



2010 Outlook for Louisiana Agriculture



INTRODUCTION

With an ever-changing production and marketing environment, agricultural producers face a number of difficult decisions. This publication provides Louisiana's agricultural producers with a view of the potential marketing and production environments they are likely to face in 2010. We hope the information will help producers as they make their farm management and production plans for 2010.

ACKNOWLEDGMENTS

The development of this publication involved the cooperation and assistance of various faculty members with the LSU AgCenter and others, including:

Dr. Stephen R. Barnes, Assistant Professor-Research (LSU Division of Economic Development)
Dr. Donald J. Boquet, Professor (LSU AgCenter Macon Ridge Research Station)
Dr. James E. Boudreaux, Professor (LSU AgCenter Plant, Environmental and Soil Sciences Department)
Dr. Clinton G. Depew, Professor Emeritus (LSU AgCenter Animal Sciences Department)
Dr. Michael A. Dunn, Associate Professor (LSU AgCenter Agricultural Economics and Agribusiness Department)
Dr. Wayne M. Gauthier, Associate Professor (LSU AgCenter Agricultural Economics Department)
Dr. Charles J. Graham, Associate Professor (LSU AgCenter Pecan Research-Extension Station)
Dr. Kurt M. Guidry, Professor (LSU AgCenter Agricultural Economics and Agribusiness Department)
Dr. Gary M. Hay, Professor, (LSU AgCenter Animal Sciences Department)
Dr. Roger A. Hinson, Associate Professor (LSU AgCenter Agricultural Economics and Agribusiness Department)
Dr. Charles F. Hutchison, Associate Professor (LSU AgCenter Animal Sciences Department)
Dr. Theresia K. Lavergne, Associate Professor (LSU AgCenter Animal Sciences Department)
Dr. Benjamin L. Legendre, Professor (LSU AgCenter Audubon Sugar Institute)
Dr. Ronald J. Levy Jr., Assistant Professor (LSU AgCenter Central Region)
Dr. C. Greg Lutz, Professor (LSU AgCenter Aquaculture Research Station)
Dr. Allen D. Owings, Professor (LSU AgCenter Hammond Research Station)
Dr. Kenneth W. Paxton, Professor (LSU AgCenter Agricultural Economics and Agribusiness Department)
Dr. Ross J. Pruitt, Assistant Professor, (LSU AgCenter Agricultural Economics and Agribusiness Department)
Dr. Donald P. Reed, Professor (LSU AgCenter Idlewild Research Station)
Dr. John K. Saichuk, Professor (LSU AgCenter Southwest Region)
Dr. Michael E. Salassi, Professor (LSU AgCenter Agricultural Economics and Agribusiness Department)
Myrl W. Sistrunk, County Agent (LSU AgCenter West Carroll Parish Extension Office)
Dr. Tara P. Smith, Assistant Professor (LSU AgCenter Sweet Potato Research Station)
Dr. Edward K. Twidwell, Professor (LSU AgCenter Plant, Environmental and Soil Sciences)
Dr. John V. Westra, Associate Professor (LSU AgCenter Agricultural Economics and Agribusiness Department)

Dr. Dek Terrell, Freeport McMoRan Professor (Economics), Director of the LSU Division for Economic Development and Forecasting, and Dr. Stephen Barnes, assistant professor, LSU Division for Economic Development, also contributed to this publication.

Additional assistance in the preparation of this document was provided by Lynda Shoalmire, Extension Associate (LSU AgCenter Agricultural Economics and Agribusiness Department), and Thomas A Merrill, Professor and Writer/Editor (LSU AgCenter Communications).

TABLE OF CONTENTS

Economic Outlook for 2010 1
Farm Inputs 4
Forestry	13
Cotton	15
Soybeans	18
Sugarcane	22
Rice	25
Feed Grains	29
Wheat	33
Sweet Potatoes	36
Commercial Vegetables	38
Nursery Crops	40
Pecans	43
Poultry and Eggs	45
Beef Cattle	46
Equine	49
Dairy	51
Aquaculture	55
Hunting Lease Enterprises	57
Conservation Programs	59

ECONOMIC OUTLOOK

DEK TERRELL

Freeport McMoRan Professor (Economics)
Director of the LSU Division for Economic
Development and Forecasting

STEPHEN BARNES

Assistant Professor
LSU Division for Economic Development

The 2008 Outlook for Louisiana Agriculture speculated the national economy might be heading into a recession, but the outlook was optimistic about the recession's effects on Louisiana. Economists felt the effects of the recession on the Louisiana economy would remain minimal for 2008. A year later in 2009, the economic outlook had dimmed as the effects of the very long national recession began to affect the Louisiana economy. This year, 2010, the national economy is showing clear signs of coming out of the recession, albeit slowly and perhaps with extended periods of high unemployment. While Louisiana continues to outperform the nation, the state will continue to feel the effects of the national recession in the coming year.

National Situation and Outlook

On the positive side, the United States financial sector appears to have regained stability. With the help of TARP funds, the nation's financial sector as a whole has averted disaster. Most of the TARP funds loaned to this sector have been repaid. In 2010, more stimulus spending will occur. While debate continues about how to best stimulate the economy – tax cuts or spending options – the nearly trillion dollars of stimulus spending so far have almost certainly stimulated the economy.

Both of these factors are starting to show up in economic data. Real Gross Domestic Product (GDP) is a measure of the total amount of goods and services produced in the United States. Real GDP reversed course and began to grow in the third quarter of 2009. A 2.2 percent annual growth rate in the third quarter was followed by a

very strong 5.7 percent annualized growth rate in fourth quarter. Improvements in consumer confidence, a rebound of the stock market, and other leading indicators suggest this recession may soon be over.

Unfortunately, the news is not all rosy. The national unemployment rate continues to hover around 10 percent, and few experts expect dramatic improvements in 2010. In fact, the general outlook is for a more gradual recovery rather than the strong V-shaped recovery that was seen following some previous economic downturns. A number of factors are responsible for this expectation. Although government spending appears to be robust, spending by consumers and private firms is not keeping pace. The underlying cause of lackluster spending by consumers and private firms relates to the cause and cure for the recession.

Lenient lending policies are a thing of the past. In many cases, these policies have been replaced by much tighter credit requirements. Whether due to changes in bank policy, tighter restrictions imposed by regulators or new legislation, lending practices seem to be moving in the direction of restricting access to credit. These changes achieve an important goal of reducing the probability of another financial crisis, but the changes also restrict access to credit in the economy. At the margin, consumers now have a harder time racking up credit card debt, qualifying for mortgages, refinancing homes or borrowing for other purposes. Businesses also are feeling the effects of tighter lending standards. While reducing the risk to the nation's financial system, the restricted access to credit also serves as a damper on both consumption and investment.

The other significant damper on the economy is uncertainty about future legislation. President Obama has suggested reforms are needed in the areas of health care, energy and finance. The current, short-term effect of the president's proposals is to generate uncertainty. As a result, some businesses are putting off major investments until the landscape becomes clear.

Louisiana Situation and Outlook

The 2009 forecast for growth in Louisiana employment was 0.1 percent. The reality was a decline in employment of slightly more than 3 percent. The first obvious reason for the decline is the national recession. Louisiana began to feel the effects of the recession in 2009. For example, Shreveport's General Motors plant experienced significant layoffs. Another key factor was the natural slowing of the efforts to rebuild New Orleans and the return migration to the city. The rebuilding and recovery of New Orleans is one reason Louisiana has avoided the severe recession felt in many other states. The decline in employment in 2009 and a review of major projects suggest the rapid growth phase of the recovery has come to a close.

New Orleans Metropolitan Statistical Area: The New Orleans MSA remains Louisiana's largest metropolitan area. The city currently has a great deal in its favor with strong employment from key companies such as Northrop Grumman and the economic contributions of tourism in the French Quarter. The city also is enjoying the benefits of the Saints Superbowl victory. Levee construction and other large-scale infrastructure projects will provide jobs and revenue for many years. These announced or ongoing projects add up to over \$9 billion in spending. However, the rebuilding effort is slowing and the above-trend growth due to return migration is coming to a close. The new NASA budget appears to ensure long-term job losses at Lockheed Martin Space Systems. Overall, expect flat to very modest growth in employment for the New Orleans MSA.

Baton Rouge Metropolitan Statistical Area: The Baton Rouge MSA has \$5.1 billion in construction projects. The area also will benefit from a new SNF chemical plant and the expansion of Shintech. Cuts to the state government's budget may be slightly less severe than originally anticipated, but possible cuts still pose a risk to employment in the area. Modest growth is expected in the Baton Rouge MSA.

Shreveport-Bossier Metropolitan Statistical Area:

The Shreveport-Bossier MSA typically suffers more in a recession due to a greater reliance on durable goods manufacturing. The area's current problems clearly stem from the national recession. Although state and local leaders are looking for an alternative use for the shuttered General Motors plant, no viable alternatives have been found. The jobs lost by the closing of the plant are likely to be permanent. On the bright side, job gains in other areas have helped to offset the typical cyclical downturn. Significant construction projects, Barksdale's Global Strike Force and the massive Haynesville Shale natural gas field are providing much-needed employment in the Shreveport-Bossier area. Expect this area to begin to come out of the recession and show growth in 2010.

Lafayette and Houma Metropolitan Statistical Areas: The Lafayette and Houma MSAs rely heavily on the oil and gas industry. Prior to the recent recession, both areas were showing strong growth due to high oil prices. The availability of deep water reserves and relatively high prices would suggest continued strength in the oil and gas sector. The key source of uncertainty for both areas lies in a potential federal energy bill. While cap and trade legislation seems unlikely, the probability of significant taxes being placed on the industry is greater. Firms are hesitant to make major capital investments because of uncertainty about possible tax increases. This uncertainty is reflected in rig count data. Overall, expect modest growth in both areas.

Lake Charles Metropolitan Statistical Area: The Lake Charles MSA will benefit from a number of new developments. The Sugarcane Bay Casino, Shaw's Global Modular Solutions facility and several potential large construction projects are welcome factors on the horizon. Expect this MSA to begin to show employment growth in 2010.

Monroe Metropolitan Statistical Area: The Monroe MSA has received a great deal of good news during the past year. The purchase of the Pilgrim's Pride poultry processing plant by

Foster Farms and a new ConAgra sweet potato processing plant are both welcome additions to the area. Although startup obstacles still exist, the proposed new V-Vehicle plant will employ 1,400 workers. These workers already are receiving training to work in the plant. Both Chase Mortgage and Gardner Denver Thomas are likely to add workers in the coming year. This expected growth in jobs leads to significant optimism in the outlook for the Monroe MSA.

Alexandria Metropolitan Statistical Area: The Alexandria MSA will see some job growth assuming the U.S. economy continues to rebound. The job gains will come from logging/lumber firms who benefit from the recovery and Union Tank Car Co. The area should also benefit from more than \$200 million in road construction. The \$1 billion construction project at Cleco's Rodemacher power plant will end, however. The loss of these jobs and the lack of new firms entering the area suggest relatively flat employment in the coming year.

FARM INPUTS OUTLOOK

KENNETH W. PAXTON

Professor (Agricultural Economics)

National Situation and Outlook

Farm inputs are those items used to produce food and fiber needed by the United States and the world. Some inputs used in the production process, such as seed, fertilizer, chemicals, fuel, or feed, are completely consumed in the yearly production cycle. Another type of input, capital items, are only partially used up in the annual production cycle and have a life of several years. Examples of long-term or capital input items are machinery and equipment, breeding livestock, orchards and facilities. The U.S. Department of Agriculture's Economic Research Service estimates the cost of these inputs as part of the annual farm income forecast. The USDA farm income forecasts for the nation as a whole can be found on the Economic Research Service's Farm Income Data Web site:

<http://www.ers.usda.gov/data/FarmIncome/>

As shown in Table 1, the USDA estimates for total U.S. production expenses in 2009 are projected at \$280.7 billion. Total production expenses for 2010 are forecast to increase only slightly to \$281.4 billion. After the large increase in production expenses in 2008, this amount represents a return to normal. For 2009, production expenses are projected to be about 83.3 percent of gross farm income. Expenses are forecast to increase only slightly in 2010, while farm income is forecast to increase nearly 12 percent. Production expenses are forecast to be 81.7 percent of gross farm income in 2010.

The USDA/ERS calculates a total of 17 expense categories for farms. All expense categories experienced significant increases from 2007 to 2008. In 2009, most expense categories declined from the 2008 highs. Expenses are forecast to increase only slightly in most categories for 2010. The charges for both short-

term and real estate interest are forecast to be lower in 2010. Farm origin input costs are forecast to decrease slightly in 2010. Although total production expenses are forecast to increase only slightly in 2010, these expenses are significantly above the most recent 10-year average of \$227.3 billion. Within the manufactured inputs category, fertilizer and lime are forecast to decrease from \$16.4 to \$15.1 billion. Fuels and oils are forecast to increase from \$10.6 to \$11.8 billion in 2010.

Louisiana Situation and Outlook

The USDA does not release state level estimates on the same schedule as national estimates. Louisiana farm income data for 2009 will be released in the summer of 2010. While detailed data for the state is not yet available, Louisiana producers could expect the same changes as those projected at the national level. This expectation is especially true for the major categories of fertilizer and fuel and oil. Changes in the cost of annual production inputs are important to a producer because these items affect farm organization and net income immediately. Changes in the prices of long-term input items affect the producer as new investments are made.

Each year the LSU AgCenter's Department of Agricultural Economics and Agribusiness estimates cost of production for major Louisiana commodities. Electronic copies of this publication are available from the LSU AgCenter's Web site:

http://www.agctr.lsu.edu/en/money_business/farm_business/budgets/

A detailed list of inputs and prices used in the 2010 budget projections is shown in Table 2. As a general rule, the prices reflect pricing for consumption by commercial production agriculture. Also, the prices do not include rebates or other incentives which may be offered by manufacturers.

Table 1. U.S. Farm Production Expenses, by Categories, 2006-2010.					
	(billions of dollars)				
Expense Accounts	2006	2007	2008	2009P	2010F
<u>Farm origin inputs</u>	61.10	73.40	79.50	77.60	76.90
Feed	31.40	41.90	46.90	44.30	43.20
Livestock	18.60	18.80	17.50	16.10	16.60
Seed	11.00	12.60	15.10	17.20	17.10
<u>Manufactured inputs</u>	37.50	46.30	55.00	43.70	44.20
Fertilizer & lime	13.30	17.70	22.50	16.40	15.10
Fuels and oils	11.30	13.80	16.20	10.60	11.80
Electricity	3.80	4.30	4.50	4.70	4.60
Pesticides	9.00	10.50	11.70	12.10	12.70
<u>Total interest charges</u>	14.40	15.10	14.50	15.30	14.00
Short-term interest	6.40	6.90	6.50	6.60	6.30
Real estate interest	8.00	8.30	8.00	8.70	7.70
<u>Other operating expenses</u>	76.90	88.40	92.40	92.40	93.00
Repair and maintenance	12.50	14.30	14.80	14.70	15.00
Hired & contract labor expenses	24.20	28.40	29.60	30.50	30.90
Contract labor	3.00	4.40	4.70	4.80	4.70
Hired labor	21.20	24.00	24.90	25.70	26.20
Machine hire and custom work	3.50	3.80	4.10	3.90	3.90
Marketing, storage and transportation	9.10	10.30	10.10	10.10	10.10
Miscellaneous operating expenses	27.70	31.40	33.80	33.10	33.10
<u>Overhead expenses</u>	42.80	44.40	48.70	51.80	53.30
Capital consumption	26.20	27.10	28.70	29.80	30.10
Property taxes	9.00	10.30	10.70	11.20	12.20
Net rent to nonoperator landlords	7.60	7.00	9.30	10.70	11.00
TOTAL PRODUCTION EXPENSES	232.70	267.50	290.00	280.70	281.40
http://www.ers.usda.gov/data/farmincome/finfidmu.htm					

Product prices may vary from one vendor to another. In addition, some products may be available in a number of formulations and sold under a variety of trade names. Such differences

provide opportunities for producers to substitute less expensive products and formulations for more costly products. By carefully looking at input requirements and comparing product prices,

producers can keep production input costs as low as possible. Also, prices and services offered will vary from dealer to dealer and production area to production area. Careful purchasing must take into consideration not only price but also quality and service. Price should not be the only guide in the purchase of production inputs.

The prices shown in Tables 2a-2d reflect only small changes from 2009 price levels. The exceptions to this expectation are energy and fertilizer prices. These two areas have experienced significant volatility in recent years. Comparing broad categories of inputs, prices for 2010 are projected to be only slightly different from prices used in 2009. Within specific categories, however, much larger differences in specific inputs may occur. For example, in the

herbicides category, the overall change is forecast to be small, but some individual products may have significant variations. In recent weeks some manufacturers have announced significant price discounts on specific products.

Energy

Energy is important to the agricultural industry. Energy is both a direct input in the production process and an indirect input as energy used in the manufacture and transport of agricultural inputs. This section summarizes the most recent data released by the U.S. Energy Information Agency regarding the short term outlook for energy in the United States. Table 3 contains a list of energy prices for selected sources.

Table 3. Energy Prices for Selected Sources, 2005-2011.

Item	Unit	Year						
		2005	2006	2007	2008	2009	2010	2011
Diesel Fuel Retail Incl Taxes U.S. Average	cents/gal.	239.70	270.20	287.90	379.70	246.10	294.80	315.50
Diesel Fuel Retail Excl Taxes U.S. Average	cents/gal.	191.40	220.10	237.90	326.40	194.60	243.90	264.20
Retail Price of Electricity in Commercial Sector, U.S. Average	cents/kwh	8.70	9.50	9.60	10.30	10.20	10.20	10.30
Retail Price of Electricity in Industrial Sector, U.S. Average	cents/kwh	5.60	6.20	6.40	7.00	6.90	6.70	6.80
Retail Price of Electricity in Residential Sector, U.S. Average	cents/kwh	9.40	10.40	10.70	11.40	11.60	11.50	11.70
Retail Price of Electricity for All Sectors, U.S. Total	cents/kwh	8.10	8.90	9.10	9.80	9.90	9.80	10.00
Gasoline Regular Grade Retail Price Incl Taxes (Gulf Coast)	cents/gal.	219.20	248.30	267.80	314.40	222.00	271.40	285.20
Gasoline Regular Grade Retail Price Incl Taxes U.S. Average	cents/gal.	227.10	257.60	280.60	325.70	234.90	283.80	297.30
Gasoline Regular Grade Retail Price Excl Taxes (Gulf Coast)	cents/gal.	176.60	206.30	226.50	271.30	181.00	229.30	242.60
Gasoline Regular Grade Retail Price Excl Taxes U.S. Average	cents/gal.	180.40	209.70	231.20	274.80	186.70	234.40	247.40
Natural Gas Henry Hub Spot Price (\$/mcf)	\$/mcf	9.10	6.94	7.18	9.12	4.06	5.53	6.03
Natural Gas Henry Hub Spot Price (\$/mmBtu)	\$/mmBtu	8.83	6.74	6.97	8.86	3.95	5.37	5.86
Natural Gas Price Industrial Sector U.S. Average	\$/mcf	8.56	7.87	7.65	9.58	5.24	6.31	6.83
Natural Gas Price Residential Sector U.S. Average	\$/mcf	12.70	13.73	13.03	13.67	12.03	12.51	13.49
Propane Retail Price Incl Taxes South	cents/gal.	190.60	212.60	230.00	269.70	229.00	243.30	255.10
Propane Retail Price Excl Taxes South	cents/gal.	181.30	202.20	218.80	256.60	217.90	231.50	242.70
Refiner Average Crude Oil Acquisition Cost	\$/bbl	50.25	60.26	68.13	94.68	59.20	76.59	81.02
Imported Crude Oil Price	\$/bbl	48.89	59.05	67.19	92.61	58.85	76.33	80.52
West Texas Intermediate Crude Oil Price	\$/bbl	56.49	66.02	72.32	99.57	61.66	79.78	83.50

Source: <http://www.eia.doe.gov/emcu/steo/pub/contents.html> (Released, February 10, 2010)

Petroleum: Crude oil prices have continued to fluctuate since the historically high price of 2008. Oil prices have moderated since then, but prices are expected to increase over the next two years. This increase will result from the continued tightening in the world oil market. If the widely predicted economic recovery continues, the demand for oil also will grow. This growth and

the production targets set by the Organization of the Petroleum Exporting Countries are major factors indicating crude oil prices will hold at or above \$80 per barrel.

The combination of OPEC's excess production capacity and the current fairly large crude oil inventory has lessened the chance of a sharp run-

up in oil prices. Oil prices are expected to continue to increase over time, however. Figure 1 shows the high degree of correlation between crude oil and diesel fuel prices. This correlation means consumers can expect fuel prices to increase over time as crude oil prices increase.

Natural Gas: The consumption of natural gas is expected to increase in 2010. This increase is due in large part to the colder weather experienced in the early part of 2010. According to the Energy Information Agency, the number of working natural gas rigs declined in 2009. This decline will contribute to a production decline in 2010. With increased demand and lower production, consumers can expect prices to increase in 2010. The Henry Hub spot price for natural gas averaged about \$4.06 per thousand cubic feet in 2009. This price is expected to increase to \$5.53 per thousand cubic feet for 2010.

Electricity: Total electricity consumption is projected to increase in 2010. This increase is partly due to the colder temperatures experienced in early 2010, especially in the South. Sixty percent of the households in the Southern census region use electricity as the primary space heating fuel. Although consumption is expected to increase in 2010, the Energy Information Agency projects electricity prices will decline slightly in 2010. The decline is predicated on

shifts in base load fuel used by electricity generating plants.

Fertilizer: Commercial fertilizer is an important input for many agricultural commodities produced in Louisiana. As shown in Figure 2, fertilizer prices spiked in November 2008 with a general downward trend in prices since then. This figure shows average monthly prices for three major fertilizer products over the time period November 2008 through January 2010. While the trend in fertilizer products has been downward during that timeframe, the price for DAP (diammonium phosphate) has recently increased. DAP is a major source of phosphate, and urea is a major source of nitrogen.

