



# 2001 Outlook

**For Louisiana's Agriculture**



## **INTRODUCTION**

With an ever-changing production and marketing environment, agricultural producers are faced with a number of difficult decisions. This publication provides Louisiana's agricultural producers with a view of the potential marketing and production environment they are likely to face in 2001. It is hoped that the information provided in this publication can help producers as they make their farm management and production plans for 2001.

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# 2001 OUTLOOK FOR LOUISIANA AGRICULTURE

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# ECONOMIC OUTLOOK

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## INTRODUCTION

After nine years of robust growth and stable prices, the U.S. economy begins the year 2001 facing more uncertainty than in recent years. Economic data in the fourth quarter of 2000 showed inventories were up, and preliminary data show that sales were sluggish during the Christmas season. These data have led several major investment banks to forecast zero growth in the first quarter and Morgan Stanley Dean Witter to forecast a full-blown recession. To understand the current and expected future economic conditions, a look at the recent past is needed.

During the second quarter of 2000, U.S. GDP grew at a blistering 5.9%, and the key question was whether the U.S. economy was about to overheat, triggering inflation; however, the Federal Reserve was ahead of the curve. Six increases in the Federal Funds rate pushed this key interest rate from 4.75% in May of 1999 to 6.5% by May 2000. As we begin 2001, the key question is whether the Fed's policy will push the economy to recession or succeed in engineering a soft landing. Given Alan Greenspan's track record, the smart money is betting on another successful effort by the Fed.

The cumulative effect of the rate hikes was felt in late 2000. With the end of dot.com mania driving the NASDAQ lower, the rate hikes hit harder than expected. Lower

industrial production, a slow Christmas season and substantial weakness in corporate earnings have caused some to predict that the economy's decline will not end in a feather soft landing. Amid these concerns, the Federal Reserve took the unusual step of reducing the Fed Funds rate by 50 basis points between meetings of the FOMC, and most economists expect further decreases in 2001.

With the help of these interest rate reductions, the U.S. economy should recover from a sluggish start and show annual growth of around 2.3% during 2001. The slower growth is likely to raise unemployment rates to around 4.6% by summer, and the rate should remain at that level for the remainder of the year. A strong housing market and increasing sales of interest sensitive consumer goods should jumpstart the economy in the second quarter. Look for continued productivity gains from the technologies driving the new economy to generate growth by year's end. Do not, however, look for another wild run from Internet stocks to emerge. We anticipate that OPEC will succeed in keeping oil prices in the \$25 per barrel range. Even under a mild-summer, mild winter scenario, natural gas prices are expected to level at \$3.50 per MCF vs. only \$2 in the '90s. Increased use of natural gas as a fuel in new electricity generation plants is driving this price increase.

In addition to spurring consumer demand, interest rate reductions by the Federal Reserve should cause a mild depreciation in the value of the dollar. Look for the exchange rate with Japan to move to 108 Yen/\$, though structural problems in the Japanese banking system and GDP growth around 1% should prevent more appreciation by the yen. Likewise, the Euro should appreciate; expect an exchange rate near parity Euro/\$ by summer of 2001. Although a

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<sup>1</sup>*The Division for Economic Development and Forecasting publishes the Louisiana Economics Outlook, which contains more detailed forecasts for the Louisiana Economy.*

falling dollar is bad news to U.S. travelers abroad, exporters will benefit as U.S. products become more competitive in the global marketplace. The additional exports should lead to a narrowing of the trade deficit and also contribute to mid-year improvements in the U.S. economic performance.

## **LOUISIANA ECONOMIC OUTLOOK**

Expect Louisiana to follow the national trends, starting slow and picking up steam in late 2001. Among the basic industries, the oil and gas industry still plays a crucial role in Louisiana. While higher oil prices tend to stifle growth on the national level, they bode well for Louisiana. The Louisiana Economic Outlook forecasts 5,800 new jobs will be created in oil and gas over the next two years. This job growth primarily benefits the New Orleans, Houma and Lafayette areas. A stronger oil industry also translates into new business for shipbuilders, fabricated metals and other industries that support oil exploration and drilling. Edison Chouest is constructing a new shipbuilding facility in Houma that may employ up to 800 workers. The most optimistic fabrication report comes from UNIFAB, which expects to hire up to 1,100 workers in Lake Charles and New Iberia within the next two years.

There are mixed signals in the Louisiana chemicals industry, and little growth is expected in that sector of the economy. Several fertilizer companies have either cut employment or temporarily shut down primarily because of the high cost of natural gas, the key input in the production process. There are, however, also expansions and new plants planned in the coming year. BASF, Shell Chemical, Dow Chemicals, Lyondell Chemicals, Vulcan Chemicals and DSM Elastomers all plan major expansions of existing facilities, and Honeywell Chemicals plans to build a new facility.

Louisiana's economy also is likely to benefit from electricity deregulation. Over the next four years, the industry plans to build 20 new power plants in Louisiana and 50 new plants in Texas. With headquarters in Baton Rouge, Shaw Industries has a patent for a new process for bending pipe used in these plants. The GE gas turbine production plant in Shreveport also benefits from this growth.

