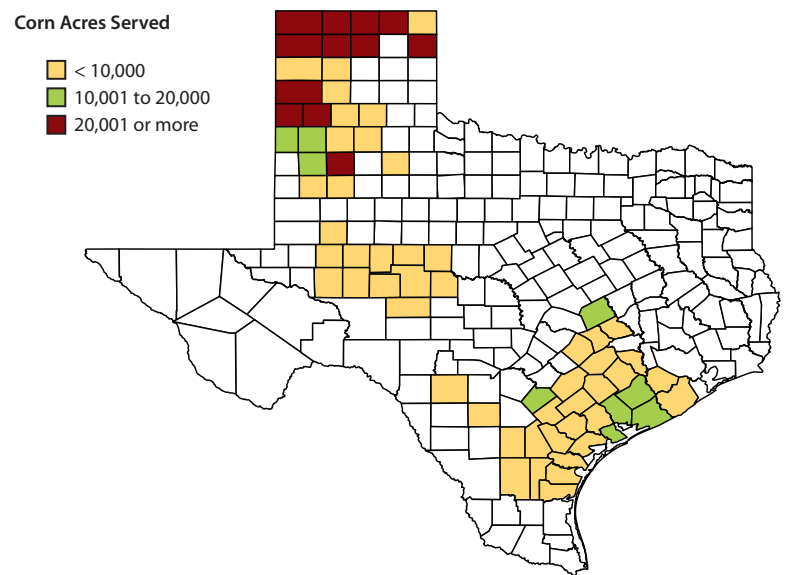
The models used to estimate these impacts are simply called input-output models. They are founded on the principle that the activity of one business can impact another. It is not hard to imagine how an investment in the agricultural sector would also affect the petroleum sector and other inputs through purchases and sales. These different transactions are an inherent part of software used to calculate the overall effects. Therefore, an analyst will generally manipulate the underlying structure of transactions to appropriately reflect the local economy defined for study.

Using the numbers collected in the survey, we conducted a contribution assessment through the use of IMPLAN (Minnesota IMPLAN Group 2004). For this, reported sales from the survey are totaled and entered into corresponding IMPLAN sectors. These sectors are defined by the North American Industry Classification System (NAICS). When placing the data into the appropriate transaction matrices, we are careful to list the sales of inputs to production agriculture as industry sales, which maintain a wholesale margin. Items typically viewed as household purchases and not produced by our defined industry (e.g. garden supplies), are recorded as retail sales.

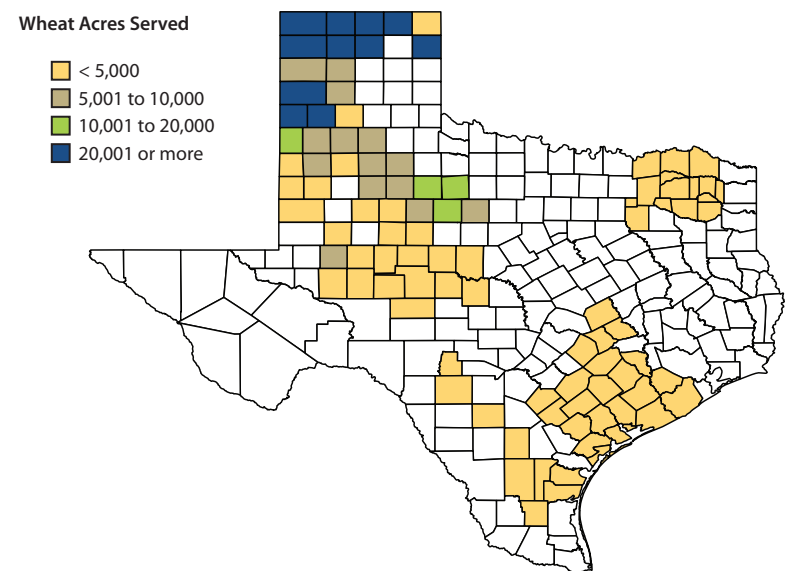
Continuing with the notion that a dollar spent in the region stimulates economic activity, we can finally address the question of interest: “to what degree does the cooperative affect the local economy?” Multiple transactions resulting from an initial expenditure results in a total effect on output (sales), government revenue (value added to GDP), person-