Economic conditions throughout the world will have a major effect on fertilizer consumption and price. Fertilizer prices exhibited a high degree of volatility in 2008. Prices stabilized somewhat in 2009 while demand was relatively flat. The production of fertilizer nutrients exceeded the demand in 2009, leading to a continued buildup of inventories. These excess inventories tend to dampen sharp price increases. The demand for major fertilizer nutrients is expected to increase in 2010, but sharp price increases should be mitigated by the current inventory levels.

Figure 1. West Texas Intermediate (WTI) Crude Oil and Diesel Fuel Prices, 2005-2010.

Source: Energy Information Agency, February 10, 2010

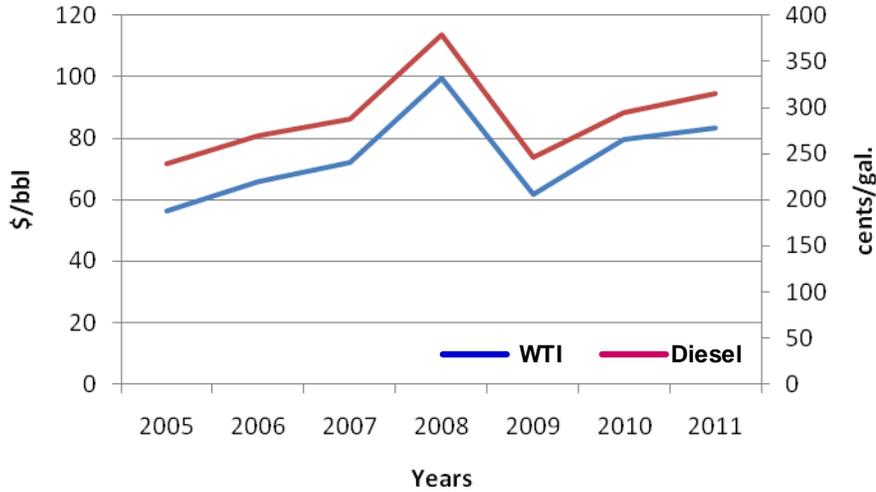


Figure 2. Average Monthly US Fertilizer Prices (November 2008 - January 2010)

Source: DTN Online, January 28, 2010

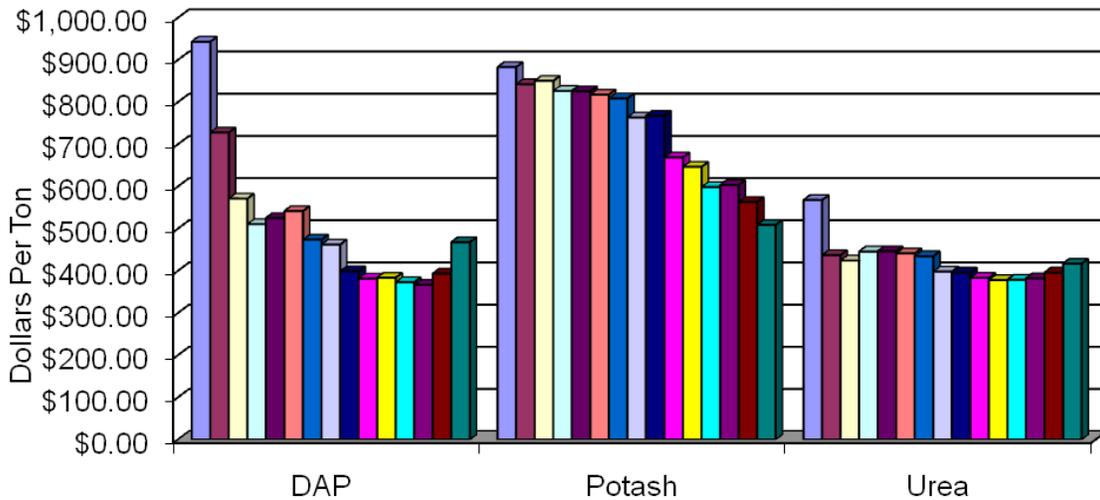


Table 2a: Estimated Prices for Operating Inputs in Louisiana, 2009

Item Name	Unit	Price (\$)	Item Name	Unit	Price (\$)
ADJUVANTS			TECHNOLOGY FEE		
Crop Oil (Seed Oil)	pt	3.27	BG II Cot Tech Fee	thous	0.71
Crop Oil (Petroleum)	pt	1.35	BG II Cot Tech Fee	cap/ac	40.00
Flexstar HL	pt	14.67	BG II/RRF Tech Fee	thous	1.45
Surfactant	pt	3.68	BG II/RRF Tech Fee	cap/ac	67.50
CUSTOM FERT/LIME			BG/RR Cot Tech Fee	thous	1.13
App Fert by Air	cwt	7.00	BG/RR Cot Tech Fee	cap/ac	52.50
App Fert by Air(Min)	appl	7.00	Eradication Fee	acre	6.00
Custom Apply Fert	acre	7.00	RR Cotton Tech Fee	thous	0.76
Custom Spread(Truck)	appl	4.50	RR Cotton Tech Fee	cap/ac	35.50
Lime (Spread)	ton	35.00	RRF Cotton Tech Fee	thous	1.00
CUSTOM SPRAY			RRF Cotton Tech Fee	cap/ac	46.50
App by Air (1 gal)	appl	2.50	SEED/PLANTS		
App by Air (2 gal)	appl	4.00	Corn Seed BtRR	thous	2.95
App by Air (3 gal)	appl	5.00	Corn Seed RR	thous	2.72
App by Air (5 gal)	appl	6.00	Cotton Seed BGII/RRF	thous	0.57
App by Air (10 gal)	appl	8.00	Cotton Seed BGRR	thous	0.55
Custom Apply	acre	5.00	Cotton Seed Bt	thous	0.28
Custom Terragator	acre	5.00	Cotton Seed Liberty	thous	0.62
LARice GPS Charge-SW	acre	0.35	Cotton Seed RR	thous	0.53
LARice GPS Charge_NE	acre	0.25	Cotton Seed RRF	thous	0.55
CUSTOM PLANT			Rice Clearfield 161	lb	0.88
LARice Air Plant NE	cwt	5.50	Rice Clearfield XL8	lb	4.88
LARice Air Plant SW	cwt	5.60	Rice Seed (Levees)	lb	0.33
Plant by Air	cwt	7.00	Rice Seed CF(Levees)	lb	0.88
CUSTOM HARVEST/HAUL			Rice Seed Conv.	lb	0.33
Haul Corn	bu	0.20	Rice Seed Hybrid	lb	3.20
Haul Cotton	lb	0.02	SC Cultured seedcane	acre	484.00
Haul Rice	bu	0.22	Sorghum Concept	lb	1.75
Haul Rice (cwt)	cwt	0.25	Sorghum NonConcept	lb	1.18
Haul Sorghum	bu	0.20	Soybean Seed RR	lb	0.99
Haul Soybeans	bu	0.20	Soybean Seed Stack	lb	0.88
Haul Wheat	bu	0.20	Wheat Seed Private	lb	0.29
LARice Haul	cwt	0.30	SERVICE FEE		
GIN/DRY			Cotton Checkoff	bale	2.56
Dry Corn	bu	0.19	Cotton Storage	bale	25.00
Dry Grain Sorghum	cwt	0.25	Crop Consultant	acre	9.50
Dry Rice	bu	0.40	Insect Scouting	acre	7.00
Dry Rice (cwt)	cwt	0.90	Rice Consultant	acre	7.00
Gin	lb	0.09	Survey & Mark Levees	acre	4.00
LARice Dry	cwt	0.90	Survey & Mark Levees	acre	3.50
IRRIGATION SUPPLIES			GROWTH REGULATORS		
Rice Gates	each	3.65	Early Harvest PGR	oz	1.55
Roll-Out Pipe	ft	0.20	LA Polado	oz	0.38
			Mepex	oz	0.29
			PGR IV	oz	1.55
			Pix Plus	oz	0.28
			Pix Ultra	oz	0.39

Table 2b: Estimated Prices for Operating Inputs in Louisiana, 2008

Item Name	Unit	Price (\$)	Item Name	Unit	Price (\$)
FERTILIZERS			HERBICIDES		
Amm Nitrate (34% N)	cwt	14.23	2,4-D Amine 4	pt	2.08
Amm Sulfate (21% N)	cwt	11.44	2,4-D Ester	pt	5.70
Anhy Ammonia (82% N)	cwt	26.85	AAtrex 4L	pt	2.57
Boron (Solubor)	lb	0.40	AAtrex NINE-O	lb	4.35
DAP	cwt	16.39	Accent Gold	oz	6.12
Fert 10-34-0	cwt	19.38	Accent SP	oz	29.01
Fert 41-0-0-4	cwt	19.88	Aim 2EC	oz	6.84
LA Nitrogen	lb	0.42	Aim DF	oz	9.65
LA Phosphate	lb	0.39	Arrosolo	qt	7.88
LA Potash	lb	0.48	Assure II	oz	1.06
Phosphorus(46% P2O5)	cwt	15.35	Atrazine 4L	pt	2.52
Potash (60% K2O)	cwt	26.10	Atrazine 90DF	lb	4.33
Sulfur	lb	0.20	Authority 75DF	lb	26.40
UAN (32% N)	cwt	10.56	Axiom 68DF	lb	25.11
UAN + Sulfur (28% N)	cwt	10.13	Backdraft	pt	2.40
Urea, Solid (46% N)	cwt	16.29	Banvel	pt	6.41
Zinc	lb	0.52	Basagran	pt	11.54
FUNGICIDES			Basis Gold	lb	9.00
Apron Maxx RTA	oz	0.75	Beacon 75% WSP	oz	30.63
Apron XL	oz	8.13	Beyond	oz	4.47
Apron XL LS	oz	6.90	Bicep II Magnum	qt	10.16
Benlate 50 WP	lb	15.95	Bicep II zmagnum	qt	10.58
Captan 4L	pt	2.83	Blazer Ultra	pt	8.23
Captan 50 WP	lb	5.33	Boa	pt	3.63
Cruiser 5FS	oz	17.38	Bolero 8EC	pt	4.95
Delta Coat AD	oz	3.75	Boundary	pt	8.69
Dithane F-45	qt	7.15	Buctril 4EC	pt	16.00
Dithane Rainsheild	lb	2.54	Butoxone 175(2,4-DB)	pt	2.70
Fungicide	lb	2.82	Butoxone 200(2,4-DB)	pt	4.04
Gem 25 WG	oz	3.47	Butyrac 175 (2,4-DB)	pt	2.71
Manzate 75 DF	lb	7.43	Butyrac 200 (2,4-DB)	pt	3.97
Manzate Flowable	pt	4.60	Canopy 75%	oz	3.08
Moncut 70 DF	lb	24.85	Canopy XL	oz	2.23
Orbit	oz	2.75	Caparol 4L	pt	4.86
Prevail	lb	25.53	Celebrity Plus	lb	84.96
Quadris	oz	2.56	Clarity	pt	12.13
Ridomil GoldPC 10G	lb	2.08	Classic	oz	13.92
Ridomil Gold PC	lb	2.05	Clincher EC	oz	1.74
Rovral 4F	pt	17.83	Cobra 2EC	oz	1.21
Shelter	oz	8.50	Command 3ME	pt	15.00
Stiletto	oz	0.56	Conclude XACT	pt	11.32
Stratego	pt	25.00	Conclude XTRA	pt	8.32
Terraclor Flowable	pt	4.74	Cornerstone	pt	3.88
Terraclor 2EC	pt	1.87	Cotoran 4L	lb	4.82
Terraclor Super X EC	pt	3.95	Cotoran DF	lb	7.92
Terraclor Super X G	lb	2.82	Cotton Pro Flowable	pt	3.36
Tilt 3.6 EC	oz	2.69	Crossbow	pt	8.05
Vitavax 200	oz	0.47	Delta Goal	pt	9.44
Vitavax M Flowable	oz	1.06	Denim 0.16 EC	pt	24.06
Vitavax RTU-Thiram	oz	0.34	Detail	pt	7.99
Vitavax T-L	oz	0.29	Direx 4L	pt	3.77
			Direx 80 DF	lb	7.37

Table 2c: Estimated Prices for Operating Inputs in Louisiana, 2008

Item Name	Unit	Price (\$)	Item Name	Unit	Price (\$)
HERBICIDES (continued)			HERBICIDES (continued)		
Diuron 4L	pt	3.06	Pendimax 3.3	pt	2.47
Diuron 80 DF	lb	4.55	Permit 75DF	oz	18.88
Domain 60DF	lb	12.75	Poast 1.53	pt	10.78
DSMA 4	pt	0.90	Poast Plus	pt	8.49
Dual II Magnum	pt	13.22	Propanil 4E	qt	5.15
Dual Magnum	pt	12.46	Prowl 3.3 EC	pt	4.19
Duet	pt	3.73	Pursuit DG	oz	11.59
Evik DF 80W	lb	6.99	Pursuit Plus EC	pt	7.10
Exceed	oz	10.71	Python WDG	oz	11.94
Exceed Custom Pak	oz	11.50	Raptor	oz	4.37
Expert	pt	4.80	Reflex 2LC	pt	14.14
Facet 75DF	lb	50.75	Regiment 80WP	oz	36.23
Finesse	oz	17.44	Remedy	pt	15.12
First Rate	oz	33.95	Resource .86EC	pt	23.46
Flexstar HL	pt	14.67	Ricestar	pt	18.13
FloMet 4L	pt	4.74	Roundup Original	pt	7.25
Freedom	qt	2.51	Roundup Original Max	oz	0.45
Front Row	oz	21.92	Roundup Power Max	pt	9.22
Frontier 6.0	oz	0.63	Roundup Ultra MAX	pt	5.97
Fultime	pt	4.27	Roundup Ultra Dry	lb	6.14
Fusilade DX	oz	1.43	Roundup WeatherMax	oz	0.56
Fusion	pt	22.33	Scepter 70 DG	oz	3.26
Glyfos	pt	2.84	Select 2EC	oz	1.53
Glyphomax	pt	3.49	Sencor 4F	pt	14.74
Glyphosate Plus 4L	pt	3.19	Sencor DF	lb	14.85
Glystar Plus	pt	3.19	Squadron CE	pt	4.55
Goal 2XL	pt	11.18	Stam 4E	qt	5.12
Gramoxone Max	pt	5.46	Stam 80 EDF	lb	5.47
Grandstand R	qt	24.65	Staple 85%	oz	16.01
Guardsman	pt	4.66	Staple Plus	oz	6.96
Guardsman Max	pt	5.46	Steadfast	oz	23.27
Harmony Extra	oz	11.75	Steel	pt	10.28
Hoelon 3EC	pt	11.45	Storm	pt	11.07
Karmex DF	lb	4.20	Strongarm	oz	43.54
LA Asulox/Asulam	gal	39.00	Superwham	qt	6.90
LA Weedmaster	gal	7.50	Suprend	lb	11.17
Lariat	qt	6.24	Surpass 20G	lb	2.36
Lasso 4EC	qt	6.60	Surpass EC	qt	17.88
Layby Pro	qt	11.06	Touchdown	qt	9.32
Lexone 75DF	lb	18.90	Touchdown 4 IQ	pt	3.33
Liberty	pt	8.31	Touchdown Total	qt	17.49
Lightning	oz	13.28	Treflan HFP	pt	3.16
Linex 4L	pt	8.13	Treflan TR-10	lb	0.77
Londax 60DF	oz	13.40	Tri-Scept	pt	5.24
Lorox 50DF	lb	18.65	Trifluralin 4EC	pt	2.28
MSMA 6.6	pt	2.78	Trilin 10G	lb	0.79
MSMA6 + Surfactant	pt	2.92	Trilin 4EC	pt	2.12
Newpath 2SL	oz	3.89	Typhoon	qt	13.06
Ordram 15-G	lb	1.34	Valor WP	oz	4.23
Ordram 8-E	pt	9.42	Whip 360	pt	25.08
Outlook	pt	20.68	Zorial Rapid 80DF	lb	15.42

Table 2d: Estimated Prices for Operating Inputs in Louisiana, 2008

Item Name	Unit	Price (\$)	Item Name	Unit	Price (\$)
INSECTICIDES			INSECTICIDES (continued)		
Acephate 90SP	lb	8.38	Mustang Max	oz	1.55
Admire 2 Flowable	oz	4.78	Orthene 90S	lb	8.04
Ammo 2.5 EC	oz	0.92	Orthene 97	lb	10.59
Asana .66 XL	oz	0.71	Penncap M	pt	3.64
Aztec 2.1% G	lb	2.63	Phaser 3E	qt	8.13
Baythroid 2	oz	2.36	Pounce 25WP	lb	10.63
Bidrin 8L	oz	0.87	Pounce 3.2 EC	oz	0.91
Brigade	oz	1.30	Provado 1.6F	oz	1.98
Capture 2EC	oz	1.50	Sevin 80S	lb	6.81
Centric 40WG	oz	4.79	Sevin XLR Plus	qt	9.85
Comite	pt	6.90	Spintor 2SC	oz	4.93
Confirm 2F	oz	1.62	Steward	pt	25.91
Counter 15G	lb	2.26	Temik 15G Grit	lb	3.78
Counter CR	lb	2.65	Thimet 20-G	lb	2.61
Curacron 8E	pt	10.73	Thionex 3EC	pt	3.40
Decis 1.5EC	oz	2.84	Thionex 50W	lb	8.20
Declare	pt	4.08	Tracer	oz	7.30
Denim 0.16EC	pt	26.36	Trimax	oz	3.11
Di-Syston 15G	lb	3.64	Vydate C-LV	oz	0.61
Di-Syston 8	pt	14.32	Warrior Z	oz	1.85
Diamond	pt	15.72	Warrior ZT	oz	1.88
Dimethoate 4E	pt	5.48			
Dimilin 2L	oz	1.84	HARVEST AIDS		
Dipel DF	lb	11.68	Accelerate	pt	2.59
Dipel ES	pt	4.08	Ammonium Sulfate	lb	0.20
Force 3G	lb	4.57	Boll'd	pt	7.01
Furadan 4F	pt	9.95	CottonQuik	pt	4.25
Fury 1.5 EC	oz	1.30	Def 6	pt	7.02
Gaicho 480	oz	8.56	Def / Folex	pt	7.15
Intrepid 2F	oz	1.96	Dropp 50 WP	lb	45.45
Intruder 70WP	oz	8.00	Dropp SC	oz	2.64
Karate Z	oz	3.28	Ethephon 6E	pt	2.85
Lannate LV	pt	8.74	Finish 6	pt	7.39
Lannate SP	oz	1.75	Folex 6EC	pt	7.27
Larvin 3.2	oz	0.53	Ginstar EC	pt	29.47
Leverage 2.7	oz	1.79	Gramoxone Extra	pt	4.86
Lorsban 15G	lb	1.89	Glamoxone Inteon	oz	0.25
Lorsban 4E	pt	6.42	Gramoxone Max	pt	5.46
Malathion 57EC	pt	4.23	Harvade 5F	oz	0.67
Malathion 8E	pt	5.50	Leafless	pt	18.56
Malathion ULV	pt	4.93	Prep	pt	5.28
Mepichlor 4.2% Liq	pt	5.91	Sodium Chlorate 3L	gal	3.00
Methyl Parathion	pt	4.30	Solium Chlorate 6L	gal	5.24
Monitor 4	pt	15.67			

FORESTRY

MICHAEL A. DUNN

Associate Professor (Agricultural Economics)

Louisiana Situation and Outlook

The projected Louisiana gross farm value of forest products decreased significantly for the period from Nov. 1, 2008, through Oct. 31, 2009. This decline marked three consecutive years of significant reductions in the forest products sector of Louisiana's economy. The decrease also coincides with the sharp contraction in the national economy that began toward the end of 2007.

The 2009 total saw log harvest decreased by 221 million board feet (26 percent) to a cut of 749.9 million board feet. This number represents a 42 percent decline in total saw log harvest from 2007 to 2009. The harvest of pine saw timber decreased 27.8 percent to a total statewide harvest of 629.9 million board feet. The hardwood saw timber harvest fell to 120.1 million board feet (a 13.6 percent decrease) in 2009. Pine chip-n-saw harvested in 2009 totaled 683,000 cords, a decrease of 14.7 percent from 2008 totals.

The 2009 Louisiana pulpwood harvest was 5.4 million cords, down 760,000 cords (13 percent) from the 2008 harvest. Pine pulpwood harvest decreased 13 percent, from 4.9 million cords in 2008 to 4.3 million cords in 2009. Hardwood pulpwood harvest decreased by 153,000 cords (13 percent), from 1.2 million cords in 2008 to 1.07 cords in 2009.

Stumpage prices for the period were mostly negative. Pine saw timber stumpage prices were 11 percent lower in 2009, averaging about \$237 per million board feet statewide for the year. This figure represents a 30 percent decline in prices within 24 months. Oak saw timber stumpage prices were 4 percent higher on average around the state in 2009, at approximately \$240 per million board feet for the reporting period (a

slightly higher average price than pine saw timber).

Statewide, average pine pulpwood prices decreased 18 percent from 2008 levels, following a 32 percent increase from 2007 to 2008. Hardwood pulpwood prices were 4 percent lower, on average, after gaining 25 percent the previous year. The average pine pulpwood price for the year in Louisiana was almost \$24 per cord, and the average hardwood pulpwood price for the year was above \$26 per cord. Chip-n-saw prices decreased 8 percent this year to a statewide average of approximately \$42 per cord.

In 2009, Louisiana's private forest landowners received an estimated \$338.9 million from the sale of forest timber, down 31 percent from 2008 and down 44 percent since 2007. Timber harvesting contractors and employees earned \$381.4 million from harvesting the trees and moving wood to mills. This total was down 22 percent from 2008 levels. The payroll and income derived from the forestry and wood products industry totaled an estimated \$2.45 billion in 2009, a decrease of almost 28 percent from 2008 totals. The total is over \$1.2 billion lower than the total for 2007, a reduction of 34 percent in two years. The gross farm income produced by all forestry-related products, such as timber, pine straw and Christmas trees totaled \$721.4 million in 2009, down 27.6 percent from the \$952 million generated in 2008. The value added through further processing and delivery was \$1.7 billion — making the estimate for the total value of the primary forestry industry in Louisiana nearly \$2.5 billion in 2009.