At the December building pace, 1.575 million new houses will be built in 2001 in the United States. Louisiana is no exception, and this housing market will help fuel the construction industry, particularly with lower interest rates. In addition to housing, expansions and new plants will stimulate the industrial construction. While environmental regulations typically discourage spending in new chemical production facilities, the new Clean Air Act also will create construction work. The act requires all refineries in the state to modify facilities to produce cleaner gasolines. The upgrades will cost about \$100 million each and create about \$1.1 billion of industrial construction work throughout Louisiana.

The service sector will continue to grow in Louisiana. Several new call centers will boost the Baton Rouge economy, and employment is expected to continue to grow at the Navy Information Technology Center in New Orleans. A key question mark in this sector is Harrah's Casino in New Orleans, which is slated to close and eliminate 3,000 jobs unless an agreement is reached to reduce the Casino's taxes.

Louisiana can be divided into eight metropolitan areas and the surrounding parishes. Among these eight areas, all signs point to the Shreveport area as the strongest local economy in Louisiana. A new GM manufacturing facility is slated to open by the end of 2002, which, by the nature of the

process, will attract new suppliers to the region and create even more jobs. Combined with the addition of Casino hotels, the GM construction will lead to a vibrant economy in Shreveport this year. As previously stated, oil prices above \$25 per barrel and natural gas prices of \$3.50 per MCF translate into a reinvigorated Louisiana oil and gas extraction industry. The primary beneficiaries will be Houma and Lafayette, where the oil industry still has a dominant role in the local economy. Both areas should show strong growth in 2001, trailing only Shreveport in job creation.

Baton Rouge is building on 13 straight years of growth and has been Louisiana's fastest growing area in recent years. In 2001, Baton Rouge is expected to continue to grow slightly faster than the state as a whole. Expansions at chemical plants, new call centers, EPA-related construction at the MSA's refineries and the Shaw group will drive the growth in 2001. The Louisiana Economic Outlook forecasts 2.3% job growth for Baton Rouge, and Monroe is expected to match that performance. Banks, insurance and the lumber and paper industry will continue to be key employers in Monroe. CenturyTel, a telecommunications firm that acquired Pacific Telecom, will continue to boost that local economy.

Alexandria and Lake Charles are predicted to perform slightly below the state average but still show job growth. In Lake Charles, environmental concerns may retard growth in the chemical industrial. Finally, the economy in New Orleans is expected to show little growth in 2001. On the positive side, New Orleans' hotel industry is booming, the oil industry is recovering and several chemical plants will be back to full capacity

in 2001. Manufacturing has been trending down in the New Orleans area, however, and the city has faced white-collar job loss in recent years as headquarters left New Orleans. Entergy's merger with FP&L may trigger the next loss of white-collar jobs, though the net effect of the merger is unknown at this time. Likewise, the future of Harrah's casino and Jazzland are uncertain.



# FARM INPUTS OUTLOOK

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## INTRODUCTION

Farm inputs are those items used to produce the food and fiber supplies needed by the world. The production process uses some inputs that are completely consumed in the yearly production cycle such as seed, fertilizer, chemicals, fuel or feed. Capital items are another input type that has a life of several years and is only partially used up in the yearly production cycle. Examples of long-term or capital input items are machinery and equipment, breeding livestock, orchards and facilities.

Louisiana agriculture is a large consumer of farm produced and manufactured inputs. The 1999 (latest year for which data are available) estimated farm production expenses, excluding operator dwellings at \$1.9 billion for Louisiana agriculture. The intermediate consumption outlays totaled \$1,231.8 million: purchased feed, \$149.8 million; purchased livestock and poultry, \$28.3 million; purchased seed, \$90.2 million; fertilizers and lime, \$138.1 million; pesticides, \$208.6 million; petroleum fuels and oils, \$75.9 million; electricity, \$20.6 million; repair and maintenance of capital items, \$136.1 million; custom work and machinery hire, \$95.7 million; marketing, storage and transportation, \$66.4-million; contract labor, \$9.9 million; and miscellaneous, \$212.4 million.

Capital consumption expenses are an estimated \$203.6 million. Factor payments totaling \$536.4 million are composed of employee compensation (hired labor), \$174.1 million; net rent for non-operator landlords,

\$221.9 million; and interest payments, \$140.3 million. The changes in the cost of the annual production inputs are of great importance to producers because changes in these items affect farm organization and net income immediately. Changes in the prices of long-term input items affect producers as new investments are made

## NATIONAL OUTLOOK

The USDA Farm Income 2001 forecasts for the nation as a whole are published at the Economic Research Service, Briefing Room website:

**[http://www.ers.usda.gov/  
Briefing/FarmIncome/Fore.htm](http://www.ers.usda.gov/Briefing/FarmIncome/Fore.htm)**

The USDA forecasts indicate total production expenses up slightly (1%) in 2001. Intermediate production inputs are forecast up 1%. Feed grain expenses are expected to be slightly higher than last year. Seed prices are expected to remain stable or fall slightly. Fertilizer expenses are expected to rise because of the significant impact of higher natural gas prices on the production of nitrogen fertilizer. Pesticide expenses are forecast up less than 2% even though petroleum is one of the main inputs in pesticide production because other production factors account for a larger share of pesticide costs.