**Table 3. Co-ops by the Numbers: Average Respondent Profile**

Average Response	Characteristic
4.6	Counties in the Service Area
7.3	Board Members
14.5	Full-time Employees
27.9	Part-Time Employees
17.8	Years of Stock Outstanding
45.3	Dollars for the Cost of Membership
55.2	Years of Doing Business



**Figure 5. Texas corn acres served by responding cooperatives**



**Figure 6. Texas wheat acres served by responding cooperatives**

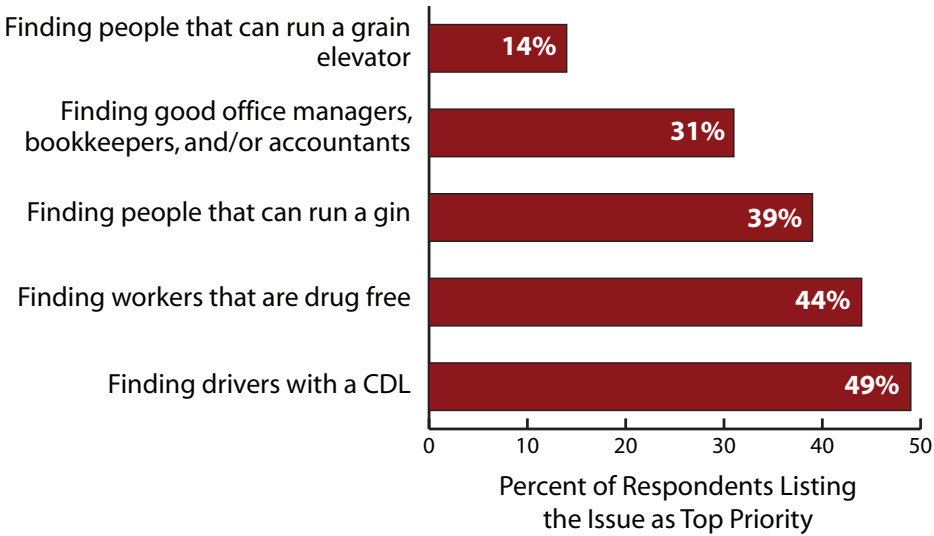


Figure 7. Respondent indications of top managerial priorities

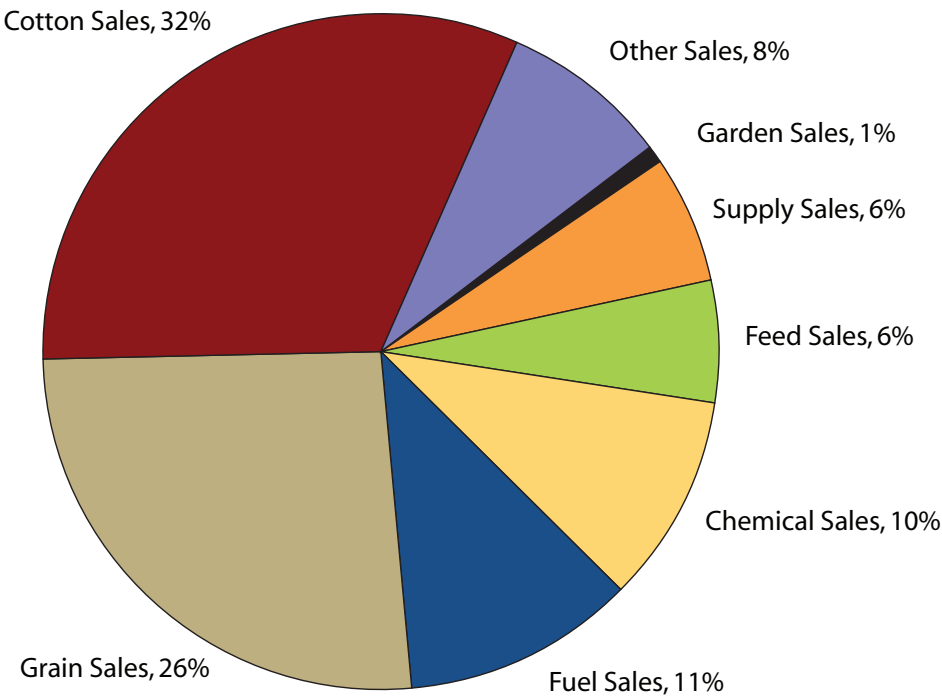


Figure 8. Average sales breakdown for all respondents

al income, and employment in the region that is greater than the initial dollar spent. For instance, customer purchases contribute to the activity of not only that business but also its suppliers and each of their employees in the form of income. However, some of the original expenditure leaks out of the regional economy as inventory is imported from other regions, employees commute from other regions, and businesses and households pay state and federal taxes. The portion of the money that remains in the local economy throughout these transactions constitutes the net economic gain.