The forest products industry and forest landowners in Louisiana have not experienced the hardness of the past two years in many years. Unfortunately, the industry and landowners do not expect to see significant improvement in 2010 because of the recession. Although the national economy appears to have hit bottom and some signs point to the beginning of a recovery, the signs also show the recovery is clearly not consumer driven. Early 2010 numbers indicate the recovery is a business-led recovery.

Consumers still lack confidence in the state of the economy. This lack of confidence is important because consumers historically account for 70 percent of the U.S. economy. Consumers continue to pay down debt (a trend started in 2009), and businesses are still reluctant to add to their payrolls. This reluctance to add new employees means unemployment is going to continue to be high in 2010.

High unemployment affects consumers' willingness/ability to spend. As a result, consumption will continue to be anemic, particularly for large goods such as homes. This problem is compounded by the additional foreclosed homes that continue to flood the national market and the outlook for the depression in the new home market to continue in 2010. Single family home construction constitutes a significant amount of solid wood consumption in the United States. Without significant new construction, harvesting activity will likely remain below average. Because mills spent a lot of 2009 selling off excess inventory, the market for solid wood may be a little better in 2010 than in 2009. Once the excess inventory is cleared, demand for stumpage will start to pick up, but a return to pre-2008 conditions is doubtful this year.

Markets for pulpwood continue to be stronger than markets for solid wood. Several factors are responsible for this strength.

First, the significant decrease in solid wood product harvests means less excess wood is available at those sawmills for pulp and paper mills to purchase cheaply. Less excess wood means pulp and paper mills will have to purchase a greater share of pulp from standing timber. The increased demand for standing timber by the pulp and paper industry should keep pulpwood prices a little stronger than saw timber prices.

Second, speculation about the effects of the emerging bioenergy markets on the market for chips continues. As new biofuels plants come online, these plants may compete with already established pulp and paper mills for wood. This

competition will have a buoying effect on pulpwood prices, as well. In the short term, the behavior of prices is difficult to predict. Pulpwood prices may hold at current levels, decline or even increase in 2010. For the longer term, pulpwood prices are expected to be stronger than prices seen historically because of increased stumpage demand.

Third, most experts forecast the beginnings of a recovery in the forest products industry in late 2011 or 2012. The recovery is dependent on several factors starting with a significant decline in unemployment. This decline will depend upon a significant increase in business activity and a loosening of credit. For credit loosening to occur, confidence in the system will have to return. The return of confidence is a function of time and stability.

One final danger to economic recovery in the forest products sector is interest rates. The U.S. Treasury has printed large sums of money to use in the stimulus programs implemented around the country. The spending has resulted in the federal government incurring a massive amount of debt in the form of U.S.-issued notes and loans. Foreign countries have purchased the notes and loans. To keep these additional notes attractive to foreign buyers, the rate of return must be raised on the notes and loans. Couple this need for greater returns with inflationary pressures and interest rates will go higher. The double-barreled pressure on interest rates will have a negative effect on borrowing for the construction of new homes at a time when home buying already is in a very precarious situation.

COTTON OUTLOOK

KENNETH W. PAXTON

Professor (Agricultural Economics)

DONALD J. BOQUET

Professor (Macon Ridge Research Station)

World Situation and Outlook

Global cotton consumption increased in the 2009-2010 year compared to the previous year. While mill use increased, global cotton production declined. This combination of increased mill use and reduced production led to a significant decline in ending stocks of more than 9 million bales. Table 1 summarizes data on the most recent estimates of global production and consumption. World production in 2009-10 is estimated to be 102.71 million bales, down from the 107.48 million bales in 2008-09. Foreign countries accounted for the majority of the production decline.

China, India and Pakistan combined are expected to account for more than 70 percent of total foreign production in 2009-10. China's cotton crop is estimated to be 32 million bales, down from 36.7 million a year ago. India, the second leading foreign producer, is expected to produce 23.5 million bales, up slightly from the 22.6 million bales in 2008-09. Meanwhile, Pakistan's cotton crop is estimated at 9.8 million bales, up slightly from 9 million bales the previous year.

Over the past 30 years, world cotton consumption has increased by more than 51 million bales or 81 percent. Annual world cotton use peaked in 2006-07 at more than 123 million bales. Since then, world use declined to 111 million bales in 2008-09 and rebounded to more than 114 million bales in 2009-10. The long-term trend in world cotton use is up (Figure 1).

World exports are projected to be 33.6 million bales in 2009-10. This figure represents an increase from the 30.1 million bales the previous year. As a result of these supply and demand projections, global stocks are expected to decline

significantly from 60.93 million bales in 2008-09 to 51.72 million bales in 2009-10. Most of this change is in foreign countries. Ending stocks in the United States are expected to decline by 2 million bales. The world stocks-to-use ratio is estimated to be 45.2 percent in 2009-10, and the foreign stocks-to-use ratio is 42.7 percent.

U.S. Situation and Outlook

According to USDA's forecast, the 2009 cotton crop is estimated to be 12.4 million bales, down slightly from the 12.8 million bales in 2008-09. Upland production is projected at 12.01 million bales, while the extra-long staple (ELS) crop is expected to be 390,000 bales. Upland cotton acreage declined in most states except Texas and Georgia. Cotton acreage in these states held steady or increased slightly in 2009 compared to 2008. Texas currently accounts for more than 55 percent of the upland cotton acreage in the United States. Georgia accounts for approximately 11 percent of the acreage. The combined cotton acreage for the five states in the Midsouth region decreased from 1.9 million acres in 2008 to 1.6 million acres in 2009. Tennessee increased planted acreage from 285,000 in 2008 to 300,000 in 2009, but cotton acreage declined in the remaining Midsouth states.

Yields per harvested acre had been increasing in recent years but have dropped the past couple of years. Cotton yield per harvested acre declined from 813 pounds of lint in 2008 to 774 pounds in 2009. In the Midsouth, cotton yields have declined in recent years primarily due to adverse weather during harvest. For Louisiana, cotton yields were over 1,000 pounds per acre in 2007 but declined to 576 pounds per acre in 2008 because of heavy rains over most of the cotton producing area during harvest. Louisiana cotton yields rebounded slightly in 2009 with an average yield of 775 pounds of lint per acre.

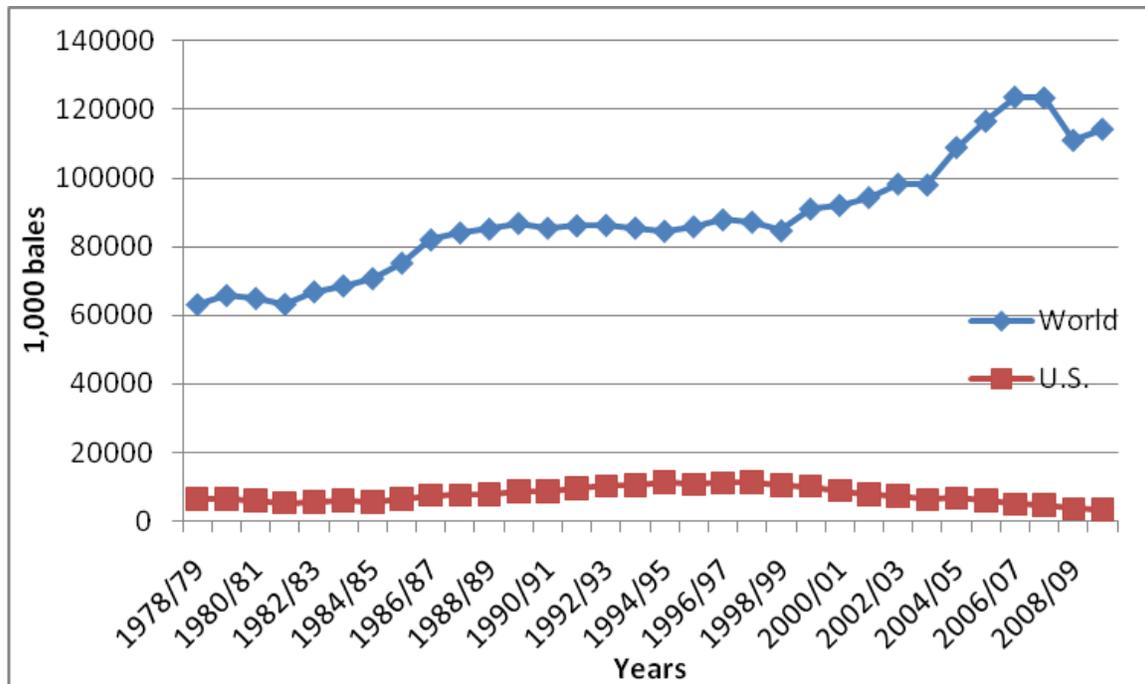
The U.S. cotton demand projection for 2009-10 is 18.74 million bales, down from 22.86 million bales last year. U.S. cotton exports are

Table 1. Cotton Acreage, Production, and Use, 2009 and 2010.

	World		Foreign		United States	
	2008/09	2009/10	2008/09	2009/10	2008/09	2009/10
Supply:	(million 480-pound bales)					
Planted Acres (million)	---	---	---	---	9.47	9.15
Harv. Acres (million)	---	---	---	---	7.57	7.69
Yield (lbs./ac.)	---	---	---	---	813	774
Beginning Stks.	62.66	62.42	52.61	56.08	10.04	6.34
Production	107.45	102.24	94.64	89.84	12.82	12.40
Imports	30.01	34.39	30.01	34.38	0.00	0.01
Total Supply	200.12	199.05	177.26	180.3	22.86	18.75
Disappearance:						
Mill Use	110.11	115.70	106.52	112.20	3.59	3.50
Exports	30.18	34.40	16.90	22.40	13.28	12.00
Total Domestic Use	140.29	150.10	123.42	134.60	16.87	15.50
Unaccounted	-2.59	-2.46	-2.25	-2.50	0.34	-0.04
Ending Stocks	62.42	51.41	56.08	48.21	6.34	3.20
Ending Stks./Use ratio (%)	44.5	34.3	45.4	35.8	37.6	20.6

Source: USDA WASDE -480, March 10, 2010.

Figure 1. United States and World Cotton Use, 1978-2009



projected to be 12 million bales, as the global demand for cotton rebounds from a recent downturn in cotton consumption. Mill use in the United States continues to decline and is estimated at 3.4 million bales for 2009-10. Production declines in the United States have been greater than the decline in domestic use, so ending stocks will be lower at the end of 2009. U.S. ending stocks are projected at 3.3 million bales, down from 6.34 million bales in 2008. This level of stocks gives a stocks-to-use ratio of 21.43 percent.

The National Cotton Council survey of planting intentions indicates producers will plant a total of 10.1 million acres of cotton in 2010. Upland cotton planting intentions are 9.9 million acres. Given a normal abandonment rate of 11.5 percent, harvested acres will total 8.9

million acres. Assuming state-level average yields, the total crop is estimated to be 15.5 million bales. In the Midsouth, acreage was expected to increase about 8.4 percent, on average.

Cotton acreage in Louisiana was projected to increase above 2009 levels by just over 1 percent in 2010. Both Mississippi and Tennessee are projected to increase planting by 18 percent or more over 2009 levels. The past two years have been particularly disappointing due to adverse weather during harvest. The year started off with adequate to above average moisture in Louisiana. Short-term forecasts call for wet weather to persist through most of the spring 2010. The weather at planting time will influence planting decisions, especially for cotton and corn, which are among the first row crops planted in the state.

SOYBEAN OUTLOOK

KURT M. GUIDRY

Professor (Agricultural Economics)

WAYNE M. GAUTHIER

Associate Professor (Agricultural Economics)

RONALD J. LEVY JR.

Assistant Professor (Central Region)

Introduction

Extremely strong domestic use and strong export demand have highlighted the soybean market to this point in the 2009-2010 marketing year. While the demand has provided solid support for the market, the prospects for growing world soybean supplies and the resulting increased export competition remain in the minds of many market analysts. Investors remain uncertain about the effects domestic and international economies will have on demand. This uncertainty and the activity level of investors in the commodity market are factors which will continue to shape future market direction.

National-International Situation and Outlook

Soybean acres in 2009 totaled 77.5 million acres, up nearly 2 million acres from the previous year. Average U.S. soybean yields reached 44 bushels per acre despite a difficult growing season. Early season weather conditions delayed planting and pushed crop development and harvest far beyond typical periods. With the increased acres and the surprisingly strong yields, soybean production totaled 3.36 billion bushels, up nearly 400 million bushels from the previous year. Typical of many agricultural commodities, considerable pressure was placed on the demand side of the equation by the larger supply of soybeans experienced in 2009. Demand needed to keep pace with the increasing supply to prevent ending stocks from growing.

Thus far in the marketing year, demand has done a very good job of trying to address the large supplies from the 2009 crop. Extremely strong export demand for soybeans and soybean

products (meal and oil) has been a bright spot. Through the middle of February 2010, soybean exports were 34 percent higher than the previous year and 51 percent higher than the five-year average. China has been the chief customer for U.S. soybeans so far in the 2009-10 marketing year. Sales to China for this marketing year are 36 percent higher than the previous year and account for more than 63 percent of total soybean sales.

This very positive situation was created by several factors. First, total Chinese demand for soybeans is expected to increase during the 2009-10 marketing year while China's domestic production is expected to be slightly smaller. The increased demand will require additional imports. Second, weather issues in South America last year led to smaller-than-expected crops in the region. The United States became the primary supplier of soybeans to the world for the last half of 2009 and the beginning of 2010. Third, a weaker U.S. dollar and lower ocean-going freight rates over the past year helped place U.S. soybeans in a very competitive position. These three reasons have contributed to the improvement seen in the pace of U.S. soybean exports.

The factors also provided some support for the pace of soybean meal and oil exports. Through mid-February 2010, soybean meal exports have outpaced the previous marketing year by 68 percent and the five-year average by 77 percent. Likewise, soybean oil exports are 273 percent higher than the previous year and 176 percent higher than the five-year average. The strong export demand experienced for both soybean meal and soybean oil has provided tremendous support for the domestic crush market. Domestic crush is expected to experience a year-to-year increase of nearly 4 percent. Currently, crush has exceeded the expected pace. Crush levels through the end of 2009 were 10 percent higher than the previous year.

While demand has been exceptionally strong through the first quarter of the 2009-10 marketing year, concern about the remainder of

the marketing year continues to exist. The concern lies with growing world soybean supplies, particularly significantly higher soybean production in South America. World soybean production is expected to increase by a staggering 20 percent for the 2009-10 marketing year. While increased U.S. production is one reason for the large world increase, the more troubling factor is increased production in both Brazil and Argentina. The two countries are expected to see substantial increases from the weather impacted 2008-09 production year. Brazil's production is expected to increase by nearly 16 percent while Argentina's production is expected to increase by a whopping 65 percent.

Larger production levels mean larger exportable supplies of soybeans and soybean products. The larger exportable supplies could curtail the strong demand the United States is experiencing in the 2009-10 marketing year. With soybean harvest getting into full swing in South America, these supplies of soybean will soon be available to the market. The pace of U.S. soybean exports is expected to weaken through March and the remainder of the marketing year. The question which remains unanswered is: "How much will demand be affected by increased world supplies?" A weak U.S. dollar should continue to support exports. Despite the support of a weak dollar, exports of U.S. soybeans probably will not maintain the same pace once the South American soybean harvest is complete and the crop ready for export

Despite total soybean demand growing by 7 percent in the 2009-10 marketing year, ending stocks are projected to reach 210 million bushels, up 52 percent from the previous year. Historically, such a large increase in ending stocks would be associated with a significant reduction in market prices. The USDA's projected marketing year average price for 2009-10 is \$9.45 per bushel, however, down only roughly 50 cents per bushel from the previous year. The strong demand seen during the first portion of the marketing year has helped keep prices from falling to levels traditionally expected with a large increase in ending stocks.

The questions facing the market now are: 1) how long can demand continue to perform well, and 2) what will be the price reaction when demand begins to falter? While most analysts believe price will inevitably react to larger ending stocks, demand continues to be extremely strong with no significant signs of a major slowdown. The longer demand remains strong, the higher the chances the USDA will reduce the ending stock projection. A smaller projected ending stock would help start the 2010-2011 production and marketing year in a more favorable situation.

The expected increase in ending stocks for the 2009-10 marketing year and the likelihood of South America having exportable soybeans levels later into the 2010 calendar year will affect soybean acreage and production decisions in 2010. These decisions will be particularly influential in determining future market direction. With growing stock levels, increases in soybean acreage and production could add to an already negative supply and demand situation. At the USDA's annual outlook conference, however, the agency estimated 2010 soybean acres at 77 million acres, a 500,000 acre decrease from the previous year. While this projected reduction would help keep the stock situation from becoming unmanageable, many analysts have serious questions regarding the accuracy of the estimate.

Historically, the current soybean to corn price ratio of roughly 2.3 would point to more corn acres. Last year, however, the ratio was roughly 2.2 and soybean acreage increased by nearly 9 million acres. Weather conditions at planting contributed somewhat to the shift in acreage, but some concern remains about the potential for increased soybean acreage in 2010. A factor adding to this concern is the roughly 6 million acres not planted in winter wheat in the fall of 2009. These acres are available for planting in the spring of 2010, possibly in soybeans.

Acreage and production in 2010 will play a critical role in the future of soybean stocks. Even with projected reductions in 2010 acreage, the

USDA still expects ending stocks to grow by more than 100 million bushels during the 2010-11 marketing year. The U.S. soybean market will also face increased competition from a larger world soybean supply while demand is projected to fall. Total soybean demand for the 2010-11 marketing year is expected to fall by roughly 4 percent rather than growing by a five-year average of 2 percent. If planted acreage increases above the USDA's first projection of 77 million acres, ending stocks could grow to extremely unmanageable levels and put considerable downward pressure on prices.

Louisiana Situation and Outlook

Louisiana soybean acreage in 2009 was 1.02 million acres, down marginally from the previous year by 30,000 acres. The 2009 production year marked the second consecutive year when soybean acreages in Louisiana were more than a million acres. This trend shows a continued rebound from the significantly lower acres planted during the 2005-2007 period. Two factors are responsible for making soybeans a logical alternative for many producers: 1) historically strong prices and 2) fewer effects from higher fertilizer and fuel prices.

Unfortunately, the 2009 growing season proved to be very challenging for most producers. Early season drought conditions hampered the development of early planted soybeans, and late-season rains hampered the development of later planted soybeans. Despite the weather extremes experienced during the 2009 growing season, average yields still managed to reach 39 bushels per acre. This yield per acre continues a trend of higher yields for the state. Improvements in varieties and increased disease and insect management by producers have resulted in higher yield potential. While the higher yields would suggest the extreme weather conditions did not significantly affect yields, these numbers only reflect the yields on harvested acres – not total planted acres. The five-year average for abandonment (i.e., not harvesting a planted acre) is 4 percent. In 2009, the abandonment percentage was more than 7

percent due to weather conditions. Weather-related yield and/or quality damage left many fields with little to no value.

Soybean acreage in 2010 is expected to increase above last year's level by 50,000 to 100,000 acres. While the current soybean-to-corn price ratio would typically favor corn acreage across the United States, the ratio does not hold nearly as well for Louisiana given the state's historical corn and soybean yields. In addition, many producers are dealing with the financial implications of the 2008 hurricanes and the wet conditions in 2009. Producers may find obtaining financing easier on a cheaper crop such as soybeans rather than a considerably more expensive alternative. Another factor which could lead to additional soybean acreage in Louisiana is the wet, cold winter the state experienced early in 2010.

Wet conditions have limited producers' ability to get land prepared for 2010 plantings. These conditions are particularly concerning to producers forced to harvest under the extremely wet conditions in the fall of 2009. Many fields were left in need of significant repair. Through February 2010, considerable acreage in the state had yet to receive an application of burn-down herbicide. If the current weather pattern persists, late application of the herbicide will push corn planting dates back, possibly beyond recommended planting dates. The most likely result would be a shift of corn acres to soybeans. While higher cotton prices might capture some of the unplanted corn acres, a significant number of those acres would likely be planted in soybeans.

Price Outlook

Several factors seem to be influencing the soybean market. While demand strength continues to provide support for prices, the prospect of an extremely large South American crop weighs heavily on the market. The financial and energy markets also are influencing the market, providing some choppy market action. Although most trading in the market through February 2010 had been sideways, some factors

are developing or have developed which could provide short-term support to the market.

First, demand has not weakened in any significant way thus far, despite a general consensus calling for demand to weaken in 2010. The longer demand can remain strong, the higher the probability 2009 ending stocks will continue to decline. A decline in ending stocks would provide a more positive outlook heading into the 2010-11 marketing year and create a greater sense of urgency for this market to maintain and attract acres. Second, prices have a seasonal tendency to strengthen through the end of June as uncertainty about planted acres and crop progression keeps some risk premium in the market. Finally, fall field work has been limited by wet winter conditions throughout much of the Southeast and parts of the Midwest. The wet weather could affect crop plantings and add to uncertainty about the 2010-11 crop year. This uncertainty will provide some support to the market for the short term.

In the long-term, the market probably will not retain prices at current levels because soybean acres are expected to increase in 2010. When coupled with the prospects for lower total soybean demand, even a marginal increase in acreage will lead to a growth in ending stocks during the 2010-11 marketing year. The USDA's first projection for a marketing year price is \$8.80 per bushel, down 65 cents per bushel from the previous year. While opportunities to price 2010 production at levels higher than \$8.80 exist, average or trend-line yields suggest ending stocks will grow and cause downward pressure on prices heading into the 2010-11 marketing year.