Other USDA reports indicate that fuel expenses for many farmers will be up from 2000 though the price rise for 2001 will not be as dramatic as the fuel price rise in 2000. Labor expenses are expected to rise in 2001 as farm labor wages follow the general wage rate upward. Farm credit projections are mixed. Average borrowers or borrowers who are less financially sound will face somewhat higher interest rates. Good customers with

sound balance sheets may pay slightly less for credit.

## **LOUISIANA OUTLOOK**

Each year the LSU AgCenter's Department of Agricultural Economics and Agribusiness estimates cost of production for major Louisiana commodities. Copies of this publication are available from your county agent's office, the Department of Agricultural Economics and Agribusiness (225.578.3282) or from the web site:

**<http://www.agecon.lsu.edu>**

Look for commodity budgets under Quicklinks.

To prepare the annual cost estimates, dealers are surveyed to gather information about input costs. A summary analysis of the prices collected from across the state is presented in Tables 1. Individual dealers may have higher or lower prices, depending upon their situations. The table lists 11 major classes of operating inputs: custom, defoliant, growth regulators, fertilizer, fungicides, herbicides, hired labor, insecticides, other, seed and land/water charge.

The defoliant category lists seven products with an average 7.8% increase from October 1999 to October 2000. One product had no price change, five products increased in price, and one product declined.

The growth regulator category listed one product with a 2.5% price decline from October 1999 to October 2000.

The fertilizer category lists 11 products for an average price increase of 49% from October 1999 to October 2000. Nitrogen price increases ranged from 30% to 266%, depending on the formulations and materials. Phosphate declined 24% while potash

increased 7.1% from October 1999 to October 2000.

The fungicide category lists six products that declined an average of 5.1% in price from October 1999 to October 2000. Three products declined in price, two stayed the same price and two increased during the period.

The herbicide category lists 47 products that declined an average of 0.2% from October 1999 to October 2000. Twenty-two products declined in price with a range of from less than 1% to 13.7% reductions. Five products had no price change. Nineteen of the remaining 20 products increased in price from less than 1% to 13%, and one product increased 34%.

The insecticide category lists 25 products for an average decline of 0.7%. Nine products declined in price, and four maintained the same price from October 1999 to October 2000. Twelve products increased from less than 1% to a maximum of 9%.

Seed prices were mixed, with technology seeds showing a price increase and seed for crops that are down in price showing a small decline from October 1999 to October 2000.

The variation in product prices provides an opportunity for less expensive products and formulations to be substituted for more costly products. Producers should look carefully at their input requirements and compare product prices to keep their costs of production as low as possible. 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 quality and service as well. Price alone should not be the only guide in the purchase of production inputs.

TABLE 1. OPERATING INPUTS: ESTIMATED PRICES LOUISIANA, 2001

Item Name	Unit	Price	Item Name	Unit	Price
<b>CUSTOM</b>			<b>HERBICIDES</b>		
Airplane Benlate	acre	4.70	Lorox 4L	pt	7.33
Airplane Fert	acre	4.20	Lorox 50DG	lbs	10.12
Airplane Fert	cwt	4.58	MSMA 6.6	pt	2.22
Airplane hi-vol (NE)	acre	3.60	MSMA plus	pt	2.14
Airplane hi-vol (RR)	acre	4.23	Ordram 15G	lbs	1.08
Airplane Insect	acre	4.27	Ordram 8E	pt	6.71
Airplane lo-vol (NE)	acre	2.38	Poast 1.5L	pt	9.90
Airplane lo-vol (RR)	acre	3.05	Probe	lbs	17.50
Airplane Seed	cwt	4.25	Prowl 3.3	pt	2.60
Airplane Seed	cwt	4.60	Reflex	oz	0.64
Airplane Seed	acre	4.50	Roundup D-PAK	pt	6.83
Airplane Seed	cwt	4.85	Roundup Ultra	pt	4.68
Airplane ulv	acre	1.93	Scepter 70DG	oz	4.86
Custom Harvest	lbs	0.10	Sencor 90DF	lbs	18.32
Drying Charge	bu	0.19	Sencor L	pt	11.54
Drying Charge	cwt	0.17	Stam M4	qt	4.93
Drying Rice	cwt	0.93	Surfactant	pt	2.01
Fertilizer Cart	ton	4.75	Treflan 4L	pt	3.19
Fertilizer Truck	acre	3.95	Whip 360	pt	25.80
Global Pos. System	acre	0.50	Zorial 80DF	lbs	14.17
GPS Spreading	acre	7.33	<b>HIRED LABOR</b>		
Storage Rice	cwt	0.45	Other Labor	hour	7.50
Storage Soybeans	bu	0.20	<b>INSECTICIDES</b>		
<b>DEFOLIANT</b>			Ambush 2EC	pt	13.80
Def	pt	5.61	Ammo 2.5E	oz	1.65
Dropp	lbs	56.34	Asana XL .66EC	pt	13.73
Finish	pt	9.72	Baythroid	pt	50.85
Folex	pt	5.39	Bidrin 8EC	pt	11.13
Harvade	pt	10.30	Counter 20CR	lbs	2.71
Prep	pt	6.53	Curacron 8E	pt	11.74
Sodium Chlorate	pt	0.61	Cygon 4EC	pt	4.13
<b>FERTILIZER</b>			Diazinon AG500	pt	3.73
Ammonium Nitrate 33%	lbs	0.08	Dimethoate 5	pt	4.41
Ammonium Sulfate 21%	lbs	0.07	Furadan 3G	lbs	0.95
Anhydrous (82%)	lbs	0.13	Guthion 2L	pt	4.06
Boron	lbs	0.38	Icon Treatment (dry)	cwt	14.00
Lime (spread)	ton	30.80	Icon Treatment (wet)	cwt	17.05
Nitrogen	lbs	0.25	Karate Z2	oz	3.79
Nitrogen (32%)	lbs	0.22	Lannate LV2.4E	pt	6.40
Phosphate	lbs	0.19	Larvin 3.2E	pt	7.05
Potash	lbs	0.15	Lorsban 4E	pt	4.64
Urea (45%)	lbs	0.07	Methyl parathion 4E	pt	3.56
Zinc Sulfate (36%)	Lbs	0.97	Monitor 4EC	pt	9.79