Economic Multipliers

The relationship between the basic and non-basic sectors is predictable. Thus, we can predict changes in the level of activity in the non-basic sector from a given change in the level of basic activity (Liestritz 2004). These effects are referred to as multipliers. In general multipliers describe the way in which the non-basic sector (local services and households) reacts as the basic sector (firms selling beyond the local economy) expands, requiring additional inputs. The output or sales multiplier measures the effect of our cooperative group on the overall economic activity in the region. The value-added multiplier measures the return to the resources used by

our cooperatives. The income multiplier measures the effect of basic sector income on the incomes of households in the region. The employment multiplier measures the effect of basic sector income on regional employment.

Adding to the confusion surrounding these multipliers, each can be described as having three components. The direct effect on the economy is the initial sale, which results in two types of secondary effects. The indirect effect results from our defined

group of cooperatives purchasing inputs among local industries. The induced effect results from the expenditure of institutions such as households and governments benefitting from increased activity among local businesses. For example, a cooperative gin runs a profitable business (direct effect) and purchases office supplies from a local retailer (indirect effect). Further, the cooperative's employees purchase food at local diner (induced effect).

To summarize, we can measure the economic contribution of a set of businesses over a defined area to sales, value added to GDP, personal income, and employment. These categories are impacted through the direct action of the businesses being studied, the indirect action of related businesses, and the induced action of households. The combined total effect divided by the original direct contribution provides the contribution multiplier.

### The Economic Contribution of Locally-Owned TACC Members

There are many facets to the Texas cooperative story. In tables 4 through 7 we present the results of an economic contribution analysis for the 96 TACC cooperatives that participated in our study. Therefore, these results should be interpreted as the economic contribution of locally-owned cooperatives *that are TACC members*. We begin by stripping away the value of any production that may be passed through the cooperative through marketing and other activities. In other words, if we consider only the retail sales and warehousing, or store-front, aspects of these cooperatives, they contributed \$630,968,121 million in additional sales across the economy for 2007 (table 4). These sales increased the region's value-added or GDP component by \$232,441,865 million, income by \$116,953,946 million, and employment by 2,001 jobs in 2007.

Although this provides a base for comparison, this conservative estimate does not account for all cooperative activity. For example, a service like cotton ginning is not fully accounted for in this estimate. Also, we argue that the value of a cooperative cannot be fully removed from the value of its constituent members. Therefore,

**Table 4. Contribution From Retail Operations, 2007.**

	<i>Sales</i>	<i>Value-Added</i>	<i>Income</i>	<i>Employment</i>
Direct	\$362M	\$96M	\$46M	769
Indirect	\$203M	\$99M	\$53M	717
Induced	\$66M	\$38M	\$20M	515
<b>TOTAL</b>	<b>\$631M</b>	<b>\$232M</b>	<b>\$117M</b>	<b>2,001</b>
<i>Multiplier</i>	<i>1.74</i>	<i>2.43</i>	<i>2.69</i>	<i>2.60</i>

**Table 5. Total Contribution, Including Commodity Sales, 2007.**

	<i>Sales</i>	<i>Value-Added</i>	<i>Income</i>	<i>Employment</i>
Direct	\$985M	\$388M	\$336M	15,522
Indirect	\$468M	\$252M	\$128M	2,815
Induced	\$327M	\$186M	\$100M	2,542
<b>TOTAL</b>	<b>\$1,781M</b>	<b>\$826M</b>	<b>\$564M</b>	<b>20,879</b>
<i>Multiplier</i>	<i>1.81</i>	<i>2.13</i>	<i>1.68</i>	<i>1.35</i>