The wildcard in this equation is demand. Signs of improving domestic and international economies provide some hope for improved demand worldwide. Also, an improving economy would provide some added confidence for investors. Investors will return to the commodity markets as confidence in the economy improves, possibly at levels approaching 2008 levels. Given this scenario, a logical price range for the 2010-11 marketing year is \$8.50 to \$9.50. Larger-than-expected acreage and production will move prices to the lower end of the range and higher-than-expected demand will provide support to the upper end of the range.

SUGARCANE OUTLOOK

MICHAEL E. SALASSI

Professor (Agricultural Economics)

BENJAMIN L. LEGENDRE

Professor, Head (Audubon Sugar Institute)

National Situation and Outlook

U.S. cane sugar production for 2009-2010 is projected at 3.437 million short tons, raw value, which is about 3.5 percent higher than the previous year. Total sugarcane harvested for the 2009-10 crop was estimated at 29.09 million tons from an estimated total acreage harvested for sugar of 852,700 acres. For the two major production states, sugarcane acreage harvested for sugar and seed in 2009-10 was estimated at 390,000 in Florida and 400,000 in Louisiana. The U.S. average sugarcane yield was estimated at 34.1 tons per acre, up from 31.8 tons in 2008-09.

U.S. sugar beet acres harvested in 2009 was estimated at 1.150 million acres, up about 14.5 percent from the previous year. The national sugar beet yield was estimated at 25.6 tons per acre, down slightly from 26.7 tons in 2008. Sugar beet production was estimated at 29.445 million tons, up 9.7 percent from last year. Beet processors' forecast of 2009-10 beet sugar production is 4.4 million short tons, raw value (STRV), representing an increase of 5.6 percent from the previous year.

The January 2010 WASDE report shows total U.S. supply of sugar at 11.665 million short tons, raw value (STRV). This total sugar supply was comprised of 1.451 million STRV in beginning stocks, 7.837 million STRV of production and an estimated import level of 2.377 million STRV. The U.S. sugar supply level is approximately 4.6 percent lower than a year earlier.

On the demand side, sugar use is projected to decline slightly in 2009-10 from the previous year's use. Total U.S. sugar use for 2009-10 is projected at 10.525 million short tons, raw value, compared with 10.775 million STRV from a year earlier. Total domestic deliveries of sugar are

projected at 10.375 million STRV. Domestic food use is forecast at 10.140 million STRV.

Ending stocks for the current fiscal year (2009-10) are estimated to be down slightly, resulting primarily from the decrease in supply. The January WASDE report estimated U.S. ending sugar stocks at 1.140 million STRV, down from 1.451 million STRV in the previous year. These projected ending stock levels result in a stocks-to-use ratio of 10.8 percent, compared with 13.5 percent in 2008-09.

Price Outlook

Raw sugar prices started the 2009 calendar year around 20 cents per pound and began to increase significantly during the summer, due primarily to tight U.S. stocks and production shortfalls in India. These two factors substantially reduced world sugar supplies. U.S. raw sugar prices averaged 20.15 cents per pound in January 2009 and rose to 22.47 cents per pound in June. Raw sugar prices continued to rise into the fall, averaging 28.91 cents per pound in September and closing the 2009 year at 33.30 cents per pound in December. The 2009 calendar year average price for U.S. raw sugar was 24.93 cents per pound.

U.S. raw sugar prices for 2010 delivery are currently trading as high as 40 cents per pound for nearby contracts. Nearby raw sugar futures prices (No. 16 contract on the New York Board of Trade) are currently trading at 40.38 for March delivery and 39.33 for May delivery. Futures contract prices for months in the 2010 sugarcane grinding season are trading in the 32-35 cents per pound range.

Louisiana Situation and Outlook

In 2009, sugarcane was grown on 417,869 acres (an increase of 16,434 acres or 4.1 percent compared to the 2008 crop) by 495 producers (a decrease of 31 producers or 5.9 percent) in 22 Louisiana parishes (counties). An estimated 390,708 acres (an increase of 15,366 acres or 4.1 percent) were available for harvest for sugar,

assuming 6.5 percent of the total acres were used for seed cane purposes. The 11 operating factories processed 13,976,970 tons of cane (an increase of 1,717,132 tons or 14 percent compared to 2008). The number of operating factories was down by one factory because the St. James facility operated by Louisiana Green Fuels closed in 2008. Further, the Lacassine syrup factory, also operated by Louisiana Green Fuels, did not operate in 2009.

All total, the 11 Louisiana factories produced 1,477,749 short tons of sugar (96 pol), which was an increase of 104,710 tons or 7.6 percent. Accordingly, the average yield of cane produced per total acre was 33.4 tons (an increase of 2.9 tons or 9.5 percent). The average yield of cane produced from each harvested acre amounted to 35.8 tons (an increase of 3.1 tons or 9.5 percent). The average sugar recovery at the 11 factories was 10.2 percent or 204 pounds of sugar (96 pol) per ton of cane; this amount was a decrease of 20 pounds of sugar per ton of cane or a decrease of 8.9 percent when compared to the 2008 crop. The yield of commercially recoverable sugar produced per acre for total acreage averaged 6,814 pounds (a decrease of 18 pounds or 0.2 percent). The yield of commercially recoverable sugar produced per harvested acre was approximately 7,303 pounds (a decrease of 22 pounds or 0.3 percent).

The gross farm value of the 2009 sugarcane crop was \$446,973,544 for sugar and molasses (an increase of \$74,178,970 or 19.9 percent when compared to the 2008 crop). The gross farm value reported above represents 60 percent of the value of the sugar and molasses produced, with the remaining 40 percent (or \$297,982,362) for processing and marketing. Therefore, the total value of the sugarcane crop to Louisiana producers, processors and landlords at the first processing level was actually \$744,955,906, an increase of \$123,631,616, or 19.9 percent when compared to the 2008 crop. Sugarcane still ranks first in value among the state's row crops.

Wet harvest conditions undoubtedly affected the overall yield of sugar per acre, which was

lower than expected. This decrease in expected yield of recoverable sugar per ton of cane was partially offset by the tremendous increase in the yield of cane per acre. The 35.8-ton cane yield was the second best in the state's history, and the yield of sugar per acre was third best.

Furthermore, the total tons processed and the total amount of sugar produced were both fifth best in the state's history even though the total number of acres harvested in those years was mostly more than was harvested in 2009.

Louisiana has seen a gradual downward trend toward fewer sugarcane acres planted each year since 2000 when approximately 496,000 acres were planted. The overall acreage has been fairly stable for the past three years, however.

The acreage figures reported by USDA-FSA were slightly higher in 2009 compared to 2008 because of a new GPS mapping system. The fewer acres reported in recent years can be attributed to urban encroachment and a switch to other crops due to higher commodity prices for grain, especially in the northern region of the sugarcane belt. The recent increase in sugar prices might possibly bring some of these "lost" acres back into sugarcane production.

The 2009 sugarcane variety census showed Louisiana producers continued to switch to the newer varieties, namely HoCP 96-540 (50 percent of the planted area), L 97-128 (17 percent), L 99-226 (11 percent) and L 99-233 (6 percent), while dramatically decreasing the acreage planted to LCP 85-384 (from 91 percent in 2004 to only 6 percent in 2009). For the most part, producers were very satisfied with the performance of the newer varieties, especially HoCP 96-540, L 97-128 and HoCP 00-950. Late planting of the crop in 2008 and the early summer drought lead to expectations of disappointing cane tonnage for 2009. In reality, average cane tonnage exceeded all expectations. The 35.8-ton average yield per harvested acre was second only to the 37.0-ton average yield obtained in 1999. Undoubtedly, the dry harvest conditions of 2008 and the warmer-than-average winter helped to establish good stubble cane stands in the spring of 2009.

Weather records showed the average temperatures across the sugarcane belt were average to above average for every month of the year – with the exception of November and December (Louisiana Office of State Climatology). On the other hand, rainfall was below average for seven months and above average for five months. Rainfall during the period from October through December, when most of the crop is harvested, was more than 10 inches above normal, making for a very difficult harvest. Sugar yield at the beginning of the harvest was considerably lower than expected due to the excessive rainfall. Excessive rainfall results in increased extraneous matter, such as field soil (mud), in the harvested sugarcane. Every 1 percent increase in extraneous matter results in a corresponding loss of 3 pounds of sugar per ton of cane. The situation worsened in December when rainfall amounts throughout the sugarcane belt exceeded record levels. One factory reported having to cease milling operations because of heavy rainfall. Ten inches of rain during a six-hour period caused more than a foot of water to flood the inside of the mill.

Although rainfall was mostly deficient from January through July, the cane responded to late summer and early fall rains to produce one of the best crops on record, tonnage-wise. Above normal rainfall during the harvest season reduced the overall quality of harvested cane. The cane in many fields became lodged (recumbent) because of heavier than expected cane tonnage and October's above normal rainfall. The late growth and lodged conditions led to later maturity and lower sucrose content at the start of the harvest season although the maturity of the crop improved during the harvest.

The use of the chemical ripener glyphosate was undoubtedly reduced because of the crop's lodged conditions. Factories reported the yield of recoverable sugar per ton of cane was superior for cane treated with the ripener in contrast to cane not treated with ripener. In many cases, producers who treated cane planted on clay (heavy) soils with ripener had to delay the harvest in those areas until later in the season

when drier conditions prevailed. The only window of drier weather generally occurred from early to mid-November.

Record cane tonnages were processed by most of the state's 11 factories during the 2009 harvest season. Harvest season lasted into January 2010. From Jan. 5 through Jan. 14, most weather stations in south Louisiana reported night temperatures below freezing. Between Jan. 9 and Jan. 12, several reporting stations (Louisiana Office of State Climatology) recorded low temperatures of 20 degrees Fahrenheit or below. Fortunately, most cane had been harvested by Jan. 12. Cane remaining in the field during this cold period developed freeze cracks. Freeze cracks normally cause significant deterioration in cane quality within one week of a freeze.

In 2009, the high cost of fertilizer caused many producers to use less nitrogen than in previous years. In the past, many producers tended to use more nitrogen than recommended even though research has shown maximum yields of sugar per ton of cane and per acre could be achieved with lower nitrogen rates. Undoubtedly, the lower rates of nitrogen helped to improve the maturity of the crop, even though cane continued to grow into October, and ultimately increased the yield of recoverable sugar per ton of cane later in the harvest. Producers also continued to apply less phosphorus and potassium in 2009 due to the high costs. Research data has shown little or no response in yield of cane or sugar per acre can be expected from application of phosphorus and potassium even when soil tests indicate an insufficient level of these nutrients in the soil.

Although the pricing period is not completed for the 2009 crop, sugar prices have risen sharply in recent months with the average predicted value for raw sugar at \$23.10/cwt (an increase of \$2.90/cwt or 14.4 percent when compared to the 2008 crop). Molasses prices have remained high and should average about \$120/short ton at 79.5 Brix or \$0.7018/gal (an increase of \$0.023/gal or 4% when compared to the 2008 crop).

RICE OUTLOOK

KURT M. GUIDRY

Professor (Agricultural Economics)

MICHAEL E. SALASSI

Professor (Agricultural Economics)

JOHN K. SAICHUK

Professor (Southwest Region)

Introduction

Heading into the 2010 planting/growing season, the U.S. rice market is highlighted by growing supplies and sporadic export demand. Production increased during the 2009-2010 marketing year due to acreage increases and near record yields. The two factors have placed considerable pressure on the demand side of the equation. Demand must keep pace with supply to keep stocks from reaching unmanageable levels. Fortunately, reductions in total world rice production have helped to ease export competition. Total world demand is expected to rebound as the economic downturn seen throughout the world in 2008 and 2009 eases.

National-International Situation and Outlook

Rice production for the 2009-10 marketing year was nearly 220 million hundredweights, up nearly 8 percent from 2008. The increased production level was a function of both increased acreage and sharply higher yields during the 2009 growing year. Acreage increased by 140,000 acres and the increases were led by Arkansas, California and Mississippi. Each of these states showed rice acreage increases of more than 6 percent in 2009. Medium-grain rice production accounted for much of the increased rice acreage, because producers were attracted by sharply higher prices. Driven by extremely tight stocks, the higher medium-grain prices attracted a considerable amount of interest in the nontraditional medium grain Delta states. In 2009, medium-grain acreage increased by 50 percent or more in Louisiana, Arkansas and Texas.

The 2009 growing season saw rice yields second only to the yield levels experienced in 2007. Average rice yield across the United States was slightly over 7,000 pounds per acre, nearly 3.5 percent higher than the previous year. State yields increased from a low of roughly 1 percent to a high of more than 8 percent despite late season rains throughout the Delta. These rains created problems for many producers due to delayed harvest and harvesting inefficiencies. Only Mississippi failed to experience year-to-year increases in average yield.

Fairly significant increases in rice supplies during the 2009-10 marketing year have placed considerable pressure on the demand side of the equation to keep pace with supply and prevent stock levels from becoming a problem for prices. Fortunately, higher per capita consumption over the past several years has led to year-to-year increases in domestic rice consumption. While this growth in domestic consumption is steady, the growth has only averaged 1 to 2 percent per year over the past 10 years. With supplies growing, export demand has become a more critical component to total rice consumption and often helps dictate the direction of price movement.

Export demand for the 2009-10 marketing year is expected to increase by nearly 8 percent from the previous marketing year. The factors underlying the increase in exports are: increased world rice trade expectations, lower production levels by major export competitors and a weak U.S. dollar. The weak dollar has helped support export sales for most agricultural commodities. Export demand in 2009-10 marketing year has been a mixed bag so far. Through the second week in February, rice export sales were roughly 2 percent higher than the previous year, but sales still trailed the five-year average by more than 4 percent.

Strong export interest at the start of the 2010 calendar year has helped push outstanding rice export commitments 45 percent higher than the previous year and nearly 20 percent higher than the previous five-year average, however. Rough

rice export demand from traditional customers like Mexico, the unfortunate difficulties in Haiti and recent buying interest from Iraq have all provided support for the export market.

World rice production for the 2009-10 marketing year is down nearly 3 percent from 2008. This reduction is largely due to the 15 percent projected reduction in India's crop. Adverse weather conditions limited India's production. Also, a 7 percent reduction in Pakistan's 2009-10 crop is expected to help ease rice export competition for much of the marketing year. While the large reduction in India's crop generally is viewed as a positive for market potential, the shortfall also has been an area of major contention in the market. Earlier reports suggested India would have to import rice during the 2009-10 marketing year. This action would be in stark contrast to India's traditional role of major rice exporter. Many market analysts suggested India would have to import rice to help offset growing internal prices due to lower supplies. To date, the country has made no major purchases. The uncertainty regarding India has generated some market movement as speculation continues about the country's role in the world rice market.

Total world rice trade is expected to increase by nearly 7 percent during the 2009-10 marketing year. The United States appears to be well situated to benefit from the increased demand created by the prospect of lower world rice supplies and increased world rice trade. Together with a historically weak U.S. dollar, the two expectations are major factors in the projections for improved export sales during the 2009-10 marketing year. Despite the projections for stronger demand, ending stocks are expected to increase by nearly 31 percent during the 2009-10 marketing year. Medium-/short-grain stocks are responsible for much of the increase in ending stocks. Increased production in the United States has outpaced demand for these products. The large increase in ending stocks will mean lower medium-grain prices for the remainder of the 2009-10 marketing year. As the 2010 production year progresses, these higher stocks could cause

severe price discounts to levels seen in 2008 and 2009

The direction prices move during the 2010-11 marketing year will depend of the production levels experienced from the 2010 crop. Ending stocks have grown over the past few years. Add the potential for increased production in 2010, and additional pressure will be placed on demand. The USDA recently released the first potential supply and demand scenarios for the 2010-11 marketing year. These estimates are subject to change during the year, sometimes substantially. The first estimates place total rice acreage at 3.2 million acres, a 2 percent increase from the previous year. Increased acreage and trend-line yields would place total rice production for the 2010-11 marketing year at 226 million hundredweights, a 3 percent increase from 2009. Total rice demand has only increased by an average 1 to 2 percent over the past 10 years. The expected 3 percent production increases would lead to a further expansion of domestic rice stocks.

USDA's first estimate of 2010-11 ending stocks placed stocks at 49.8 million hundredweight, up 25 percent from the 2009-10 marketing year. The Delta states currently are experiencing wet conditions, and the 30-day precipitation forecast is calling for a wetter-than-normal March. These conditions may hinder producers' ability to plant rice in a timely fashion. Fewer planted acres could benefit the excess supply situation. But the underlying message contained in the USDA's first 2010-11 projections calls for major changes in the current outlook. Without these changes, the 2010-11 marketing year will be difficult – with increased production and ending stocks and the potential for the weather-impacted crop in India to rebound. Another major uncertainty is both domestic and international economic growth. Continued signs of economic improvement could help support demand and offset the projected larger supplies.

Louisiana Situation and Outlook

In general, Louisiana rice acreage did not experience the same level of expansion as the other major rice growing states in 2009. The state's total rice acres remained fairly stable in 2009 as reductions in southwestern Louisiana were mostly offset by increases in northeastern Louisiana. Total rice acreage in 2009 was roughly 470,000 acres. A considerable shift occurred between long- and medium-grain acres, however.

The National Agricultural Statistical Service (NASS) projected long-grain acres at 415,000 acres in 2009, down from 455,000 in 2008. The lingering effects from hurricanes Gustav and Ike in 2008 were responsible for much of this reduction. The two storms caused considerable saltwater intrusion on many major rice growing areas. An increase in medium-grain rice acres also contributed to the reduction in long-grain acreage. In 2009, medium-grain acres increased to 55,000 acres from only 15,000 in 2008. This increase in medium-grain acreage was due to strong medium-grain prices at planting time and the ability of producers to lock in profitable price levels prior to planting.

Louisiana did not escape the weather related difficulties experienced by the rest of the Delta in 2009. Early season drought conditions quickly turned into late season rains, which persisted for much of September and October. While the rains created only minor effects in the southwest growing region due to earlier harvest, the rain created significant harvest delays in the northern part of the state. Despite delays in harvest, producers in the northern growing region found rice was able to hold up under adverse weather conditions and that their harvest delays were better than many other competing crops.

While the 2009 growing season was challenging for many producers, state average rice yields were very strong. NASS is projecting a record 6,300 pounds per acre. This figure is nearly 500 pounds per acre higher than the previous five-year average. Yield surveys by the

LSU AgCenter indicate an even higher state average yield of 6,500 pounds per acre. The higher yields and slightly lower production costs in 2009 helped provide a more profitable outlook for many producers in the rice industry.

At the start of 2010, new crop rice futures prices were in the \$13-\$14 per hundredweight range (\$21-\$22.59 per barrel). The outlook for 2010 rice production looks very competitive to alternative cropping enterprises. Several factors point to higher rice acres in Louisiana for 2010: the relatively positive market conditions, the successful crop experienced in 2009 and the ability to plant salt-affected acreage. How large the increase in rice acres will be 2010 is unknown at this time. An extremely wet, cold winter has limited producers' ability to make traditional land preparations. If wet conditions persist through the spring, these conditions could have a significant effect on crop mixes seen in the state.

Price Outlook

The price outlook for rice needs to be broken into a short-term outlook and a long-term outlook. In the short-term (over the next few months), the outlook for prices is relatively positive. Strong export demand at the start of 2010 has provided a relatively positive tone to the market. Export business spurred by Iraqi purchases has helped to support prices. These exports and food donations associated with the unfortunate earthquake in Haiti have provided some additional mill business and some additional activity in the market. The outlook for export demand remains fairly positive for the next several months due to reduced world supplies and a weaker-than-normal U.S. dollar. Those two factors, along with the uncertainty regarding planting weather and planting intentions, should help support short-term prices.

Other commodity markets such as corn and soybeans also could have some spillover effects as weather and market conditions influence planting decisions for 2010. The rice market could also benefit from a spillover effect in

outside markets as the economy slowly recovers and provides additional investment interest.

The long-term outlook is a little more challenging as the market must deal with growing supplies and the potential for increased acreage and production in 2010. Initial USDA projections for the 2010-11 marketing year place rice acres at 3.2 million acres, only a 60,000 acre increase over 2009. While the slight increase in acreage does not seem overly significant, higher beginning stocks and trend-line yields would result in ending stocks growing by roughly 10 million hundredweight for the 2010-11 marketing years. The large increase in ending stocks is a major concern for rice prices.

The USDA's very early season average price projection for the 2010-11 marketing year is \$13 per hundredweight (\$21.06 per barrel). For prices to remain at this level with the significant increase in ending stocks, demand would have to perform very well during the 2010-11 marketing year. Signs of recovering domestic and world economies provide hope for continued growth in world demand during the next marketing year. Any disruption in demand along with an almost certain growing supply level in 2010-11 would mean prices were unlikely to remain in the \$13 range, however. Given growing supplies and uncertain demand, the logical average price range for the 2010-11 marketing year will be in the \$12-\$13 per hundredweight range (\$19.50-\$21 per barrel).

FEED GRAIN OUTLOOK

KURT M. GUIDRY

Professor (Agricultural Economics)

WAYNE M. GAUTHIER

Associate Professor (Agricultural Economics)

RONALD J. LEVY JR.

Assistant Professor (Central Region)

Introduction

The feed grain market has experienced many of the same factors faced by most of the commodity markets. Larger production levels, uncertainty regarding demand and reduced speculative investment all have created a discounted price situation compared to 2008 and the first part of 2009. A surprisingly strong production year in 2009 helped create a third consecutive year of slightly higher ending stocks. The higher stocks continue to place pressure on the demand side of the equation to keep pace and continue to support prices. Even when discounted to 2008 levels, these prices are at historically strong levels.