TABLE 1. OPERATING INPUTS: ESTIMATED PRICES LOUISIANA, 2001 (continued)

Item Name	Unit	Price	Item Name	Unit	Price
<b>FUNGICIDES</b>			<b>INSECTICIDES</b>		
Benlate 50% WP	lbs	16.51	Orthene 75S	lbs	11.34
Giberlic Acid	cwt	3.00	Orthene 90SP	lbs	10.19
Quadris	oz	2.23	Pounce 3.2EC	pt	18.15
Rovral WG	lbs	20.34	Scout x-tra	pt	31.51
Tilt 3EC	oz	2.39	Sevin 80% S	lbs	4.85
TXS 18.8G	lbs	1.44	Sevin XLR	pt	3.41
<b>GROWTH REGULATORS</b>			Temik 15G	lbs	3.32
Pix	oz	0.77	Tracer 4EC	oz	5.76
<b>HERBICIDES</b>			Bt Cotton Fee	acre	26.40
2,4-d Amine	pt	1.47	Bt / RR Tech Fee	acre	33.80
2,4-D-LV4	pt	2.01	BWE Assessment (NE)	acre	15.00
2,4 DB	pt	3.03	BWE Assessment (RR)	acre	10.00
Arrosolo	gal	25.19	Ginning Cost	lbs	0.08
Atrazine 4L	pt	1.29	Innoculant	bu	0.70
Basagran 4L	pt	8.71	Insect Scout	acre	9.00
Bicep	qt	8.26	Insect Scout (Bt)	acre	12.00
Bladex 4L	pt	3.71	Roundup Tech Fee	acre	7.40
Blazer 2L	pt	7.77	Storage	bale	25.00
Bolero	pt	6.11	Supply & Misc.	dol	1.00
Canopy 75DF	lbs	40.60	<b>SEED</b>		
Caparol 4L	qt	6.99	Bt Cotton Seed	lbs	1.03
Classic	oz	11.06	Bt Cotton Seed (RR)	lbs	1.15
Command 3ME	pt	7.94	Corn Seed	thou	0.88
Cotoran 4L	qt	8.65	Corn Seed (Bt)	thou	0.99
Crop Oil	pt	0.86	Cotton Seed	lbs	0.88
DSMA 4L	pt	1.01	Cotton Seed (BXN)	lbs	1.50
Dual 8E	pt	7.16	Cotton Seed (RR)	lbs	1.15
Fusilade DX	pt	15.02	Milo Seed	lbs	1.14
Goal 2XL	pt	11.05	Ryegrass Seed	lbs	0.32
Gramoxone Extra 2.5SL	pt	3.79	Seed Treatment	bu	0.84
Harmony Extra	oz	11.56	Soybean Seed	lbs	0.34
Karmex	lbs	4.33	Soybean Seed (RR)	lbs	0.53
Lasso 4EC	pt	2.77	Vetch Seed	lbs	1.51
Lexone 90DF	lbs	17.76	Wheat Seed	lbs	0.15
Lexone L	pt	13.26	Wheat Seed	lbs	0.12
Londax 60DF	oz	14.65	Winter Pea Seed	lbs	0.34

SOURCE: Projected Costs and Returns - Cotton, Soybeans, Corn, Milo and Wheat, Northeast Louisiana, 2001, Kenneth Paxton, A.E.A. Information Series No. 189, January 2001.