**Table 6. Total Contribution, Including Commodity Sales, Assuming Non-Cooperation, 2007.**

	<i>Sales</i>	<i>Value-Added</i>	<i>Income</i>	<i>Employment</i>
Direct	\$985M	\$388M	\$129M	15,522
Indirect	\$468M	\$252M	\$125M	2,815
Induced	\$176M	\$100M	\$54M	1,370
<b>TOTAL</b>	<b>\$1,630M</b>	<b>\$740M</b>	<b>\$309M</b>	<b>19,707</b>
<i>Multiplier</i>	<i>1.65</i>	<i>1.91</i>	<i>2.39</i>	<i>1.27</i>

**Table 7. Comparison of Cooperation to Non-Cooperation, 2007.**

	<i>Sales</i>	<i>Value-Added</i>	<i>Income</i>	<i>Employment</i>
Direct	\$0M	\$608M	\$207M	0
Indirect	-\$504M	-\$266M	\$2M	0
Induced	\$151M	\$86M	\$46M	1,172
<b>Difference</b>	<b>\$151M</b>	<b>\$86M</b>	<b>\$255M</b>	<b>1,172</b>
<i>Percent</i>	<i>9.2%</i>	<i>11.6%</i>	<i>82.8%</i>	<i>5.9%</i>

*Rounded numbers are shown for purposes of presentation.*

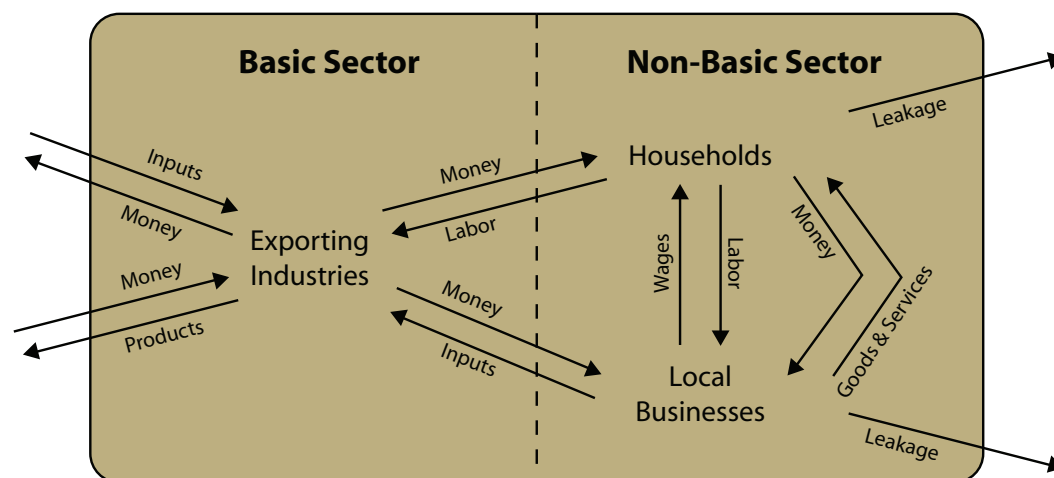


Figure 9. Illustration of economic base model

in table 5 we present the full contribution of these cooperatives including the value of marketed commodities. When commodity sales are included as part of cooperative activity, these TACC cooperatives contributed \$1,780,539,014 billion in additional sales through commodity production, retail and warehousing operations, and equity and cash patronage payments. This activity increased the region's value-

added GDP by \$825,610,090 million, income by \$564,230,434 million, and employment by 20,879 jobs (table 5). It should be noted that we have accounted for the cooperative structure of these businesses in the analysis, especially in regards to the flow of funds through the economy, which are more likely to remain local.

For a point of comparison, we relax the restrictions in the model that reflect the cooperative structure. If we were to assume our respondents were non-cooperative business arrangements, the equity payments, patronage payments, and tax treatment of these cooperatives boosted sales by \$150,656,018 million, value-added GDP by \$85,584,422 million, and income by \$255,494,983 million (table 6). Further, the comparison of cooperation versus non-cooperation is presented in table 7, which is simply the difference between the results of tables 5 and 6. From this we see that co-operation adds an additional 9.2% of sales to the defined region, 11.6% to GDP, and 82.8% to personal income. This last result seems especially high, but may reflect the nature of cooperation where corporate profits are being returned to the customers, and more business activity remains local.