National-International Situation and Outlook

Beginning in 2007, total feed grain acreage experienced tremendous growth in the United States. The five-year average for corn and grain sorghum acreage from 2002 through 2006 was roughly 87 million acres. Starting in 2007, however, acreage for those two commodities, corn in particular, saw tremendous growth fueled primarily by increased demand from a growing ethanol industry. In 2009, the combined acreage for corn and grain sorghum totaled slightly more than 93 million acres, a 6 million acre increase over the 2002-2006 average. As a result of this acreage increase, supply levels of the two crops have increased significantly. Increased supply has put considerable pressure on demand to keep pace with supply to prevent an explosion of feed grain stock levels. To this point, growing ethanol demand has been able to offset the increased production and has kept ending stocks at relatively stable levels.

The 2009-10 marketing year is proving to be very similar to the past three marketing years. Major factors in the market have been large corn supplies and strong domestic demand. Despite the similarities with previous marketing years, this year started off on a negative note. Corn acreage increased in 2009 by an additional 500,000 acres over the previous year to 86.5 million acres. The acreage increase would have probably been larger if extremely wet conditions at planting time had not limited planted acres. These wet conditions persisted through much of the early part of the growing season and placed corn development at a later-than-normal pace.

While concerns over the lateness of crop development and the resulting lateness of harvest helped provide support for the market, nearly ideal weather conditions later in the growing season provided a strong base for yield potential. As result, the effects of the late harvest never materialized into significant yield reductions. In fact, the USDA projects a record U.S. yield of 165.2 bushels per acre, up nearly 12 bushels per acre from 2008 and up nearly 13 bushels per acre from the previous five-year average. Total supplies for the 2009-10 marketing years are expected to be a record 14.9 billion bushels due to record yields and increased acreage in corn production. This record supply is roughly 500,000 bushels higher than the supply for the 2007-08 marketing year when corn acres increased to a record 93.5 million acres.

The large corn supply has and will continue to place significant pressure on demand to keep pace. Fortunately, several positives will influence the demand side throughout the remainder of the 2009-10 marketing year and into the 2010-11 marketing year. A rebound in total red meat and poultry production should provide a solid base for feed demand moving forward. Also, expectations for higher crude oil prices should help return the competitiveness of ethanol in 2010 and create additional demand. In addition, the continued push to raise the minimum ethanol blend from 10 percent to 15 percent provides additional opportunities to continue to expand corn used in ethanol production. Export demand

in the 2009-10 marketing year is expected to rebound somewhat from the previous year as a weaker U.S. dollar and increased world demand help to broaden U.S. export business.

From an international perspective, world corn and feed grain production has increased significantly over the past three years as producers worldwide reacted to significantly higher prices. With the increased production of corn and other feed grains, competition for world export markets has continued to stiffen. When total feed grain production was lower, demand for feed grains was able to shift considerably across the different types of grain. For example, when wheat supplies became extremely tight worldwide, this tightness created significant markets for grain sorghum as buyers shifted purchases from wheat to grain sorghum. With supplies of all feed grains growing, demand is less likely to shift across commodities. Exports have become much harder to obtain than was the case just a few years ago. One positive note is the expectation for total world trade to improve during the 2009-10 marketing year. World trade should continue to strengthen as international economies recover from the economic downturn experienced in 2008 and 2009.

Unlike corn, grain sorghum acreage decreased by more than 1.5 million acres in 2009. Fewer acres were planted in response to lower prospects for export demand, which, in turn, limited prices and affected the profitability outlook heading into the 2009 growing season. Yields in 2009 were up 4 bushels per acre from 2008 and slightly over 3 bushels per acre from the previous five-year average. Despite this increase in yield, total production will be down nearly 100 million acres from the 2008-09 marketing year due to the significant acreage decreases. Sharp declines in total demand for the 2009-10 marketing year will, however, keep the lower production from driving ending stocks to extremely tight levels. Ending stocks are expected to fall to 48 million bushels, down 7 million bushels from the previous year but still in line with the five-year average.

Looking forward to the 2010-11 marketing year, many of the same factors which helped define price direction in the current marketing year will continue to exist. The number of acres planted in corn and grain sorghum will have a large effect on the outlook for these commodities, especially considering the trend toward higher feed grain supplies. Corn acres are expected to increase in 2010. Winter wheat plantings in the United States were down roughly 6 million acres last fall (2009). Producers probably will plant these acres with another commodity in the spring of 2010. Early projections call for a roughly even split of those acres between corn and soybeans. The soybean-to-corn price ratio, which is roughly 2.3 at this time, would historically favor corn. Since the beginning of 2010-11, however, price movements generally have pointed to a slight advantage for corn.

At the USDA's annual forum, first projections for 2010 placed corn acreage at 89 million acres, a 2.5 million increase over the previous year. Weather conditions over the next couple of months will have a large effect on acreage. The late 2009 harvest and the year's wet, cold winter have limited producers' ability to prepare the land for 2010 production. The effect of the wet winter weather conditions on land preparations heading into spring will be a significant factor in determining the number of acres planted in corn for 2010.

Louisiana Situation and Outlook

Louisiana corn acreage in 2009 was 630,000 acres, up 90,000 acres from the previous year. Stronger corn prices relative to soybean and cotton prices at the start of the year played a role in the increase in acres. Grain sorghum acreage was down 50,000 acres from the previous year with 70,000 acres planted. Heading into the 2009 growing year, low export demand led to much lower prices and particularly low basis levels, which, in turn, brought the profitability of grain sorghum into question.

The 2009 growing season was one of extremes with early season droughts followed by excessive

rains later in the year. While corn and grain sorghum harvests were essentially over by the time the heaviest and most persistent rains came in September and October, the drought conditions in May and June severely limited yield potential for many producers. Corn yields in the state averaged 132 bushels in 2009, down more than 10 bushels per acre from the previous five-year average. Likewise, grain sorghum acres averaged 82 bushels per acre in the state, down 5 bushels from the five-year average.

Looking forward to the 2010, corn acreage in Louisiana is expected to remain fairly stable around the 2009 level. Two factors which could help push up corn acreage are fertilizer prices and prices of corn and soybeans. Fertilizer prices are lower than the previous two years, and corn prices are higher relative to soybeans. Weather conditions, however, may ultimately have the biggest effect on acreage. An extremely wet and cold winter has limited field preparation for many producers. With wet harvest conditions severely damaging many fields last year, the inability to repair those fields and the inability to timely apply burn-down herbicides may push some producers beyond the optimal planting window.

The continued persistence of wet conditions is causing concern among producers as the limited time still available for land preparation is lost. The lack of land preparation will affect producers' ability to plant corn acreage in a timely manner. The improvement in cotton prices and the positive outlook for rice profitability may possibly limit the number of corn acres planted. These factors could limit corn expansion in northeastern Louisiana. This part of the state has the highest percentage of corn acres.

While grain sorghum acreage also will be affected by weather conditions, a more critical factor in determining planted acreage will be the general profitability outlook for the grain. While corn futures prices remain at historically high levels, grain sorghum basis levels have trended much lower over the past few years as export demand began to falter. Despite some modest

improvement in basis levels, the linkage between a relatively poor performing export market and basis levels will keep many producers leery of expanding grain sorghum acreage. Finally, with prices for competing crops offering competitive profitability projections, grain sorghum acres are expected to remain stable with last year's levels.

Price Outlook

The short-term outlook for corn prices remains relatively positive, but the long-term outlook appears to be more challenging. Relatively strong export demand during the start of 2010 has provided good support to the corn market. Concern about weather conditions and the ability to get land prepared and corn planted in a timely fashion should provide support to this market over the next couple of months. Also, prices typically experience some seasonal price strength heading out of winter into spring and early summer. The long-term outlook contains some concerns about possible increases in acreage, yields and ending stocks.

Ending stocks have been growing over the past two marketing years. The prospect of higher planted acreage in 2010, coupled with this growth, raises concerns over ending stocks rising to price-limiting levels. Initial projections by the USDA have corn acreage increasing by 2.5 million acres in 2010. A return to more trend-line yields from the record 2009 yields should keep production at fairly stable levels for 2010. Assuming modest growth in corn demand, more traditional yields would leave ending stocks well within the five-year average range. Based on these assumptions, the USDA estimates 2010-11 corn prices at \$3.60 per bushel. Although slightly discounted from the 2009-10 marketing year average price, the price is still within the upper range of historical prices.

Yields will be critical to price direction, however, assuming corn acres increase. If yields in 2010 approach the record levels experienced in 2009, supplies could approach levels which would generate ending stocks in the 2 billion bushel level. This level is traditionally viewed as

burdensome for the market. Higher yields or higher-than-expected increases in corn acreage would limit prices for the 2010-11 marketing year. Corn prices could be pushed into the lower \$3 range rather than the \$3.60 range initially projected by USDA.

WHEAT OUTLOOK

KURT M. GUIDRY

Professor (Agricultural Economics)

WAYNE M. GAUTHIER

Associate Professor (Agricultural Economics)

EDWARD K. TWIDWELL

Professor (Plant, Environmental and Soil Sciences)

Introduction

The wheat market has changed drastically over the past few years, more so than any other agricultural market. The market has gone from extremely tight domestic and international supplies to a market where domestic stocks have nearly tripled in a two-year period. Starting in 2007, record wheat prices were generated by a combination of factors. A trend toward lower wheat acreage was causing tight domestic stocks in the United States. In addition, international stocks were tight due to weather-related shortfalls in a few major producing countries. Producers in the United States reacted to record prices by drastically increasing acreage and production. At the same time, production in many countries rebounded as improved weather created a return to normal yields. Over the next two production years, increased supply and lower demand caused by the economic downturn helped create an explosion in ending stocks. Large ending stocks placed downward pressure on prices.

National-International Situation and Outlook

With growing supplies causing lower prices, wheat acres for the 2009-2010 marketing year were down roughly 4 million acres from 2008. Much lower profitability projections turned many producers away from growing wheat, particularly in nontraditional growing regions. These regions had grown wheat when prices reached record levels. Production for the 2009-10 marketing year was lower than the previous year. While average yields were marginally lower than the previous year at 44.4 bushels per acre, these yields were nearly 3 bushels per acre higher than the five-year average. The higher-than-average

yields lessened the effect of lower production on ending stocks and prices.

Although growing wheat supplies during the 2007-08 and 2008-09 marketing years did not help the supply and demand situation, the economic downturn caused a significant slowdown in demand. Decreased demand placed increased pressure on prices. The export demand that generated historic prices has been substantially curtailed from 2007-08 levels. Wheat exports have fallen from 1.3 billion bushels in the 2007-08 marketing year to 825 million bushels in 2009-10, a 35 percent reduction. Increased world production, particularly by major export competitors, has driven this reduction in export demand.

World wheat production is projected to decrease by less than 1 percent for the 2009-10 marketing year. This marginal decrease still represents a nearly 14 percent increase in production over the 2006-07 marketing year, however. The 2006-07 season was the first marketing year when ending stocks became extremely tight. During this same time period, major wheat exporters increased production levels tremendously. From 2006-07 to 2009-10 the following major exporters increased production: Australia, by more than 100 percent; Russia, by 37 percent; the European Union, 11 percent; and Canada, 5 percent. Two factors were responsible for the increases. Perhaps the biggest contributor was improved weather conditions, which favored a return to more normal yields. The remainder of the increase was a function of the prevailing higher prices. Producers reacted to the prices by increasing acreage placed in wheat production.

The slowdown in total wheat imports has added to the difficulty created by increased production. Exports are a large component of total demand for countries like the United States. Lower world trade means less demand and fewer export opportunities. Total world imports for the 2009-10 marketing year are projected to decrease by 13 percent from 2008-09. More important, total imports from the top seven U.S. wheat

markets are expected to decrease from the previous marketing year by roughly 12.5 percent in 2009-10. Despite lower production levels, ending stocks for the 2009-10 marketing year will continue the trend toward higher levels because of lower total demand. Ending stocks for the current marketing year are projected to increase by more than 300 million bushels to 981 million bushels. This figure is an increase of more than 600 million bushels since the 2007-08 marketing year.

Until the market can adequately correct the supply situation, prices are unlikely to approach levels anywhere close to the levels experienced just a year ago. The first step in controlling ending stocks is controlling planted acreage. The fall of 2009 saw winter wheat acreage cut by 6 million acres. Planted acreage was 37.1 million – the lowest level in more than 20 years. A wet fall and much lower profitability projections led to significant reductions in winter wheat acreage. An unusually cold and wet winter created some uncertainty regarding the yield potential for the winter wheat crop. While this uncertainty may provide some modest support to the wheat market, the wheat crop still has time to recover and generate average yields. Without a major reduction in winter wheat production, the prospects for an improved stock situation coming out of the 2009-10 marketing year are marginal at best. This situation offers very little optimism for a significant improvement in prices.

Louisiana Situation and Outlook

Winter wheat acreage in Louisiana in 2009 was 185,000 acres, down 215,000 acres from the previous year. Extremely high prices heading into the 2008 winter wheat planting period generated a tremendous amount of interest in the state. In 2008, a near record 400,000 acres were planted in wheat. Higher fertilizer prices and lower commodity prices sharply dampened producers' interest heading into the 2009 planting season. Winter wheat acres fell to a level closer to the state's long-term average.

From a production standpoint, producers in the state continue to have success growing winter wheat. Louisiana's winter wheat yields for the 2009-10 marketing year continued a five-year trend of yields greater than 50 bushels per acre. At 56 bushels per acre, 2009 yields were nearly 3 bushels higher than the previous five-year average. While wheat profitability has eroded due to higher input costs and lower wheat prices, this erosion has not been a function of lower yields.

Winter wheat acreage planted in the fall of 2009 for harvest in 2010 was estimated at 140,000 acres. This estimate is down 45,000 acres from the previous year and serves as a signal of the lower projected profitability in the wheat market. The heavy, persistent rains during the fall planting season are another factor influencing the decrease in planted acres. In some cases, producers intending to plant wheat simply were unable to get the crop planted during the recommended time frame. With the prospects for prices very much in question, most producers simply chose not to plant the crop rather than take the chance of planting outside the recommended window. The wet, cold conditions present during planting time did, for the most part, continue throughout the winter. The conditions limited producers' ability to make timely applications of fertilizer and pesticides and could hamper final yield potential. If these weather conditions continue to persist through the spring, the average yield for 2010 wheat crop might be unable to reach the 50 bushel level for the first time in several years.

Price Outlook

Given the current supply and demand situation for wheat, very few factors suggest significantly higher prices. For the past several months, supply and demand fundamentals have had less influence over the wheat market than outside factors. Spillover effects from movements in other commodity markets and outside markets have had greater effects on the movement of the wheat market. As such, any competition developing between the corn and soybean

markets could spill over into the wheat market, although the effects may be very limited. Likewise, increases in the financial and energy markets could provide a small and brief level of support for the wheat market.

The other factor which could positively influence the wheat market is the effect of the wet and cold winter on winter wheat yields. While wheat still has time to rebound from the adverse weather conditions, the current weather pattern is expected to persist through spring. This persistence could create additional uncertainty in the market and provide some risk premium to prices. Unless weather conditions significantly cut production levels, however, the price outlook has limited upside potential given the tremendous levels of stocks on hand.

In the long term, the reduction in wheat acreage will help improve the fundamental supply and demand situation for wheat. Despite the expectation for reduced production, the USDA projects ending stocks will remain substantially above the 900 million bushel level for the 2010-11 marketing year. Given this initial outlook, the USDA places a marketing year price for 2010-11 at \$4.90 per bushel, up 5 cents from the previous year. A smaller-than-expected winter wheat crop could push prices into the mid-to upper \$5 range. Given the current and projected supply and demand situation, the market is unlikely to sustain prices at any higher levels.

SWEET POTATO OUTLOOK

TARA P. SMITH

Assistant Professor (Sweet Potato Research Station)

MYRL W. SISTRUNK

County Agent (West Carroll Parish)

National Situation and Outlook

The estimated sweet potato acreage planted for 2009 was 109,000, about 6,000 acres more than 2008. The estimated acreage harvested was approximately 97,000, similar to 2008. Production was estimated at 193 million pounds, or 3.9 million bushels, a slight increase from 2008. North Carolina, Louisiana, Mississippi and California account for approximately 90 percent of the sweet potato acreage and production in the United States. North Carolina and Mississippi's acreage remained unchanged from 2008 to 2009. Acreage in California increased in 2009, up 2,500 acres compared to 2008. Louisiana's acreage decreased approximately 1,000 acres compared to 2008, according to USDA NASS statistics.

Louisiana dropped to fourth overall in nationwide planted acreage. Similar to 2008, Louisiana producers experienced significant crop losses in 2009. Some Louisiana producers dealt with drought conditions for much of the growing season. More than 90 percent of Louisiana's acreage was negatively affected by excessive rainfall and the subsequent saturated conditions encountered during the key harvest months of September and October. The repercussions of the negative field conditions carried over into storage. In many cases, the quality of the stored crop is reduced and the pack-out percentages will be down considerably. In contrast to 2008, producers across the southeastern United States have been negatively affected by the fall rains and adverse field conditions encountered in 2009. Producers throughout Mississippi, northern Alabama and Arkansas have all been affected. While Mississippi's acreage has been increasing during the past few years, adverse conditions in

Louisiana have forced some growers out of business, resulting in a loss of acres.

Beauregard, the leading variety in the United States, looks similar when grown on Louisiana and Mississippi soils, and brokers tend to prefer this look over the "russet appearance" of the Beauregard when grown in North Carolina soils. Beauregard remains the dominant variety planted in Louisiana and Mississippi. Evangeline, a new variety released from the LSU AgCenter Sweet Potato Breeding Program in 2007, was planted on approximately 1,200 acres in Louisiana in 2009. This variety was also evaluated under the material transfer agreements in several southern states. A variety similar to Beauregard in production characteristics, Evangeline held up well under saturated conditions in Louisiana in 2008 and 2009. Given the unpredictable nature of weather during sweet potato harvest in Louisiana, this characteristic definitely is a positive attribute for any commercial sweet potato variety. The majority of North Carolina producers are now producing the Covington variety. This variety accounted for approximately 80 percent of the total acreage planted in North Carolina in 2009. The Covington, which was released from the North Carolina breeding program, is performing well on their soil types and is purported to have consistent shape and high pack-outs when produced in the region.

Louisiana Situation and Outlook

In 2009, Louisiana producers planted about 14,000 acres of sweet potatoes, similar to 2008 acres. The 2009 planting season went well. The majority of the crop was planted early and with a few exceptions most producers had a strong plant stand. Conditions were ideal for planting early in most areas while other areas were dry, particularly later in the planting season. Growers with irrigation capabilities used irrigation before and after transplanting to aid in transplant survivability and to improve overall stands. Late June and July were unusually dry in the southern production region of the state.

The costs of production in 2009 were similar to 2008, but production costs, in general, were up from previous years due to increases in the costs of fuel, fertilizers and labor. Production and packing costs were estimated to be approximately \$3,000 to \$3,500 per acre.

Brigade® insecticide (active ingredient = bifenthrin) along with several generic bifenthrin products received a full federal label in 2007. Bifenthrin has largely displaced other soil insecticides, namely chlorpyrifos and ethoprop, as the predominant soil insecticide used in Louisiana.

The 2009 crop was shaping up nicely prior to the fall rain events. Initial estimates suggested the 2009 crop would meet or exceed the yields experienced in 2007. These increased yields would have displaced some of the financial burden incurred with 2008 crop losses. The rainfall received in September and October, however, created adverse conditions and negatively affected crop performance. Approximately 50 percent of the crop was lost in the field due to rotting and souring of sweet potato roots. In addition, the pack-out percentage on the affected harvested crop is reduced, which increases the overall loss incurred. On a positive note, some producers were less affected and were able to harvest the majority of their crop in good condition.

A year-round market has developed in recent years, and producers, shippers and brokers are interested in maintaining a year-round supply to meet buyer's needs. In addition to the fresh market demand, a market for processed consumer friendly sweet potato products has developed in recent years. This market includes items such as sweet potato fries, canned sweet potatoes and sweet potato chips and cookies. In the coming years, significant acreage increases in Louisiana and the southeastern United States are expected as a result of growth in value-added use of sweet potatoes. The increased use will lead to more market opportunities for producers.

The number of sweet potato producers in Louisiana has decreased during the past five years, while the average acreage per producer has increased. The number of producers in 2008 and 2009 was relatively unchanged, and producer numbers are expected to be similar in 2010. Sweet potato growers have the same major concerns with labor as many other agricultural commodities. The availability of labor, the cost of labor and the hassle of dealing with labor has discouraged some growers to the point of leaving the sweet potato business. The northeast parishes of West Carroll, Franklin, Morehouse and Richland account for 65 percent of the sweet potato production in Louisiana.

The 2010 outlook for Louisiana sweet potato acreage is around 14,000 acres. The price received by grower/shippers is considered adequate if yields are above average in 2010. Producers are also expected to expand planting of the Evangeline variety in 2010. In addition, sweet potato growers are expected to diversify planting intentions and marketing strategies to capitalize on growth in the value-added sector of the industry.

COMMERCIAL VEGETABLES

JAMES E. BOUDREAUX

Professor (Plant, Environmental and Soil Sciences)

ROGER A. HINSON

Associate Professor (Agricultural Economics)

National Situation and Outlook

Nationally, the 2009 farm-level sales value for vegetables and melons was \$17.4 billion – similar to 2008. The sales value differed little from the average over the period from 2000 through 2008. The [2007 Census of Agriculture](#) indicates about 69,000 farms produced vegetables and melons on almost 4.4 million acres. About 15,000 of these farms grew potatoes, while 1,900 farms grew sweet potatoes. Around 4,000 operations grow greenhouse vegetables. On a fresh-weight basis, per capita use of all vegetables and melons averaged 440 pounds. The top five crops in total use are potatoes (30 percent) followed by tomatoes, lettuce, sweet corn and onions. Vegetables and melons comprised about 14 percent of all crop cash receipts in 2008. Potatoes continued to lead in cash receipts with an average of about \$2.8 billion. Following closely behind are tomatoes (fresh and processing) with \$2.06 billion and lettuce (all types) with \$2 billion. These three crops were the only ones reporting more than \$1 billion in sales.