# FORESTRY OUTLOOK

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## NATIONAL SITUATION

Despite starting off strongly, 2000 marked a general economic slowdown throughout most sectors of the U.S. economy. As interest rates crept upward for most of the year, trends indicated that most U.S. economic sectors were tightening the reins on growth. Most analysts projected growth in the U.S. economy to slow to a more long-term sustainable rate. There is even some concern for 2001 of an impending recession. Most economists, however, do not predict recession for this year. Leading the slowdown was Wall Street, which lost its confidence in much of the technology sector and "dot com stocks." Exuberance over the Internet waned as investors realized that this new application has its limitations, as do all new technologies. Further, the economy's manufacturing sector weakened throughout 2000 and doesn't show signs of strengthening to any substantial degree in 2001. Manufacturers will probably try to whittle away at their inventories and cautiously expand operations, in light of waning consumer confidence.

Despite this apparent economic slowdown, general economic conditions should remain moderately strong in 2001. Although Gross Domestic Product slowed in the latter half of 2000 to a more moderate level of around 2.5%, forecasters project GDP to continue to grow by about 3% in 2001. Inflation crept up in 2000, largely because of higher energy prices, with some impacts occurring from tight labor markets. As a result, the Federal Reserve embarked on a course of further raising interest rates to curtail rapid economic growth. This seemed to work, because the economy slowed in the latter half of 2000. Recently, the Fed reversed

course by substantially lowering interest rates. It is likely that interest rates will continue to decline or at least remain stable in 2001. This will help to continue strength in housing and construction markets, and it may help turn around U.S. stock markets.

Nationally, the forest products economic sector has enjoyed continued strength in housing markets through most of 2000. This strength is expected to continue in 2001. Housing starts in the southern United States have remained strong. Weather patterns in 2000 allowed construction to continue almost unabated throughout the year. Although higher interest rates curtailed the high rates of growth increases in housing starts and construction activity in 2000, activity remained generally strong and is expected to continue to remain strong this year.

Consumer activity and consumer confidence waned in 2000. By the end of the year, consumer confidence was at a two-year low. Retail sales slumped, particularly for Christmas season sales. This can have a negative impact on the paper industry, which relies upon strong retail sales for its packaging products. This is somewhat mitigated, however, by continued recovery in Asian markets and continued strength in other parts of the U.S. economy.

Two issues loom as potentially subversive for the forest products sector in 2001. The first is energy prices, which have seen dramatic increases over the past year. Many different parts of the forest products sector consume large amounts of energy in the production of their products, from the harvesting activity on forestlands to the creation of paper in mills. If energy prices continue to increase, it could put market pressure on the pulp and paper sector, which is already very competitive.

The second major issue facing U.S. lumber manufacturers is the impending expiration of the Canadian Softwood Lumber Agreement (SLA), which places tariffs on Canadian lumber imports into the United States over a certain amount. Proponents of the SLA argue that Canadian stumpage prices are subsidized because these prices are set by the Canadian government at rates far below prices established in open markets in the United States. Opponents of the SLA point to U.S. Department of Commerce studies that indicate Canadian lumber is not subsidized. If a new agreement is not instituted by the time the old SLA expires, Canada will no longer have import disincentives placed on it.

In all likelihood, the Canadian industry will substantially increase lumber exports into the United States, at least in the short run (the first and second year). This will cause significant pressure on the lumber industry in the northern United States, and its effects will likely be felt in the South as well. The United States, as a nation, has a large forest resource, high production of that resource and also high consumption of the resource. Therefore, the United States heavily influences global supply and demand in terms of solid wood, pulp and paper sectors.

#### **LOUISIANA SITUATION**

This past year saw Louisiana harvest slightly more stumpage than in 1999; however, the value that landowners received for that wood declined. Lower prices for stumpage, particularly for hardwood and pine pulpwood, negatively affected gross farm values for forestry activities. Stumpage prices began 2000 on a rather strong note, but declined quickly throughout the year. The lower stumpage prices are a reflection of a drought that afflicted Louisiana for most of the year. Because of prolonged dry periods, producers were able to harvest more timber from locations that can't normally be reached

(particularly hardwood sites). This, in effect, increased the supply availability for Louisiana. Producers and landowners alike desired to have this normally unattainable wood harvested while it was possible. Therefore, inventories for stumpage grew.

Louisiana has suffered under drought conditions for three years in a row. These conditions have led to reduced tree growth, damage and loss to forests from fires, and significant seedling mortality. In 2000, losses to Louisiana's forestry community from drought surpassed \$100 million. For 2001, Louisiana will again keep a wary eye on the weather. The state desperately needs a return to a more normal winter, with more rain and lower temperatures. Thus far, this has been the case. The colder weather helps control pest populations such as the southern pine beetle. Wet weather could alleviate the long-suffering state from drought.

Other issues will be important in Louisiana for 2001. The aforementioned Canadian Softwood Lumber Agreement, set to expire in early spring 2001, could have a significant impact on lumber prices in Louisiana, at least in the short run. If Canadian lumber suppliers are able to export their products to the United States without tariffs, it in effect reduces their costs. Therefore, it becomes cheaper to push those products into southern markets. Canadian lumber directly competes with southern pine lumber on certain fronts. For example, northern softwood lumber is often used for studs in housing construction in the South. There are two sides to every story, however.