## 5 The Cooperative Story

A cooperative is a unique customer-owned business that is driven by the needs of its members. Because of this unique relationship between ownership and governance, social issues impact managerial decisions. Perhaps this is why most cooperative businesses focus their efforts inwardly and fail to cultivate their outward image. However there remains a valuable story to be told. Profits from these firms are distributed to member-owners that reside in the surrounding community. This money is circulated through the local community through purchases from local businesses or hiring of labor. Therefore, the structural nature of cooperatives makes them a desirable asset for communities, especially in rural Texas. Our analysis shows

that cooperation provides an additional 9.2% to total output, an additional 11.6% to the value added to the economy, and an additional 82.8% to personal income when compared to a traditional corporate structure that is less likely to retain its income at a local level.

From the TACC Cooperative Assessment Survey we found that these 96 cooperative businesses operate in 136 counties throughout Texas covering a combined area of 130,435 square miles; nearly the size of Montana. Operating primarily in rural communities, these cooperatives have the potential to impact the lives of 8,259,091 people, or about every 1 in 3 Texans. We also find it significant that 30 cooperatives within our sample indicate that they were among the top three property tax paying entities for their county. That sizable investment continues to drive the economies of rural communities. Stretching across the state from the Rio Grande valley to the Texas panhandle, these cooperatives contribute to a vibrant Texas economy in ways that go beyond the simple numbers they report. They represent the heart of rural Texas.

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# Appendix

## *Reprint of the TACC Survey*

### AN ASSESSMENT OF THE LOCAL FARMER COOPERATIVE IMPACT IN TEXAS By the Texas Agricultural Cooperative Council

The Texas Agricultural Cooperative Council is coordinating a member-driven initiative to collect data and develop a profile – in aggregate form – to tell a more accurate story of the economic and rural community impact farmer – owned and controlled businesses have in Texas and in regions of the state. Today, there is no such information. In the end, we envision producing a brochure describing this collective information and what it means to agriculture, cooperatives, and rural Texas. As an example, we arbitrarily hear that co-ops handle nearly 65% of the cotton south of IH-10 and in West Texas about 55% of the crop in that region. We hope to eliminate guesstimates with this information and at the same time, allow industry representatives to provide more timely services to cooperatives.

1. List the counties where your co-op conducts business:
2. Give a definition of the radius of your membership from your headquarters (i.e., 25 miles south, 50 miles east, 10 miles north, and 20 miles west):

_____ miles north	_____ miles east
_____ miles south	_____ miles west

3. Location of branch locations (if any):
4. Number in the membership:
 

_____ stockholders
_____ active members
_____ non-members

5. Approximate number of acres your co-op services:

	_____ PASTURELAND
_____ ROW CROP	
_____ Cotton	
_____ Grain Sorghum	
_____ Corn	
_____ Wheat	
_____ Other: _____	
_____ Other: _____	

6. Year the co-op was chartered: \_\_\_\_\_



7. Co-op fiscal year end: \_\_\_\_\_
8. Number of co-op employees: \_\_\_\_\_ full-time \_\_\_\_\_ part-time / seasonal (at peak season)
9. Regarding labor in your co-op, what is your most difficult task  
(Place an A, B, or C priority next to each blank with "A" denoting "most difficult".  
Do not rank the listing, but instead rate each one):
- \_\_\_ finding people that can run a gin  
 \_\_\_ finding help that can run a grain elevator  
 \_\_\_ finding CDL drivers  
 \_\_\_ finding drug free, clean – driving record personnel  
 \_\_\_ finding good office managers / bookkeepers / accountants  
 \_\_\_ other: \_\_\_\_\_  
 \_\_\_ other: \_\_\_\_\_
10. One of the keys to this survey is the economic impact a co-op has on a given community.  
With this said:  
What are your total employee compensation expenses (salaries, insurance, benefits)?  
Approximately what percent of your total co-op expenses are total employee compensation expense?
11. Tax rank contributor in the community (i.e., largest, top 5, etc.) \_\_\_\_\_
12. Usual monthly date of board meetings (i.e., 2nd Tuesday of every month):  
\_\_\_\_\_
13. Usual date of co-op annual meeting (i.e., last Thursday in April):  
\_\_\_\_\_
14. Size of the co-op board (i.e., 7 members): \_\_\_\_\_
15. Cost of co-op membership: \_\_\_\_\_
16. Three year average: \_\_\_\_\_ gross sales  
 (complete those applicable to your operation) \_\_\_\_\_ bales ginned  
 \_\_\_\_\_ bushels handled
17. Total equity invested by members into the co-op: \_\_\_\_\_
18. Length of oldest stock (in years): \_\_\_\_\_