California is the leader among states in vegetable and melon production and sales, with nearly 1.2 million acres. California has about 25 percent of harvested acreage and about 60 percent of fresh and processed production. California's large share of production is indicative of the state's productive potential. Also in the top five states in fresh market production and sales are Florida, Arizona, Georgia and New York. Idaho and Washington are the top two potato-producing states, and production in those states is much more concentrated in a few crops (apples, as well as potatoes, for example). On the other hand,

Michigan ranks second as a producer of processed vegetables – primarily canned.

Vegetables and melons continue to play an important role in American diets. Farm-level sales indicate the value consumers place on these products. Consumers' preference for the health and nutritional benefits of vegetables remains strong, both for conventionally produced products and for those foods with special attributes, such as organically produced products. Organically produced vegetables and melons comprise a small but fast growing segment of the market. Consumers also are concerned about sustainability of the production process. Locally produced, like organic, is a relatively small but fast growing segment. Consumers also support local production as a way to support local farm businesses. Food safety concerns are important. At some point, regulations with respect to food handling will be applied to the smallest of farmers. Finally, consumers increasingly are asking for independent verification of the desired special attributes, adding another set of costs. (For additional information, see *Vegetables and Melons Outlook 2009* and online USDA/Economic Research Service briefing rooms).

Louisiana Situation and Outlook

Commercial Vegetable Crops: The Louisiana vegetable industry involves 2,800 growers who grow 32 different vegetable crops on 9,200 acres for a gross farm value of \$50 million. The majority of the vegetable crops grown in Louisiana are sold by direct marketing at farmers markets and roadside stands. Direct marketing offers the producers a retail price with a minimum amount of risk. The development of farmers markets has greatly enhanced the marketing and value of vegetable crops in the state.

The remainder of the crops is delivered to grocery store warehouses, individual grocery stores and fruit and vegetable stands. Most watermelons grown in the state are sold to peddlers, and only a small portion is sold to the

wholesale market. Watermelons (2,500 acres) at \$6.4 million and tomatoes (600 acres) at \$14.3 million were the two leading vegetable crops in the state. Southern peas (2,100 acres) at \$5.3 million in gross farm value, peppers (190 acres) at \$3.8 million and cabbage (240 acres) at \$3.5 million rounded out the top five vegetable crops.

Tangipahoa Parish is the leading vegetable-producing parish in the state with a gross farm value of \$10.6 million. The leading crops in this parish are tomatoes, peppers, cabbage and cucumbers. Plaquemines Parish is the second leading parish in vegetable production with a value of \$5 million. Tomatoes are the major crop in Plaquemines Parish. Union (\$3.4 million), Caddo (\$3.3 million) and Bienville (\$3.2 million) are next in total sales. Watermelons and southern peas are the major crops in those parishes. St Charles had \$2.8 million in gross farm value in 2009 and rounds out the top five parishes in vegetable production.

Citrus: The Louisiana citrus industry involves 411 growers in 18 parishes who grow 418 acres of navels, 375 acres of satsumas and 48 acres of other types of citrus with a gross farm value of \$9 million. Plaquemines Parish is the leading parish with 525 acres of citrus with a gross farm value of \$5.6 million. Lafourche produces 97 acres of citrus with sales of \$1 million. The majority of the citrus is sold by direct marketing at roadside stands and farmers markets. Peddlers buy citrus on the farms and resell the fruit across the state. Growers deliver citrus to grocery store warehouses, individual grocery stores and fruit stands.

Strawberries: The Louisiana strawberry industry involves 89 growers producing 397 acres of strawberries for a gross farm value of \$17.4 million. Strawberries are the leading fruit crop in the state. Tangipahoa Parish is the leading strawberry-producing parish in the state with 300 acres and a farm value of \$13.8 million. The majority of the Louisiana strawberries are sold by peddlers. Growers also deliver berries to grocery store warehouses, individual grocery stores and fruit stands. The remaining part of the crop is sold at farmers markets and roadside stands. Louisiana strawberries are now available in November, December and January. This early availability is due to the use of the variety called Strawberry Festival (plug plants from nurseries in Quebec, Canada), row covers and wire hoops. These early berries bring a premium price and play a large part in the high returns for this crop.

NURSERY CROP OUTLOOK

ALLEN D. OWINGS

Professor (Hammond Research Station)

ROGER A. HINSON

Associate Professor (Agricultural Economics)

National Situation and Outlook

Last year's economic recession in the United States was relatively short but very intense. A recession is defined as a decline in the output of goods and services as measured by the gross domestic product (GDP). This measure changed from a negative to a positive value of about 2.8 percent in the third quarter of 2009 and further increased to 5.7 percent in the fourth quarter, indicating the recession's end. Because typical growth rates range from 2 percent to 3 percent, the fourth quarter number is not expected to be sustainable. According to the GDP report, the growth in the fourth quarter of 2009 was fueled by larger private inventories.

The recession had other specific effects. The financial sector, which stumbled substantially in 2008 and 2009, is now more stable due to fiscal and monetary policy actions. Jobs and consumer confidence are other important areas affected by the recession. Unemployment currently is around 10 percent. Not included in this number are unemployed people who have stopped searching for jobs. Estimates place the number of people "not looking for jobs" at about the same percentage as "unemployed" people. A reduction in unemployment is expected to be slow and costly. Until employers become confident the recovery is assured, new job creation will be slow. Employers will delay hiring and rely on the existing workforce. This kind of hiring practice relies on current workers to make productivity gains and provide revenue that can be used to make other investments, such as those in new equipment.

Unemployment and reports about the extent of unemployment result in a general uneasiness in the consuming public. This uneasiness discourages consumer confidence and alters

spending patterns. Consumers change the kinds and quantities of goods and services purchased. Reduced spending leads to slower growth rates and lowers the likelihood a firm will resume hiring. In this situation, both individuals and businesses have incentives to be conservative.

Spending by individuals and households is the major portion of GDP. Cutbacks in spending and increases in savings suggest a change in consumer attitudes toward spending and consumption. Households lost large amounts of wealth with the collapse of the housing industry and stock prices. Household purchasing power declined. Consumer savings began to increase, especially in the latter part of the year. Gradual growth in the savings rate is expected to continue. Because of increased savings, spending will grow more slowly than income, in contrast to the past few years when consumer confidence was high. During that period, the use of credit allowed spending to exceed income.

Spending cutbacks suggest consumers have a different post-recession attitude toward spending and consumption. This new attitude is being called the "new normal." If consumer behavior has changed and spending does not rebound with the recovery, the change could have significant implications for the entire nursery products supply chain. For example, current production and sales levels, or even further reduced levels, might be the new normal. A contrasting view sees consumers as frugal now with memories of past spending behaviors still fresh. These memories of past consumption and behaviors will encourage consumers to move toward the higher consumption levels of the past.

The past few months has seen some recovery in consumer confidence. Consumer confidence has risen to nearly twice its value at the low point of the trough. The rates of new home construction and sales of existing homes seem to have stabilized at reduced levels. At the end of 2009, sales of new homes rose to the highest level in more than a year. Markets in the southern United States were relatively higher, offsetting declines in other sections of the country. At the

end of November 2009, sales were up 6.2 percent from September to a seasonally adjusted rate of 430,000. This increase is taken as a sign "builders will need to start swinging their hammers again soon."

As a whole, these considerations suggest the spending patterns of the boom may be moderated, but neither will frugality dominate the consumer psyche. These factors are important to the ornamental plants industry. The factors will both directly and indirectly affect the whole industry from wholesale growers to retailers. Cooperation throughout the supply chain to create value and contain costs may be a strategy which resonates in this economy.

Louisiana Situation and Outlook

Production and sales of nursery-grown ornamentals have significantly declined over the past two years. Farm-gate value decreased 27 percent from 2009 compared to 2008. A significant farm-gate value production decline also occurred from 2008 to 2007 (10 percent). These declines are only the third and fourth times in the past 40 years that sales have decreased from one year to the next. Over the past few years, wholesale production in Louisiana has been slightly less than \$100 million with an additional \$75 million to \$100 million in plant inventory. Plant inventory for future sales has slightly decreased the past few years with some growers feeling these values are under-reported. Nursery crop sales in 2009 continued to suffer due to fewer residential and commercial landscape installation projects.

Woody Ornamentals: Woody ornamentals account for the vast majority of the wholesale farm-gate value of commercial nursery crops in Louisiana. LSU AgCenter estimates place the wholesale value of woody ornamental sales in Louisiana at \$60 million to \$70 million annually. A recovery from the sales decline in 2008 was predicted to occur by fall 2009 or spring 2010. A reversal of this sales decline has not yet occurred, but growers are more optimistic about 2010 than 2009. Container production acreage has increased

significantly in the past five years, while acreage in field production has been stagnant or decreased slightly. The major container crops are azaleas, hollies, crape myrtles, Indian hawthorns, groundcovers and shade/flowering tree species. The number of acres in bigger container sizes is up significantly. Several woody ornamental growers have gone out of business in the past year.

Floriculture/Bedding Plants: Floriculture/bedding plants typically represent about 30 percent of Louisiana's nursery crop production. At the wholesale level, about 40 percent of bedding plant/floriculture crop sales occur in late winter and early spring. Floricultural crop and bedding plant production (including poinsettias, hibiscus, garden mums, lantana, impatiens, petunias, vinca and begonias) have experienced little growth in Louisiana in the past three to five years. Profit margins in floricultural crop production are shrinking because of energy price increases, transportation costs, fertilizer expenses and other factors. Floriculture and bedding plant producers need to take advantage of the new Louisiana Super Plant promotion and marketing program planned for fall 2010.

Foliage Plants: Foliage plant production in Louisiana has slowed. Most foliage sold at the retail level now is imported from Florida or brought in from Florida by wholesale growers and brokers. In some cases, these imports are grown in Louisiana for several months prior to wholesale sale. Interest in wholesale production of tropical plants, however, has increased recently in Louisiana. Although this category could fall into the floriculture/bedding plant category, outdoor tropical plants such as esperanza, gingers, cannas, bird of paradise and so forth have increased sales potential. Many greenhouse growers have profitable markets for these products. Cold weather this past winter damaged many outdoor foliage plants, and replacement plants need to be marketed this spring.

Fruit/Nut Trees: Fruit/nut tree production is stable in Louisiana at the wholesale level. A

slight increase in production has occurred in the past several years. Container citrus production has rebounded from the damage incurred from hurricanes Katrina and Rita in 2005. The subsequent discoveries of the Asian citrus psyllid and citrus greening in Louisiana have caused economic loss in the container citrus industry, however. The availability of container-grown improved pecan cultivars is significantly below market demand, and opportunities to grow these cultivars for wholesale or retail sales are considerable. Also, many new fruit cultivars could be grown to increase market potential. Citrus, figs, pecans, peaches, muscadines, blueberries, apples and pears represented the vast majority of wholesale production of container-grown fruit and nut trees. LSU AgCenter fruit tree releases are popular with consumers and are underproduced in the state.

PECAN OUTLOOK

CHARLES J. GRAHAM

Associate Professor (Pecan Research-Extension Station)

National Situation and Outlook

The U.S. Department of Agriculture's January 2010 estimate for the 2009 U.S. pecan crop was 290.5 million pounds. This estimate is a 96.4 million pound (49.7 percent) increase over the 2008 crop of 194.1 million pounds. The 2009 estimated crop is 24 million pounds (9 percent) above the 10-year average of 266.4 million pounds. The 2009 pecan crop in Mexico, the leading pecan exporter to the United States, is expected to be 198 million pounds.

Approximately 100 million pounds a year have been imported into the United States in recent years. By the end of January 2010, the United States already had imported more than 80 million pounds of pecans from Mexico this crop year. A large portion of these pecans are returned to Mexico, since Mexico is the largest importer of United States pecans.

Pecan trees are alternate bearing – with a large on-year crop usually followed by a light off-year crop. Off-years often have a 30 percent or greater reduction in production. Georgia, New Mexico, Texas, Arizona and Alabama were the five top pecan-producing states in 2008 with 86.9 percent of the United States crop. The five states leading production in the 2009 on-crop year are Georgia, New Mexico, Texas, Arizona and Oklahoma, accounting for 87.8 percent of the United States crop. Above average production in 2009 suggests the 2010 crop will be significantly smaller because of the prediction of an off-year for most of the major U.S. pecan-producing states.

Pecan prices in 2010 will likely be equal to or higher than 2009, since most of the nation is scheduled to have an off-crop year, which usually places upward pressure on prices. The 2009 crop estimate continues to be downgraded, with the carryover of the current on-year crop probably being marginal to handle 2010 pecan demand. In

China and Hong Kong, demand for U.S. tree nuts has been growing in recent years. Also, both countries have been fairly immune to the economic tightening experienced elsewhere in the world and have benefited from the weaker U.S. The cheaper dollar makes products from the United States cheaper to import.

With China continuing to exhibit a voracious appetite for pecans, and assuming consumption remains at or near current levels, prices can be expected to remain firm well into 2011. As China continues to buy only the biggest and best products from the crop, the industry will probably continue to see shortages of mammoth, junior mammoth and jumbo pecan halves as well as extra large and large pecan pieces. This shortage of mammoth and junior mammoth halves could force both foreign and domestic buyers to either alter buying preferences or pay higher prices for the product. As long as prices do not climb dramatically in the months ahead, however, the weak dollar and the firming prices of both almonds and walnuts should help to keep pecan sales robust.

Louisiana Situation and Outlook

The state's pecan crop estimates during the summer ranged from 9 million pounds to 12 million pounds, approximately 10-33 percent below the 10-year average (1999-2008) of 13.4 million pounds. Scab pressure was heavy early in the season, but the disease was manageable if a good spray program was maintained. Insect pressure was sporadic, with no significant losses being attributed to a specific insect statewide. Rainfall was inconsistent during the season, with above normal amounts occurring in May, July, September and October. Rainfall was below normal in June and August.

Excessive rainfall in October hampered harvesting efforts and resulted in a significant decrease in nut quality. Crop losses due to kernel rot exceeded 25 percent in many parishes in the state. Southern Louisiana, especially Pointe Coupee Parish, is still recovering from major structural damage to the trees by hurricanes

Gustav and Ike in 2008. A return to normal production levels probably will take several more years in the most heavily damaged parishes.

Louisiana harvested 7.8 million pounds of pecans in 2009, well below the state average but 2.8 million pounds better than the 2008 crop. The crop was below average due to a significant decrease in native production. The crop included 4 million pounds of improved pecans and 3.8 million pounds of native pecans. Wholesale prices in Louisiana for natives averaged 75 cents per pound, while improved pecans averaged \$1.40 per pound. The prices paid for pecans varied considerably based on the following factors: pecan quality, location and time of sale and the quantity of pecans sold. The gross farm value was estimated to be \$8.4 million. This value is \$3.6 million above 2008 value but almost \$3 million below the value of the 2007 crop.

Commercial production of improved cultivars accounted for approximately 21 percent of the state's production in the past 10 years. Improved cultivars are located primarily in the northern half of the state. Generally, over half of the improved variety acreage is managed to control diseases, insect pests and weeds. Supplemental irrigation occasionally is provided, and the orchards are harvested mechanically. Yield is typically higher and more consistent and the nut quality usually is better than unmanaged trees. The remaining acreage frequently has reduced inputs, is composed of older trees and usually is harvested only during good years.

Machine-harvested native groves are located primarily in central and southern Louisiana. Little effort is normally made in the management of these native groves, with much of the acreage being involved in livestock production. The decision to harvest is dependent on the size of the crop and the price being paid for native pecans. The smaller and low-yielding groves often are not harvested in years when pecan prices are low. Prices received for machine-harvested pecans are usually higher than hand-harvested, since the pecans are cleaned to improve quality and sold in volume directly to shelling plants.

Yard trees and small orchards are harvested and sold during years with heavy production and good prices. Many of these pecans are sold to accumulators in lots weighting less than a thousand pounds. Some pecans are sold retail from homes and farmers markets. The number of acres and the pounds of production involved in yards and small orchards are variable and hard to estimate. The 2010 pecan crop in Louisiana will be an off-year due to the alternate bearing nature of pecan production. Production may be even less than a typical off-cycle year because of the hurricane damage sustained in several major pecan producing parishes in the state.

POULTRY AND EGGS

THERESIA K. LAVERGNE

Associate Professor (Poultry)

J. ROSS PRUITT

Assistant Professor (Agricultural Economics)

National Situation and Outlook

Total broiler production for 2009 is estimated to be 35.5 billion pounds, which is lower than in 2008 (36.9 billion pounds). Wholesale price of broilers averaged 77.5 cents per pound, down 2.2 cents per pound from 2008. Total broiler exports for 2009 are estimated to be 3 percent lower than in 2008. Egg production remained the same in 2009 (6.46 million dozen), and egg prices decreased 28.5 cents per dozen in 2009 (99.8 cents per dozen). Per capita consumption was 248 eggs and 80.1 pounds of broiler meat in 2008.

In 2010, broiler production is expected to show a modest 2 percent increase over 2009. Broiler prices are expected to stay similar to 2009 prices. The broiler export market is expected to decrease in 2010 by 6 percent of the 2009 level. (Latest U.S. Department of Agriculture projection is an 11 percent decrease in broiler exports while the Livestock Marketing Information Center is projecting 2010 to be even with 2009.) Per capita consumption of broiler meat is expected to rise by 1 pound in 2010. Egg production is expected to remain the same in 2010. Wholesale egg prices should remain the same in 2010.

Louisiana Situation and Outlook

In 2009, 827.9 million pounds of broilers were produced. Broiler production decreased in 2009 due to one of the poultry complexes in Louisiana being closed for several months. The complex transferred ownership and is increasing production back to pre-closure levels. Also, the closure of a poultry complex in Arkansas decreased broiler production in Louisiana because some commercial growers in the state were under contract with that complex. The gross farm value of broilers was \$372.6 million in 2009. Louisiana had 324 broiler producers and 475 egg producers 2009 (including both commercial and small producers). Eggs produced in Louisiana during 2009 totaled 21.3 million dozen, and the farm value of commercial egg production was \$16.2 million.

Broiler production should increase to near the 2008 production levels and is expected follow the national outlook in 2010. Broiler prices and net returns will remain similar to 2009 prices and returns. Also, wholesale egg prices should remain similar to the 2009 prices, and production should stay the same in 2010. The number of egg producers should be similar to 2009. Producers should expect modest increases for inputs in 2010 as demand for agricultural inputs increases. Inputs such as fossil fuels will increase in price as worldwide demand for these products is slowly restored.

BEEF CATTLE OUTLOOK

J. ROSS PRUITT

Assistant Professor (Agricultural Economics)

Introduction

While input costs were down drastically at the close 2009, calf prices were not able to show any appreciable gains over 2008 as beef demand withered. The cost of key inputs such as fuel and fertilizer were slow to recede from 2008 levels. The prices of these inputs were down from 2008 price levels by a third to a half. Louisiana calf prices were below year-ago levels with an average year-to-year decline of \$2 to \$6 per hundredweight for calves weighing 400 pounds to 600 pounds. Projected returns to the cattle feeding industry from the Livestock Marketing Information Center show a loss of approximately \$90 per head for 2009. Export demand was not as strong as in 2008 despite favorable currency exchange rates. Throughout the year, the cattle market looked to Wall Street for direction in price movements as positive supply fundamentals took a back seat to a lack of demand for beef.

National Situation and Outlook

Considerable uncertainty exists regarding the economic recovery as 2010 begins. Uncertainty about the recovery and consumer confidence in the recovery is spilling over into the cattle industry. Throughout 2009, beef prices exhibited counter-seasonal surges and declines as each wave of optimism was quickly replaced with more grim economic news. December saw fed cattle futures slip to below \$80 per hundredweight as wholesale beef prices weakened counter-seasonally as consumers continued to tighten their belts. Slightly positive news such as less than expected unemployment numbers led to temporary rallies in the beef industry, but the rallies were short lived.

The lingering effects of oversupply in the pork industry will keep beef prices on the defensive in 2010. The pork industry was especially hard hit in 2009 due to fears of the H1N1 flu virus which

was inappropriately labeled "swine flu." Another contributing factor was ideal farrowing conditions for much of the year, which produced more pork than the market could absorb. This overproduction led to a second straight year of "per head" losses in the pork industry. The losses are projected to continue for much of 2010 as the pork industry tries to correct its course. The excess pork will provide a cheaper source of protein than beef.

On top of the pork industry's spillover effect, wavering international demand for dairy products beginning in 2008 and continuing in 2009 pushed the dairy industry deep into the red. In an attempt to stem losses caused by overproduction, the dairy industry instituted three separate dairy herd buyouts. These buyouts spilled over into the cull markets. The first two buyouts of the year had visible effects on the price of cows with the effect from the final 2009 buyout being hidden by seasonally higher beef cow culling.

Commercial cattle slaughter was approximately 3 percent lower in 2009 than 2008. Several factors contributed to beef production declining by only 2 percent to 3 percent in 2009, however. Feedlot placements of animals weighing more than 700 pounds exceeded 2008 levels as favorable conditions in many parts of the country aided pasture production for the first time in several years. The increase in placement weights also contributed to late summer discounts of carcasses exceeding 1,000 pounds. Favorable feeding conditions in the Northern Plains feedlots also were a cause of this increase in placement weights. These factors are not expected to occur again in 2010.

Early projections of beef production for 2010 indicate a 1.5 percent decline relative to 2009. Cow slaughter in 2009 was below 2008 levels, but still above levels in the recent past. The U.S. beef herd also is expected to show year-to-year declines when the January 1 cattle inventory report is released in February. Published by the USDA's National Agricultural Statistics Service, the July 1 cattle inventory report estimated the U.S. calf crop at 35.6 million head, about

500,000 head less than 2008 and the smallest calf crop since 1950. Beef heifers held as replacements were listed at 4.5 million head, a decline of approximately 2 percent from the 2008 report.