Canadian lumber is not only a substitute for southern pine. In some cases, it is a complementary good as well, because a large portion of southern pine lumber goes into the production of treated wood products. If northern wood is cheaper, more

construction projects may be undertaken, using more of both northern softwood lumber and treated southern pine lumber. Nevertheless, the likely outcome will be that homebuilders and construction companies will opt for using more Canadian lumber instead of southern pine lumber if the Canadians flood our markets with their products. This could have a chilling effect on the prices landowners receive for their timber.

Another issue relevant to Louisiana is the Environmental Protection Agency's push toward more control over non-point source pollution. In 2000, meetings were held around the state, attended by various stakeholders including forest landowners, to examine the issues surrounding potential regulations and restrictions that could be imposed were EPA to implement strategies to enforce total maximum daily load requirements on impaired waters in Louisiana watersheds. These requirements, if implemented, could require such things as harvesting permits in impaired watersheds and other restrictions as necessary.

EPA backed off from imposing these restrictions on forestlands for the immediate future, however, but this is an issue that will not go away, even though it has been placed temporarily on the backburner. In all likelihood, EPA will revisit this issue. Plus, the general trend is toward better water quality on all watersheds in Louisiana and throughout the United States. Regulators may look increasingly to the forestry and agricultural sectors for assistance in providing remedies for impaired waterways. This issue warrants vigilance on the part of forest landowners, the forest products industry and other natural resource stakeholders.

Louisiana also witnessed an inordinate amount of mill shutdowns in 2000. In some cases, plywood mills closed as a result of intense competition from the oriented strand board industry. Oriented strand board (OSB) is a viable substitute product for plywood and has replaced plywood in some cases. Also, consolidation within the industry, combined with technological gains, has rendered some lumber, plywood and sawmills inefficient. Because of technology gains in transportation, mills now have larger procurement zones. This, combined with increased technological efficiency within mills, allows efficient mills to procure more wood from a greater distance and process it at a cheaper price. Therefore, fewer mills are needed. This, in large part, contributed to the mill closings we saw in Louisiana in 2000. Some more mill closings may occur in 2001, particularly if the SLA is revoked and no new import policy takes its place.

Not all the news is bad for Louisiana. Even though prices declined in 2000 and the total value of forest products from Louisiana declined significantly, the fundamentals are still in place for a strong forest products sector. Housing starts remain very strong in the South and are expected to remain strong through 2001. This will help keep the lumber industry in Louisiana strong and will help the plywood and OSB mills, too. Demand for paper should remain at or near current levels, with increased demand from overseas companies helping offset weakening demand domestically, a result of slower consumer activity. Harvest levels in Louisiana remain strong and will likely be stronger in 2001. And even though prices declined somewhat in 2000, they are still strong, historically speaking. The outlook for forestry as an investment in Louisiana remains good.

# **COTTON OUTLOOK**

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## **WORLD SITUATION AND OUTLOOK**

China continues to be an influential force in shaping the world cotton outlook. The most recent USDA reports were adjusted to reflect an increase of about two million bales in China, bringing the estimated production in China to about 20 million bales for the 2000-01 marketing year. Production in the rest of the world is expected to bring total production to about 91 million bales. Consumption is estimated to be up slightly to about 92 million bales, thus reducing world stocks slightly. World production, consumption and ending stocks are in Table 2.

While world stocks continue to decline slightly, the stocks-to-use ratio remains above 40%. There is some consensus that a stocks-to-use ratio of about 35% is needed to sustain a price rally. Recent declines in world stocks have led to a higher "A" Index relative to the U.S. price. Current expectations are that the "A" Index will remain in the 65-75 cent range for the next several months. If this occurs, domestic producers will not receive loan deficiency payments (LDPs) for the remainder of the 2000-2001 marketing year and into the next season.

World cotton production is experiencing the same plateau in yields experienced by U.S. producers. The 2000-01 crop year is the ninth consecutive year in which the world yield has not risen. This trend is caused by specific difficulties

affecting production in the largest producing countries. Many of the major cotton-producing countries are experiencing difficulties with disease and insect resistance to pesticides. Also, there has been an expansion in area in some countries contributing to a reduced yield.

In summary, the world cotton production is estimated to be about 91 million bales, and consumption is estimated to be about 92 million bales. Ending stocks are again projected to decline for the 2000-01 marketing year. The USDA has projected ending world stocks-to-use ratio of about 38%. Based on historical relationships, this ratio of stocks-to-use has resulted in an "A" Index price of about 70 cents.

## **UNITED STATES SITUATION AND OUTLOOK**

USDA estimates for total U.S. cotton production are about 17 million bales. Recent USDA reports reduced estimates of the U.S. crop by 188,000 bales while reducing domestic use and export estimates by 400,000 bales. As a result, ending stocks were estimated to increase to 4.1 million bales. Domestic use was estimated at 9.8 million bales, and exports at 7.3 million bales. Within the U.S. market, export sales have been rather sluggish, and mill use has declined. Since 1996 mill use has declined from about 11.35 million bales to about 10 million bales for the 2000-01 marketing year. A summary of data for the current situation in U.S. cotton is in Table 3. Overall, 2001 cotton acreage in the U.S. is expected to remain at about the same level as 2000. If average yields are obtained, this would imply a crop of approximately 19 million bales. Given this situation, the U.S. market would expect more than adequate domestic supplies of cotton. Higher prices for soybeans and other grains or some weather-induced crop reduction could help bring the projected cotton supply in balance.