## APPENDIX

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19. What co-op services are you in and what are the percent overall sales of each:

SERVICE	APPROXIMATE % OF OVERALL SALES
Cotton Gin	_____
Grain Elevator	_____
Fertilizer / Chemicals	_____
Fuel	_____
Feed and Seed	_____
Farm Supply	_____
(parts, tools, fencing, lubricants, plows, bolts, clothes, etc.)	
Nursery / Home & Garden	_____
Other: _____	_____
Other: _____	_____

Name of Co-op \_\_\_\_\_





## About the Authors

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Dr. John Park is an associate professor and extension specialist in the Department of Agricultural Economics at Texas A&M University and holder of the Roy B. Davis Professorship in Agricultural Cooperation. He received his B.S. in Agricultural Economics from Brigham Young University with an emphasis in Food Industry Management. He continued his study of agricultural marketing with an M.S. in Agricultural Economics from Utah State University and a Ph.D. in Agricultural Economics from Texas A&M University.

In 1996, Dr. Park began his career in food product marketing and strategic business management at Cornell University where he conducted research for the Food Industry Management Program, renown for its research and executive training in food retailing. In 2000 Dr. Park returned to Texas as a visiting assistant professor in the Department of Agricultural Economics at Texas A&M University teaching agribusiness marketing and management. In 2003 he was invited to stay on in the department as an associate professor and extension specialist. Today he puts his skills to use for Texas cooperatives.

Dr. Park is a recipient of the Presidential Award for Excellence in Research and Communication and the Patrick J. Byrne Award for Emerging Leadership, both presented by the Food Distribution Research Society. In addition, Dr. Park has served the Society in various leadership capacities, and is currently Secretary-Treasurer. Dr. Park provides statewide leadership and coordination for Extension educational programs and research for agricultural cooperatives in Texas. He works closely with the Texas Agricultural Cooperative Council and is a member of the board of directors for that organization.

### Jonathan R. Baros

Jonathan R. Baros is an extension program specialist in the Department of Agricultural Economics at Texas A&M University. He holds B.S. and M.S. degrees from Texas A&M University in the field of Agricultural Economics. As member of the Financial and Risk Management Assistance (FARM Assistance) group, Jonathan provides long-term, strategic financial analysis for Texas farmers, ranchers, agricultural businesses, and agricultural cooperatives in an effort to provide them with the information necessary to make better management decisions. He resides with his wife in College Station, Texas.

### Dr. Rebekka M. Dudensing

Dr. Rebekka Dudensing is an Assistant Professor and Extension Economist in Community Economic Development. She is located in the Department of Agricultural Economics at Texas A&M University. Rebekka's responsibilities include the analysis of economic and fiscal impacts and public/private goods issues. She also studies the roles of entrepreneurship, human resources, and business and social structures in community development. She is particularly interested in the sustainability of agriculture- and natural resource-dependent rural communities.

Rebekka has a B.S. in Agriculture from Kansas State University and an M.S. in Agricultural and Applied Economics from Texas Tech. She received her Ph.D. in Applied Economics at Clemson University where her fields were regional and development economics and public policy.

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The Roy B. Davis Cooperative Management Program is an effort of Texas AgriLife Extension Service to serve the needs of existing cooperative businesses and assist producer groups with coordinated business initiatives. Program personnel interact closely with industry associations to maintain relevant programming for our clientele. Building on the long-standing tradition of cooperative service from the Roy B. Davis professorship in agricultural cooperation, the Program specializes in the provision of scholarly analysis and the development of innovative educational material. In the words of one client, "this fresh thinking has grabbed the attention of many of our cooperative agribusiness leaders."



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