The most recent information on protein products in cold storage showed supplies have been below year-ago levels for most of the year and will not be overly burdensome on prices. Supplies are still above the historical average due to exceptional production of the past few years, but these stocks are slowly being drawn down. Both USDA and the the Livestock Marketing Information Center are projecting declines in per capita consumption of red meat (beef and pork). The USDA per capita projection has beef consumption falling below 60 pounds in 2010 while the LMIC projects consumption will fall in 2011 due to the decline in the national beef herd since 2006. Chicken is the only major meat projected to show an increase in consumption and production in 2010. Production is expected to increase a modest 2 percent.

Too much rain at the wrong time of the year, especially during September and October harvest and winter wheat planting season, raised concerns about corn, soybean and wheat crops. Uncertainty over the damage done to the corn and soybean crops by a delayed harvest and mounting concerns over an early freeze fueled a rally in those markets. Even though harvest stretched into December, the corn crop will still be one of the largest on record. Winter wheat planting in the Southern Plains went longer than usual with the result of some acreage planted for grain only. How many producers choose to solely graze the wheat and not harvest for grain is unknown. With the strong wheat production the past few years, this number may be higher than initially expected and result in some temporary momentum in calf prices in January 2010.

Continued tight supplies of cattle will result in lowered beef production in 2010. Production in the second and fourth quarters is estimated to be lower than the same quarters of the previous year by 3.3 percent and 1.9 percent, respectively (the

other quarters are expected to have declines of less than 1 percent). Increased carcass weights will once again make up for lower supplies of feeder cattle, but feeding conditions may not be as ideal as 2009. If these conditions are the case, feedlots may shorten feeding periods to minimize losses in an industry which has lost a great deal of equity during the past two years.

Demand will continue to be a key concern throughout 2010 and will be reflected in the economy's recovery. The LMIC is projecting a return to profitability for the cow/calf sector in the Southern Plains in 2010. This expectation is due to an improved economic outlook as demand is restored but also reflects the tight condition of available cattle. Lower grain prices will aid the feedlot sector's return to profitability, and increased demand for beef will aid fed cattle prices. Although aggressive producers may not be ready to go into full expansion mode in 2010, these producers should consider laying the groundwork for expansion this year. Producers who wait until 2011 to consider expansion may lose the opportunity to quickly take advantage of higher prices.

Louisiana Situation and Outlook

In the late spring/early summer months of 2009, Louisiana cattle producers faced a period of several weeks with no rains. Hay production was hindered by lack of moisture. September and October brought heavy rains, which affected both the quality of hay and the ability to harvest. Rains in these two months also delayed ryegrass planting in many areas until November. Additional heavy rains in December compounded producers' inability to prepare pastures for winter ryegrass seeding and application of nitrogen fertilizer. The result was ryegrass production being as much as six weeks behind normal.

Louisiana cattle prices were about \$5 per hundredweight lower in 2009 than in 2008. The high cost of key inputs in 2008 lingered until the second quarter of 2009. This slow decline prevented profitability for Louisiana producers. Retained ownership of cattle to heavier weights

provided producers a viable strategy to increase prices as the price slides were much tighter in 2009 than in 2008. A healthy economy should see these slides return to pre-2008 levels during 2010, although the return may take several months to occur.

Crude oil was trading at \$80 per barrel in late December 2009. Although a return to the high oil prices of 2008 is doubtful, producers should budget for some appreciation in oil prices. An increase in oil prices probably will lead to some increases in fertilizer prices. The corn stocks-to-use ratio is in line with the trends of the past few years, but the ratio is still below historical ratios. This factor in conjunction with some signs of ethanol profitability will provide a floor to corn prices.

Delayed plantings and fertilizer application to winter ryegrass due to heavy moisture in the fourth quarter of 2009 could result in an increased use of stored forage in the first part of 2010, with some producers facing the possibility of replanting ryegrass. Contraction in the beef industry is expected to continue in 2010. Cattle prices should be supported by the continued tightening supply of market ready cattle. As a result of these factors, profitability will be within reach of many Louisiana producers.

Price Outlook

The recession will remain an issue for cattle prices in 2010. For the foreseeable future, producers will continue to face lower demand caused by the recession. Both the production and consumption of red meat are projected to decline in 2010. Consumption of poultry also is expected to decline. Feeder and live cattle futures looked to the equity markets for direction throughout 2009, and this trend is likely to continue until consumers feel the recession is truly over. The December USDA cattle on feed report showed decreased placement and increased marketing. These findings somewhat surprised the market and provide some upward momentum early in the year.

Beef imports from Canada and Mexico are not expected to increase in 2010. Because cattle herds in the two countries also are contracting, the levels of live cattle imports are expected to remain similar to the levels imported in 2009. A tight cattle supply in the two countries and a relatively weak U.S. dollar will make importing live beef relatively more expensive. Beef production in the United States is expected to fall by 2 percent this year, and the LMIC projects fed cattle prices to be \$86 to \$89 per hundredweight in 2010. This projection could translate into an annual average price of approximately \$100 per hundredweight for Louisiana steers that are 500-600 pounds.

Improvements in the value of cattle byproducts (including the liver, hide and tallow) could provide a noticeable increase in fed cattle prices that would provide additional support to calf prices. Calf prices will be stronger later in the year provided fed cattle prices are able to maintain strength and grain prices do not reach levels seen in 2008. Cull cow prices may also see year to year gains since dairy cow slaughter is expected to slow. Good demand for inexpensive (ground) beef would provide strength for higher cull cow values.

EQUINE OUTLOOK

J. ROSS PRUITT

Assistant Professor (Agricultural Economics)

CLINTON G. DEPEW

Professor Emeritus (Animal Sciences)

National Situation and Outlook

Decreased consumer spending caused by the continuing recession affected the equine industry in 2009. Input costs fell throughout 2009, but horse prices did not rebound due to the oversupply issues which continue to plague the industry. Horse shelters are near or at full capacity, and the issue of abandoned horses is gaining national attention.

Due to be released in March 2010, a study by the Government Accountability Office (GAO) should bring additional attention to the connection between oversupply issues in the equine industry and the lack of horse slaughter facilities in the United States. Closure of all U.S. horse slaughter facilities is partly to blame for the excess supply of horses in the industry. The report will address the effects of closing the horse processing facilities and the effects of the closures on the farm and ranch economy and related animal welfare issues on the horse population.

Approximately 9 million horses are owned by almost 2 million people in the United States. In 2005, the American Horse Council estimated the equine industry generates 453,000 jobs in the United States and contributes \$102 billion to the economy. Since this estimate was released, growth in the industry has slowed due to the recession and reduced consumer spending. Market saturation continues to be a concern to the equine industry. Many breed associations are reporting a decrease in the number of mares being bred, with about half the available mares being left open. The effect of the decrease reported by the breed associations on the total horse population will not be significant because owners of unregistered (or grade) horses continue to breed mares at the same rate.

Prices for horses vary from the multimillion dollar racehorses to recreational horses whose value may be only a few thousand dollars. Quality horses are still receiving good prices, while horses in the bottom third of the market have little or no value. The lack of processing facilities in this country has all but eliminated the value for horses in the bottom third of the market. The cost of producing horses is holding constant due to some recent reductions in input prices. Producers should expect the costs to increase slightly in 2010 as the recession ends and consumer confidence increases. As consumer spending increases, demand for equine products and services will increase and lead to price increases.

The basic cost of producing a 2-year-old in a very efficient operation will average \$5,000 to \$6,000 per horse. An extensive or intensive operation may average \$8,000 to \$10,000 or more. Therefore, the average 2-year-old from a very efficient operation needs to bring \$8,000 to \$10,000 to produce a profit for the owners. In general, the horse should be worth twice the stud fee, and most stud fees are \$2,000 to \$3,000 on average. With the decrease in the price of horses, both mare and stallion owners have found an adjustment of stud fees essential to making a profit. Lower stud fees mean lower costs for the mare owner and a steady book of mares for the stallion owner. Producers must watch the markets closely and breed with two goals in mind: 1) breed quality horses sufficient to attract top end buyers, and 2) minimize production costs.

Louisiana Situation and Outlook

The increases in breeding and training for racing operations in Louisiana are the result of bigger purses being offered by the racehorse industry. These purses are supported by casinos. The large purses are attracting owners and breeders from other states. Quality horses are necessary, however, to capture the money available in the industry. In Louisiana, breeders must pay close attention to maintain a competitive advantage and capture the economic opportunity.

The number of horses used to compete in barrel racing, roping and ranch horse competitions continues to expand. Horse shows, in general, have declined – with more emphasis on a few big shows as opposed to a lot of smaller shows. Specialty areas such as calf roping and barrel racing are attracting large fields of competitors. The Ranch Horse Association continues to grow and expand its opportunities for Louisiana competitors in the show arena.

Trail riding and recreational activities were affected by the recession, but these activities remain popular in Louisiana. The trail riding associations scattered throughout the state represent one of the largest groups of horse owners in Louisiana. Horse owners are traveling and spending a great deal of money in their recreational pursuits. A lack of trails and campsite opportunities mean many of these expenditures are going out of state. A tremendous opportunity exists to increase the economic effects of these recreational riders by developing trails on national forests and state-owned lands in Louisiana. More campsites, housing and dining facilities will be needed to keep these riders in Louisiana and to attract out-of-state riders. Opportunities for economic development of this group are readily available.

DAIRY OUTLOOK

WAYNE M. GAUTHIER

Associate Professor (Agricultural Economics)

GARY M. HAY

Professor (Animal Sciences)

CHARLES F. HUTCHISON

Associate Professor (Animal Sciences)

Influence of 2007, 2008 and 2009 on the Context for the 2010 Outlook

U.S. milk production rose to record high levels in 2007. The national average all-milk price rose to \$19.13 in 2007 because of favorable economic conditions in both domestic and export markets. Although lower in 2008 than in 2007, milk prices still recorded a level of \$18.34, second to the record high. High prices in 2007 and early 2008 attracted additional resources into milk production. Both cow numbers and production per cow increased. Economic conditions in both the United States and the export markets weakened the demand for dairy products in late 2008 and through most of 2009. The weaker demand lasted through the fall of 2009, with some recovery in December 2009. This recovery is expected to carry forward into 2010, and the strength of the recovery will depend upon the export market.

Because milk production is a biological as well as an economic phenomenon, time is required for resources to adjust into and out of production. The increased milk prices during 2007 and early 2008 increased total milk production. The increased production led to a buildup in dairy product stocks and increases in the productive capacity of the dairy industry (i.e., the numbers of cows and heifers). The high stock levels placed downward pressure on milk prices and increased product flows into Commodity Credit Corporation (CCC) warehouses at support price levels. Support price levels are so low relative to market levels that dairy farmers experienced both low and volatile milk prices.

The Cooperatives Working Together (CWT) Experience

The depressed milk prices led to five “rounds” of CWT herd retirements during 2008-09. Two rounds occurred in the second half of 2008, and three rounds occurred in 2009. According to CWT reports, these five rounds removed 250,000 dairy cows and 5 billion pounds of milk, equivalent to about 2.5 percent of annual output. Total milk production in 2008 increased to 189.6 billion pounds, an increase of 2.2 percent or 4 billion pounds over 2007. U.S. production per cow averaged 20,396 pounds in 2008 and 20,565 in 2009. Despite the CWT buyouts and depressed prices in 2009, total milk production is forecast to decline by less than half a percent from 2008. The size of the U.S. dairy herd is expected to fall below 9 million head in 2010. Milk prices are expected to average \$4 per hundredweight more in 2010 than in 2009.

The dependence of the CWT program on voluntary funding limits its effectiveness and creates a “free rider” problem. In addition to the “free rider” problem, other dimensions associated with the CWT limit the program’s effectiveness in raising prices. Even in the absence of a CWT program, low milk prices from July 2008 through fall 2009 would have caused heavier culling of cows and farm exits from the dairy industry. The nonparticipants in the CWT program may have anticipated higher prices as a consequence of the CWT program and thus maintained or even increased their cow herds. Since the lowest producing cows usually are culled first, one effect of the CWT program is to raise the overall average production per cow of the remaining herds.

The low 2009 prices can be attributed to production in excess of market needs. A consequence of these low prices is a more intense debate on the merits of mandatory supply control in 2010. Dairy industry analysts believe the stronger milk prices the industry experienced in the latter quarter of 2009 will continue through 2010. These higher milk prices are expected to have positive effects on milk production per cow.

The U.S. dairy herd numbers, however, are forecast to continue contracting and fall below 9 million head in 2010. Recovery of the domestic milk market in 2010 will depend upon the effectiveness of the fiscal policies created to address the financial meltdowns which began in late 2008 and continued through 2009. These meltdowns dampened consumer demands for dairy products.

Consumer prices for dairy products are expected to increase during 2010. The extent of the forecasted recovery in 2010 will be influenced by such dairy specific events as the CWT dairy export program, the CWT herd reduction program and USDA purchases of dairy products for both domestic and export markets. Milk production per cow is forecast to increase to 20,950 pounds (1.84 percent) – a greater increase than the five-year trend. Production per cow increases are expected as a consequence of higher milk prices and lower feed costs.

Influence of Input Prices on Costs of Production

Input prices, primarily for concentrates (corn and soybean meal) and crop production costs (fertilizer, feed and seed) rose significantly in 2008, peaking during the summer. Although input prices declined somewhat between 2008 and 2009, production costs in 2009 were lower than in 2008 but higher than in previous years. Feed costs should continue to drop in 2010, but the relative amount of the drop will not be the same when compared to the 2008-2009 decrease. Low milk prices in 2009 reduced profitability and accelerated the exit of dairy farmers. As a consequence of sharply reduced prices for raw milk and high production costs, the profitability in dairying in 2009 was bleak to nonexistent, especially for the first half of 2009. The exit of resources (cows and dairy farmers) during 2009 improved the economic outlook for 2010, since those exits reduced total milk production and moderated the downward pressures on milk prices.

Government intervention is expected to continue strengthening the economy. This intervention is also expected to have a positive effect on milk prices from a demand perspective. Improvement in prices is likely to stimulate the milk supply. A stimulated demand should improve financial outcomes in 2010. The combination of higher milk prices and reduced costs suggests a return of profitability margins in 2010. Higher milk prices in 2010 are a virtual certainty because of improved domestic and export demands. The combination of enhanced prices and reduced input costs enhances prospects for profitability in 2010.

Changes in the Rules Governing Milk Production, Processing, Pricing and Distribution

Changes in the rules governing milk production, processing, pricing and distribution are constant. The changes originate in the economic, political and cultural processes which render the milk market “manmade.” These changes foster adjustments within both the physical transformation activities through which cows convert feedstuffs into milk and the accompanying social system activities through which people modify, create and eliminate the rules associated with economic and political systems. At the same time, the adoption of technology fosters changes in the physical transformation practices which also get incorporated into the rules. Rule changes foster adjustments throughout milk production, processing, pricing and distribution systems. Some of these adjustments are minor, while other adjustments prove to be radical. Rules likely to affect the economics of dairying in 2010 and beyond include the Louisiana Dairy Refundable Tax Credit Program, the Market Income Loss Contract (MILC) Program and the possibility of a mandatory milk supply control program.

The Louisiana Dairy Refundable Tax Credit Program of 2007

This legislation provides Louisiana dairy farmers tax credits/refunds against their state

income taxes when certain criteria are met. The tax credit/refund applies whenever the uniform price (UP) in Federal Milk Market Order 7 (FMMO 7) for the taxable year drops below a moving average of calculated annual "announced production prices" (APP). The APP is a single value derived as the average of the prior three years of annual production prices (PP). The annual PP is an annual average of the monthly market balancing factors (MBF) and the estimated annual cost of milk production in Louisiana. The MBF is a monthly calculation of the difference between the costs of importing milk into Louisiana and the UP paid to Louisiana dairy farmers for the month. The cost of importing milk is calculated as the average of the UPs in the exporting orders plus the associated transportation costs to New Orleans.

Tax credit calculations for the 2009 tax year will be made in 2010. To calculate the 2009 credit, the UP in each calendar month of 2009 will be compared against the single-valued APP for calendar years 2006, 2007 and 2008. If the APP is greater than the 2009 calendar month's UP, then the 2009 calendar month qualifies for the tax credit. Furthermore, if any one month in a calendar quarter qualifies for the tax credit, then the entire calendar quarter qualifies for the tax credit. All four quarters in 2009 will qualify for refundable tax credits. Depending upon the 2009 level of milk production, Louisiana dairy farmers can expect refundable tax credits ranging from \$5,000 to \$30,000 per producer.

Milk prices are expected to increase in 2010. The APP in 2010 will be based on sets of calendar year 2007, 2008 and 2009 uniform prices, costs of transportation and costs of Louisiana milk production. In 2007 and 2008, the average UPs for milk in Federal Order 7 were record highs at \$20.40 and \$20.17, respectively. The average UP for 2009 was low at \$14.25. The 2010 moving average will be derived from these three years. The availability of the refundable tax credit for any or all quarters in 2010 is uncertain at this time. For any given tax year, total program tax credits/refunds are capped at \$2.5 million,

while individual producer tax credits/refunds are capped at \$30,000 dollars.

The Market Income Loss Contract (MILC) Program and Mandatory Supply Control

The national Market Income Loss Contract (MILC) program was initially created in 2001 to provide payments to farmers in those months when market payments fell below a benchmark. Some provisions of the program were modified in the 2008 farm bill. Changes made in the 2008 farm bill are complex and include a trigger price. This trigger price is adjusted for changes in estimated feed costs. If the market price is below the trigger price in a particular month, farmers will receive a percentage of the difference. The 2008 farm bill changes the payment percentage from 34 percent to 45 percent of the difference between the month's reference price and the "trigger" price. The trigger price is \$16.94 per hundredweight. The bill also changes the annual per farm total production cap from 2.4 million pounds to 2.985 million pounds for each fiscal year until August 31, 2012.

Some segments of the dairy industry advocate mandatory supply control. During 2009, these advocates received greater attention and support because profitability was absent in the industry due to low milk prices and high input costs, especially feed. Despite difficult economic times, many in the dairy industry still have a philosophical opposition to mandatory controls.

Concluding Observations

The 2010 dairy outlook is one of increasing prices for raw milk and moderating prices on feedstuffs. Milk price increases will be larger than the declines in feed costs and other input costs. The net effect will be an increased milk-feed price ratio, which will slow down the exit of dairy farmers and cows. Total milk production is not expected to rise – although the milk production per cow will increase due to the combination of higher milk prices and lower feed costs. The enhancement in the milk-feed price ratio will not support investment in dairy cows,

however. The size of the dairy cow inventory will continue to shrink in 2010 below 9 million head. The extent of the increase in milk prices will be strongly affected by the strength of the export demand. Domestic demand is expected to recover somewhat despite increases in dairy product prices.

The decline in the productive capacity of the Louisiana dairy industry is expected to continue. From a long-term perspective, the industry is no longer sustainable on a pasture-based feeding program. Pasture-based feeding programs do not provide the production levels per cow or the farm level milk production volumes necessary for Louisiana farms to be competitive. The producer has little control over the milk price and the costs of inputs. The producer has some control over the cost of production through cow culling and other management decisions. A key to gaining control over per hundredweight milk costs is increased production per cow. Identifying and retaining the higher producing cows requires current and accurate records. Culling lower producing cows might prove to be one way to increase profitability in 2010. As in all management actions, care must be taken to introduce replacements for culled animals at costs consistent with milk prices and feed costs.

Louisiana dairy farmers may receive additional compensation in the form of refundable tax credits and MILC program payments. Any compensation will depend on the magnitudes of the increases experienced in farm level milk prices and decreases in feed costs. In 2010, Louisiana dairy farmers will realize full refundable tax credits for 2009 production. The forecast increase in 2010 milk prices and decreases in feed costs may result in smaller refundable tax credits and MILC program payments for 2010 production. These smaller payments, however, signal better economic conditions in 2010 for the dairy industries in both Louisiana and the United States.

AQUACULTURE OUTLOOK

C. GREG LUTZ

Professor (Aquaculture Research Station)

Louisiana Situation and Outlook

Louisiana has long been recognized as supporting one of the most diverse aquaculture industries in the United States. Species and products such as crawfish, catfish, alligators, oysters, tilapia, baitfish, hybrid striped bass, soft shell crawfish and crabs, ornamental fish, baby turtles, a variety of freshwater game fish and other minor species have all been commercialized successfully. Louisiana's producers continue to lead the nation in crawfish, oyster, pet turtle and alligator sales, but the state's aquaculture crops exhibited a generally downward trend during 2009. Gross farm sales were estimated at roughly \$198 million, down approximately 8 percent from 2008. Value added to aquaculture products was estimated to be nearly \$129 million, resulting in a total estimated value of approximately \$327 million for the aquaculture sector of the state's economy in 2009.

Crawfish: Estimates from the field indicate farmed crawfish production occupied more than 173,000 acres during 2008-2009, down approximately 6 percent from the previous year. The estimated number of producers in 2009 decreased by 15 percent, suggesting most of the acreage reduction was among smaller crawfish farming operations. Estimated average yields per pond acre (567 pounds) were lower over most of the crawfish-producing areas of the state. The decrease in yields reflect higher harvesting costs, competition from wild-caught product and reduced crawfish prices later in the season.

According to estimates from the state's crawfish-producing parishes, more than 98 million pounds of farm-raised crawfish were sold for \$115.7 million during the 2008-2009 season, making farm-raised crawfish far and away the state's most valuable aquaculture commodity. For the 2009-2010 crawfish season, conditions

suggest possible continued competition from wild-caught product. This competition has the potential to push prices downward. Nonetheless, farmed production appeared headed toward a normal-to-good season prior to an extended cold spell in January. The industry has concerns about possible losses in some farm populations apart from the nonlethal effects of cold temperatures. At this time, results from research backing such a conclusion are lacking.

Catfish: Due to continuing declines in acreage, Louisiana no longer ranks fourth among catfish-producing states in USDA statistics. These declines in acreage and production continued and accelerated throughout all the major producing states in 2009. According to field estimates, Louisiana catfish acreage decreased by 41 percent to 2,622 acres of ponds. Despite the decrease in acreage, producers still sold more than 10 million pounds of catfish valued at \$8.3 million. During 2010, Louisiana's catfish producers, and the industry as a whole, will continue to struggle with high input costs, competition from imports of catfish and basa and downward price pressure at most retail outlets.