Table 2. World Supply and Use of Cotton, 1997-2000.

Item	Marketing Year			
	1997-98	1998-99	1999-00	2000-01
<b>Supply</b>				
Acreage (million acre)	83.35	81.44	79.51	79.98
Yield (Lint - lbs per acre)	527	501	527	537
Beginning Stocks	40.06	43.68	44.89	41.16
Production	91.57	84.88	87.36	88.43
Imports	26.17	25.18	28.27	26.83
<b>Disappearance</b>				
Mill Use	57.16	85.35	91.87	82.21
Exports	26.76	23.75	27.21	26.66
Ending Stocks	43.68	44.89	41.16	37.39
Stocks-to-Use Ratio (ending stock)	76.42	52.60	44.80	40.55
"A" Index	72.12	58.94	52.86	62.74

Source: World Agricultural Supply/Demand Estimates, USDA, January 11, 2001.

Table 3. United States Supply and Use of Cotton, 1997-2000.

Item	Marketing Year			
	1997-98	1998-99	1999-00	2000-01
<b>Supply</b>				
Planted Acreage (million acre)	13.90	13.39	14.87	15.54
Harvested Acreage (million acre)	13.41	10.68	13.42	13.10
Yield (Lint - lbs per acre)	673	625	607	631
Beginning Stocks	3.97	3.89	3.94	3.92
Production	18.79	13.92	16.97	17.22
<b>Disappearance</b>				
Mill Use	11.35	10.40	10.24	9.80
Exports	7.50	4.43	6.75	7.30
Ending Stocks	3.89	3.94	3.92	4.10
Average Farm Price (cents per lb)	65.20	60.20	45.00	55.10

Source: World Agricultural Supply/Demand Estimates, USDA, January 11, 2001.

## **LOUISIANA SITUATION AND OUTLOOK**

In 2000, an estimated 2,633 farmers planted 690,000 acres of cotton in Louisiana. This is an increase of more than 80,000 acres compared to the 1999 crop. Lint yield per acre was an estimated 633 pounds, down 74 pounds from 1999. The estimated on-farm value of the 2000 crop, including seed, was \$235,061,073. This is substantially less than previous years when the state cotton crop has been valued at as much as \$500,000,000. Cotton remains one of the three major row crops grown in Louisiana, the others being sugar and rice.

Acreage is expected to increase in 2001 by 10% to 12%. Cotton acreage for the state is estimated at 760,000 - 770,000 acres for 2001. This increase in acreage is caused by depressed markets in most major row crops grown in Louisiana and optimism in regard to the recently implemented Boll Weevil Eradication program. The Boll Weevil Eradication program has been very successful in the first full year in the northeastern section of the state. The program is nearing completion in the Red River region and has almost totally eradicated the boll weevil from that cotton-growing area. Escalating production costs and low prices for 2001 perpetuate an already difficult situation for producers.

Transgenic or genetically altered varieties that possess weed and/or insect resistance constituted close to 90% of the varieties planted in 2000. This trend is expected to continue in 2001.

The use of reduced tillage methods to produce cotton has become widespread in recent years and will likely increase further in 2001. Producers cite ease of planting and stand establishment, ability to plant in adverse (wet) weather and possibly

increased yield as primary reasons for favoring it.

Marketing continues to be an extremely important part of a complete farm management plan. A 1995 survey of the state's cotton growers revealed that 81.3% forward contract at least part of their cotton. Another large group (79.1%) sell part or all of their crops at harvest. Many producers use a combination of practices to market their crops that may include hedging and the use of options.

After the extremely dry conditions of 1998, 1999 and 2000, producers are more concerned with irrigation techniques than ever before. Irrigation consistently increased yields in 2000. Irrigated acres are expected to increase in 2001.

A survey of Louisiana cotton producers conducted in 2000 revealed that LSU AgCenter programs targeted toward variety development were considered the most pressing need. Insect management and weed control were second and third, respectively, across all cotton-growing areas. Research and education programs in the area of irrigation were considered very important.

The analysis of data collected in the survey of cotton producers in Louisiana indicated that cotton variety development continues to be a high priority. Insect management and weed control are also high priorities. Weather was identified as the major problem facing farmers within the past three years. Low prices and inconsistent yields also were noted as major problems.

## **MARKETING DECISIONS FOR 2001**

The continued drawdown in world stocks, however slight, is an optimistic note for cotton producers. Foreign mill demand

has increased, and a continued strong demand by foreign mills is a positive sign for cotton prices. With the ending stock-to-use ratio projected to be approximately 38% for the 2001-02 marketing year, the "A" Index is expected to be in the 70 cent range. Historically, the U.S. price has followed the "A" Index and, if this continues in the next year, producers could experience cotton prices in the 65-75 cent range. With the higher "A" index, producers would not receive LDPs but would likely receive higher market prices for their cotton. The net price, however, would likely be lower than the price received in 2000 including the LDP.