Alligators: Following several years of impressive growth in farmed alligator production, industry expansion has reversed in response to the global economic recession. Tag data from the Louisiana Department of Wildlife and Fisheries suggest the number of alligators produced in 2009 was down roughly 10 percent from the prior year. Nonetheless, the 2009 farm-gate value was estimated at \$32.3 million. In 2010, effects of limited egg collection during 2009 will begin to become apparent. The industry appears poised for further consolidation, and the long-term effects of changes in the international market structure for hide remain to be seen.

Pet Turtle Hatchlings and Baitfish: Pet turtle hatchling production was down sharply in 2009 with production of roughly 2.2 million hatchlings. This decline was the result of several factors, including the extensive damage to facilities and loss of breeding stock caused by Hurricane Gustav in late 2008, global economic

trends (virtually all hatchlings are exported due to FDA restrictions on domestic sales) and increasing self-sufficiency in China's farmed turtle industry. Nonetheless, estimated hatchling sales exceeded \$2.1 million in 2009. No major changes are anticipated in the turtle production or marketing situations for 2010.

Louisiana's bait fish and minnow industries also declined sharply in 2009 in response to general economic trends, but this sector may rebound somewhat more rapidly in late 2010 and beyond.

Oysters: Oyster sales estimates for the past year were \$38.8 million, up approximately 9 percent from the previous year. The information reported about oyster production represents a one-year lag to avoid estimation and projection errors from using data for only part of the year. Figures for oysters reported in 2009 are from 2008 harvests. Oyster sales data is compiled by the Louisiana Department of Wildlife and Fisheries (LDWF). The sales data is sent to the National Marine Fisheries Service (NMFS) for verification. Because of the lag created by this process, complete information typically is not available until the middle of the following year. At this time, no major changes are foreseen for Louisiana's oyster industry.

HUNTING LEASE ENTERPRISES

DONALD P. REED

Professor (Idlewild Research Station)

National Situation and Outlook

Outdoor recreation has changed dramatically in the United States. Changing land use patterns, the greater abundance of disposable income by many Americans and greater amounts of leisure time have led to tremendous opportunities for hunting leases to provide substantial economic gains to landowners nationwide. The latest national survey of fishing-, hunting- and wildlife-related recreation reveals 12.5 million Americans participated in hunting-related activities in the United States. These individuals spent \$22.9 billion in pursuing their hunting activities.

In many parts of the country, urban sprawl has led to fragmented wildlife habitats. Urban sprawl is the result of increasing human populations. Many farmers engaged in traditional agricultural commodities have begun to include hunting leases as part of their farms' management plans for total economic returns on the land. The recent passage of a newest farm bill includes numerous programs for promoting wildlife enhancement and conservation. These same programs, which once heavily subsidized crop production, are now providing landowners with the means to greatly enhance wildlife habitat on their lands. Enhanced habitat leads to increased wildlife populations. These wildlife habitat improvement programs allow landowners to demand greater lease rates for managed lands. A widely seen trend in 2009 was timber companies selling off large tracts of land to private individuals. In many cases, the new owners purchased the land for recreational hunting opportunities.

Sixty percent of the total land area in the United States is private rural lands. These lands cover approximately 1.28 billion acres. The big increase in wildlife habitat is due to the many farm bill programs promoting the return of marginal agricultural areas back to more suitable uses such as wildlife habitat. Many forestry- and

wildlife-related farm bill programs provide for tree planting. As a result, forest cover has increased on private lands in terms of both ownership and acreage. This forest cover provides excellent habitat for a wide variety of wildlife species, which, in turn, provides the opportunity for hunting lease enterprises to become part of a landowners management options.

Other federal programs designed specifically for the creation of wildlife habitat are available to private landowners. These programs generally are tied to either long-term or perpetual easements requiring landowners to maintain habitat conditions as specified under terms of the contract. These areas are, however, available for landowners to engage in hunting lease enterprises. Some concern exists about the effects of the current alternative energy programs on wildlife species dependent on water-related agricultural operations such as rice and crawfish farming. If these programs lead to the conversion of water-cropping systems to dry-land agricultural systems, what effect will the conversion have on water-dependent wildlife?

Louisiana Situation and Outlook

Landowners who engage in hunting lease enterprises are an important component in the state's management of wildlife. Wildlife improvements made on hunting leases by the lessee or lessor provide both game and nongame wildlife species with necessary food and cover. In 2009, approximately 6,765 producers leased land in Louisiana under a fee-based hunting lease enterprise. This figure is represented by 5,428 individuals who participated in upland game leasing (predominately for deer and turkey) and 1,337 individuals who participated in waterfowl leases. Acreage leased for each of these operations was 6.37 million for upland game and 1.7 million for waterfowl. Overall acreage for both waterfowl and upland game leases were up from the previous year.

Gross farm values for these leases amounted to \$49.54 million for upland game and \$40.94

million for waterfowl. Average lease rates were \$7.77 per acre for upland leases and \$23 for waterfowl leases. Waterfowl leases averaged \$15 per acre in coastal areas of the state and \$50 per acre in other areas. Leasing rates varied greatly throughout the state from lows of \$1 to highs of \$30 per acre for upland game leases. In all hunting lease enterprises, rates depended on location, habitat quality and species involved. While these factors were most important in setting the base price for hunting lease operations, the amenities provided were another important factor. A high demand for a good hunting lease with extra amenities will many times bring prices greater than the state average. Value-added components raised the total economic effect of hunting leases in Louisiana to \$95 million.

Despite the current recession, the market for hunting leases should continue to be strong in 2010 due to public demand. The new farm bill contains wildlife-related programs which will serve to further the commitment many Louisiana landowners make toward wildlife habitat. These programs will provide incentives to provide additional habitat for game and nongame species. The wildlife habitat created by programs such as the Wetlands Reserve Program, Conservation Reserve Program, Wildlife Habitat Incentives Program and the Conservation Reserve Enhancement Program have made available hunting lease opportunities for many landowners within the guidelines of each specific program. A competitive market will continue to be the driving force behind land leased for hunting enterprises. The revenue generated by these leases provides the landowners with the potential for significant income gains.

Recommendations

Wildlife management is not a one-time endeavor whereby targeted wildlife will continue to benefit from the management performed. Landowners must be aware of the perpetual nature of land management, especially under the climatic conditions of the southeastern United States. These conditions mean managed lands must be constantly monitored. Habitat manipulation procedures such as tree plantings, timber cuttings, disking, mowing, prescribed burning and the use of herbicides, are necessary to steer the progression in the direction most beneficial to the targeted wildlife species. Landowners must also be aware of the risks involved in engaging in overly competitive markets for hunting leases. Too much competition for leases may result in the loss of individuals who are priced out of the market. These losses could comprise the core support for the activity and pose a serious threat to sport hunting. An important issue faced by every state game agency in the United States is the recruitment of new individuals into sport hunting. Dwindling hunter numbers negatively affects the federal dollars states receive for their wildlife management programs.

CONSERVATION PROGRAMS

JOHN V. WESTRA

Associate Professor (Agricultural Economics)

Introduction

Conservation programs in the United States are associated primarily with the USDA's Natural Resource Conservation Service (NRCS). Though the USDA-NRCS is not the only public agency or nonprofit organization providing technical or financial assistance in Louisiana, the agency is the primary entity associated with conservation programs as measured by number of producers contacted, acres under conservation contracts and dollars obligated or spent for technical and financial assistance. The USDA-NRCS also partners with the Farm Service Agency (FSA), a sister agency within USDA that provides financial assistance for certain conservation programs.

Various federal conservation programs were created, modified or deleted under The Food, Conservation and Energy Act of 2008 (the 2008 farm bill). Due to changes in this enabling federal legislation and the programs authorized, this situation and outlook on conservation programs will explain the core programs and new initiatives USDA-NRCS has to address Louisiana's natural resource concerns in agriculture.

Program Overview

This year marks the 75th anniversary of the Natural Resources Conservation Service (formerly the Soil Conservation Service) being a partner with private landowners and managers. Since 1935, it has helped private individuals conserve soil, water and other natural resources. In addition to landowners or managers, NRCS partners with other federal and state agencies, nongovernmental entities and land-grant universities like the LSU AgCenter. The purpose of the partnerships is to deliver conservation programs which address natural resource concerns in Louisiana. NRCS professionals

provide science-based technical assistance to private landowners. This assistance is suited to specific needs of a producer.

In an effort to encourage the adoption of many conservation activities by producers, NRCS and FSA provide financial assistance to the producers. The assistance provides incentives for producers to adopt practices and resource conserving structures which might otherwise be cost prohibitive. Producer or landowner participation in all USDA programs is voluntary.

Conservation programs with NRCS are designed to help producers address local and national resource concerns. These concerns include reducing soil erosion, reducing nutrient losses, enhancing water supplies, improving water quality, increasing wildlife habitat and reducing damage caused by floods and other natural disasters. When implemented appropriately, the conservation programs provide multiple benefits to society.

The benefits help enhance natural resources and sustain agricultural productivity and environmental quality while supporting continued economic development, recreation and scenic beauty. These ecosystem services are the principal public benefits provided by NRCS programs. In addition to public benefits, producers and individual private landowners derive substantial private benefits from the programs. Public and private costs are incurred in providing the benefits associated with the private-public partnerships conservation programs help foster.

Conservation programs are classified into either working land programs or land retirement (or easement programs). With most easement or land retirement programs, producers voluntarily enter into a contract with USDA-NRCS, or in the case of CRP with USDA-FSA, to set aside land for a lengthy period for specific conservation or environmental purposes. These set-aside periods generally are 10 years or more. The Conservation Reserve Program (CRP) and the Wetlands Reserve Program (WRP) are easement programs

which convert cropland into conservation or environmental reserves. Other easement programs like the Grassland Reserve Program (GRP) and the Farm and Ranch Lands Protection Program (FRPP) are designed to protect and preserve working agricultural lands from development.

In all easement programs, the federal government acquires certain rights over the property for the duration of the contract. Regarding working lands programs, however, a producer or landowner enters into an agreement with NRCS to implement some best management practices (BMPs). Using these BMPs or conservation practices (CPs), the producer modifies some field practices or builds a specific structure to address some local or national resource concern. Working lands programs include the Environmental Quality Incentives Program (EQIP) and Wildlife Habitat Incentive Program (WHIP). Total financial and technical assistance obligated by USDA for these programs during the 2009 fiscal year (October 2008 through September 2009) was \$3.38 billion nationally and \$34.4 million in Louisiana (Table 1).

Easement Programs – Current Situation and Outlook

Conservation Reserve Program (CRP): Started in 1985, the CRP is the oldest and largest easement program currently in use in the country. The program provides technical and financial assistance to eligible farmers and ranchers so soil, water and related natural resource concerns on their lands can be addressed in an environmentally beneficial and cost-effective manner. The program is funded through the Commodity Credit Corporation (CCC) and is administered by the Farm Service Agency (FSA), with NRCS providing technical assistance. CRP encourages farmers to convert highly erodible cropland or environmentally sensitive areas to vegetative cover, such as native grasses, wildlife plantings, trees, filter strips or riparian buffers. As a result, land enrolled in CRP reduces soil erosion and sedimentation in streams and lakes,

improves water quality, establishes wildlife habitat and enhances forest and wetland resources. Farmers receive an annual rental payment for the term of the multiyear contract (10-15 years in duration). Cost sharing is provided to establish the vegetative cover practices.

At the end of the 2009 fiscal year, 33.85 million acres were enrolled in all categories of CRP in the United States, a decline of 900,000 acres from the previous year. This enrollment constituted 766,451 contracts with 425,552 farms with an average annual rental payment of \$52 per acre or \$1.75 billion annually nationwide (Table 1). In Louisiana at the end of the 2009 fiscal year, total enrollment in CRP was 318,765 acres, an increase of nearly 14,000 acres. The figure represents 4,856 contracts with 3,124 farms receiving an average annual rental payment of \$55 per acre. Total annual rental payments obligated by USDA in Louisiana for all CRP contracts were \$17.6 million in 2009; an increase of nearly \$1.5 million over 2008.

For 2010 and beyond, acreage enrolled in CRP at the national level is expected to decline because the 2008 farm bill capped acreage enrollment at 32 million starting in October 2009. To date, this level has not been realized. Lower enrollment and the expiration of some contracted acreage in 2010, however, means CRP acreage should achieve the cap. Funding for CRP is projected to be \$1.8 billion for 2010.

Wetlands Reserve Program (WRP): This voluntary program, begun in 1992, offers landowners an opportunity to protect, restore and enhance wetlands on their property. NRCS assists landowners with technical and financial support to help restore wetland property. The goal of the WRP is to achieve the greatest wetland functions and values on acres enrolled in the program. NRCS also seeks to promote optimum wildlife habitat on enrolled acreage. This program offers landowners an opportunity to establish long-term conservation and wildlife practices and protection, since most contracts under WRP are perpetual easements. As of the

end of the 2009 fiscal year, more than 10,000 contracts had been established between private landowners and USDA, resulting in cumulative nationwide enrollment in WRP of 2.0 million acres. The USDA obligated \$404.6 million in financial assistance to producers nationwide last year (Table 1).

In Louisiana, the cumulative enrollment in WRP was 221,449 acres under more than 600 contracts with landowners. No new contracts were written in 2009 in Louisiana. Louisiana is the most successful state under the WRP, both in terms of contracts and acres enrolled. More than 11 percent of the wetlands restored under WRP nationwide have been in Louisiana. WRP has provided millions of dollars in economic and environmental benefits to the state and the country.

Future prospects for WRP in Louisiana are somewhat brighter than over the past few years. First and foremost, changes in the process for determining the easement value have been made under the 2008 farm bill. USDA now must use the lowest of the fair market value of the land, according to the Uniform Standards of Professional Appraisal Practices, or an areawide market analysis; the geographic area rate cap as determined by USDA or the landowner's offer. This approach is expected to increase participation in Louisiana to previous levels. The 2008 farm bill raises the acreage cap for WRP to 3.04 million acres through 2012 – an increase of nearly 770,000 acres. Federal funding available in 2010 for WRP is projected to be \$570 million.

Farm and Ranch Land Protection Program (FRPP): Matching funds are provided by FRPP to help purchase development rights to keep productive farm and rangeland in agricultural uses. Working through existing programs, USDA-NRCS works with governments and nongovernmental organizations to acquire conservation easements or other interests in land from landowners. Under FRPP, USDA provides up to 50 percent of the fair market value of the conservation easement. For 2009, USDA has made \$100 million available for FRPP nationally.

The farm bill authorized \$743 million from 2008 until 2012 for FRPP. Because this program depends on partners working with NRCS and the landowner to help with the cost-share portion of the easement, however, FRPP has been relatively small in Louisiana. Participation in the state is expected to remain small until a willing Louisiana partner is found.

Grassland Reserve Program (GRP): The GRP was created in 2002. Under the program, landowners are given the opportunity to protect, restore and enhance grasslands on their property. NRCS, FSA and the Forest Service (FS) jointly implement GRP. The program helps landowners restore and protect grassland, rangeland, pastureland and shrubland. The GRP also provides assistance for rehabilitating grasslands. The program will conserve vulnerable grasslands from conversion to cropland or other uses and conserve valuable grasslands by helping maintain viable ranching operations. This program provided \$312,369 in support to landowners in Louisiana in 2009. A similar funding level is foreseen in 2010.

Working Lands Programs – Current Situation and Outlook

The Environmental Quality Incentives Program (EQIP): Authorized under the 1996 farm bill, EQIP is the oldest working lands program promoting agricultural production and environmental quality as compatible national goals. EQIP helps eligible producers install or implement structural and management practices on eligible agricultural lands. EQIP offers contracts with terms ending from one to 10 years after a producer has implemented the last scheduled practices. EQIP contracts provide financial assistance incentives to implement conservation practices.

Payments rates, based on the most recent statewide cost estimates, vary by conservation practice, and are higher for beginning or limited-resource farmers. Incentive payments may be given to producers for up to three years to encourage implementation of management

practices which may be too costly otherwise. Under the 2008 farm bill, EQIP rules prohibit a producer from receiving, directly or indirectly, financial assistance or incentive payments exceeding \$300,000 for all EQIP contracts during any six-year period; down from \$450,000 under the 2002 farm bill.

Starting in 2009, EQIP funding in Louisiana (as most states) was allocated on the basis of Soil and Water Conservation Districts instead of parishes. In 2009, national financial and technical assistance obligations to producers under EQIP totaled \$1.7 billion (Table 1). In Louisiana, USDA obligated \$12.3 million in financial assistance to producers and spent nearly \$4 million on technical assistance during the 2009 fiscal year (Table 1). This program is popular with producers, as well as policymakers, and is projected to be funded at \$1 billion nationally in 2010. In Louisiana, funding should be about \$16 million – \$12 million in financial assistance and \$4 million for technical assistance.

The Wildlife Habitat Incentives Program (WHIP): This program provides technical and financial assistance (up to 75 percent) to landowners interested in establishing and improving fish and wildlife habitat on land formerly used in agriculture. WHIP agreements between NRCS and a landowner generally last from five to 10 years, with annual payments limited to \$50,000 per year for producers. Since beginning in 2002, this program has proven to be a highly effective and widely accepted program across the country.

Nationally, WHIP obligated nearly \$52 million in financial assistance to landowners in 2009; a decrease of more than \$5 million from the previous year (Table 1). The figure represented 812,497 acres under contract. In Louisiana, slightly more than \$870,000 was obligated in 2009 for approximately 6,888 acres under contract. This amount represents a decline in funding of nearly \$250,000. Between 2007 and 2008, funding for WHIP more than doubled in Louisiana. Although the 2008 farm bill authorized USDA to spend up to \$85 million

annually, WHIP funding is expected to continue at current levels in 2010 – approximately \$52 million nationally and \$1 million in the state.

Conservation Stewardship Program (CSP): The 2008 farm bill replaced the Conservation Security Program with the Conservation Stewardship Program (the new CSP) for 2009 through 2017. This voluntary conservation program is designed to encourage producers to address resource concerns in a comprehensive manner by undertaking additional conservation activities and improving, maintaining and managing existing conservation activities. To participate in CSP, producers must meet a stewardship threshold for a minimum of one resource concern. A producer also must address at least one additional priority resource concern by the end of the CSP contract.

Enrollment in CSP is anticipated at 12.77 million acres for each fiscal year at an average annual cost of \$18 per acre for technical and financial assistance. Acreage will be allocated proportionally across states or areas based on the total number of eligible acres nationwide. Contracts will cover the entire agricultural operation for five years. CSP payments are designed to compensate producers for going beyond current conservation efforts by installing and adopting additional conservation activities or by adopting resource-conserving (beneficial) crop rotations. Producers are expected to improve, maintain and manage conservation activities in place at the time the contract offer is accepted. CSP payments are available to producers who engage in activities related to on-farm conservation research and demonstration activities and pilot testing of new technologies or innovative conservation practices.

CSP payments are based on: the cost of installing, adopting or maintaining the conservation activities; income forgone by the producer; and expected environmental benefits as determined by NRCS conservation measurement tools. Payments cannot be made for expenses associated with animal waste storage or treatment facilities or related waste transport or transfer

devices for animal feeding operations. CSP payments to an individual or legal entity are limited to \$200,000 for all contracts entered into during any five-year period. Nationally, technical and financial assistance obligations for CSP were \$245.4 million in 2009 (Table 1). In Louisiana, financial assistance obligations were \$6.3 million for CSP last year.

Mississippi River Basin Healthy Watersheds Initiative (MRBI): The latest conservation program was initiated by the administration of President Barak Obama and Agriculture Secretary Tom Vilsack. The objective of this program is to improve the health of the Mississippi River Basin in terms of water quality and wildlife habitat. Through this new initiative, NRCS will partner with other agencies to help producers in selected Mississippi River Basin watersheds voluntarily implement conservation practices. The aim of these practices is to avoid, control and trap nutrient runoff, improve wildlife habitat and maintain agricultural productivity.

NRCS anticipates improvements will be accomplished through a conservation systems approach that manages nutrients (nitrogen and phosphorous) within fields so runoff is minimized and downstream nutrient loading is reduced.

NRCS will provide producers technical and financial assistance with a system of practices to control soil erosion, improve soil quality and provide wildlife habitat while managing runoff and drainage water for improved water quality. This new program will be implemented in a 12-state area (Arkansas, Kentucky, Illinois, Indiana, Iowa, Louisiana, Minnesota, Mississippi, Missouri, Ohio, Tennessee and Wisconsin) to address nutrient loading in the Mississippi River Basin. Nutrient loading affects both local water quality problems and the hypoxic zone in the Gulf of Mexico. NRCS will offer the program during the 2010 fiscal year through the 2013 fiscal year and provide up to \$80 million in financial and technical assistance in each fiscal year. This support is in addition to the agency's regular program funding in the 12 states and funding by other federal agencies, states and partners and the contributions of producers.

Program	Louisiana	United States
CRP	\$17,630,000	\$1,749,865,000
WRP	-----	\$404,611,013
FRPP	-----	\$112,915,161
GRP	\$252,102	\$44,627,257
EQIP	\$15,349,463	\$770,330,000
WHIP	\$870,752	\$51,998,722
CSP	\$292,173	\$245,425,255
Total	\$34,394,490	\$3,379,772,408

Source: USDA

Department of Agricultural Economics and Agribusiness
Louisiana State University
101 Agricultural Administration Bldg.
Baton Rouge, La 70803-5604



Louisiana State University Agricultural Center
William B. Richardson, Chancellor
Louisiana Agricultural Experiment Station
David J. Boethel, Vice Chancellor and Director
Louisiana Cooperative Extension Service
Paul D. Coreil, Vice Chancellor and Director
Department of Agricultural Economics and Agribusiness
Gail L. Cramer, Department Head

Pub. 3048 (online only) 5/10 Rev.

The LSU Agricultural Center follows a nondiscriminatory policy in programs and employment.