A number of economic factors could come into play during the 2001-02 marketing year. There are continuing signs that the U.S. economy is slowing somewhat and the dollar weakening. Some of the Asian economies are slowly improving, and Europe is stabilizing. These factors could have a significant impact on world demand and our ability to export a sufficient quantity of cotton to avoid building domestic stocks.

With uncertainty in the market, marketing skills will become increasingly important. If individuals are not comfortable marketing their crops, they should consult outside expertise. This could take the form of hiring someone to market a crop or

joining some type of marketing association that markets crops for its members. In either case, it is important for individuals to know the basics of supply and demand as well as to understand the technical charts. This information, coupled with a well-developed marketing strategy and plan, will enable individuals to take advantage of pricing opportunities that result from seasonal changes or bad weather during the planting season.

# SOYBEAN OUTLOOK

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## INTRODUCTION

As with the last three years, the overriding factor in the current soybean market continues to be large supplies. Record U.S. production in 2000 has helped keep downward pressure on this market in spite of a resurgence of demand in the 1999-2000 marketing year. In addition to large domestic supplies, the U.S. soybean market has had to contend with large world soybean supplies, increased competition from foreign soybean producers and a rebound in the production of competing oilseeds.

## NATIONAL AND INTERNATIONAL SITUATION

Since the inception of the 1996 Freedom-To-Farm bill, soybean acres in the United States have increased steadily. Much of the increase has come at the expense of corn acres as producers moved toward a 50-50 rotational split. In addition, the poor price prospects in both the corn and soybean markets in the last three years have forced producers to use marketing loan rates as the deciding factor in their crop enterprise selections. With the soybean loan rate set at \$5.26 per bushel vs. the \$1.89 per bushel loan rate for corn, many producers have found it difficult to project more profit potential for corn. As a result, soybean planted acres in 2000 swelled to 74.5 million, the highest level ever planted. Despite strong demand, the resulting record production has kept average farm prices thus far in the 2000-01 marketing year under \$4.85 per bushel.

On January 11th, the USDA released two much-anticipated reports: the January Supply and Demand report and the Quarterly Grain Stocks report. In the latest Supply and Demand report, the soybean crop was reduced by 7 million bushels from the December estimate and now stands at 2.770 billion bushels. While the reduction was welcomed, given the large supplies, it was lower than expected by the market. The lower than expected cut in production, coupled with 6% more soybeans on hand on December 1 as compared to the previous year, brought a very negative reaction by the market; soybean futures fell by double digits on the day the reports were released.

The only other major revision made in the January Supply and Demand report was a 5 million bushel reduction in expected domestic crush. Domestic crush had been a bright spot in the market in the first quarter of the marketing year. Improved soybean demand, improved feed demand and the reaction to the European Union's ban on bone and meat meal had significantly boosted domestic crush. Signs of a slowdown have emerged in the past few weeks, however. Reductions in the profitability of soybean crushing have been visible as soybean product values have declined from their peak experienced this fall. Soybean meal has been the driven force in the pace of crush, but the expected significant increase in demand as a result of the EU ban on bone and meat meal has yet to materialize. Increased feed demand by the livestock market will likely keep meal values at respectable levels but not the level needed to maintain profitability for soybean crushers, given the poor performance of the soybean oil market. Soybean oil continues to struggle as world vegetable oil production has rebounded significantly, making it difficult for soybean oil to compete in the world market.

Soybean export expectations remained unchanged in the January 11th report. Soybean export sales are expected to reach 975 million bushels in the 2000-01 marketing year. This would represent a slight increase over the 973 million bushels exported in the 1999-2000 marketing year. Thus far, sales have managed to keep track with last year's record pace and have, in fact, moved ahead of last year's pace. Through January 11, soybean exports have reached 681.8 million bushels, a 11.13% increase over last year's level. While exports have performed well, there are still questions of the ability of the market to maintain this record-setting pace. Historically, export sales begin to lag as South American supplies become available at harvest in February and March. Exports of soybeans during the 1999-2000 marketing year had the luxury of a delayed South American crop and strong China demand. This year, however, the South American crop has potential for an earlier than normal harvest. In addition, China's soybean purchases are expected to moderate from their huge levels of last year.

World soybean production for the 2000-01 marketing year is expected to increase by nearly 10 million metric tons (367 million bushels) over the previous year. The record U.S. crop in 2000 and the record crops expected in Brazil and Argentina make up the bulk of this increase. The Brazil and Argentina crops are expected to increase by 2 and 3 million metric tons, respectively. Extremely favorable weather conditions in both countries and particularly Brazil have many market watchers pegging in record soybean crops. While the USDA estimates the Brazilian crop at 34.5 million metric tons (1.267 billion bushels), many market watchers believe it's just a matter of time before this estimate is increased.

## **LOUISIANA SITUATION**

Soybean acres in Louisiana have been in a downward trending pattern over the past three years, with the 2000 planted acres coming in at below 1 million acres for the first time since 1966. For most producers in Louisiana, soybeans are a secondary crop. As such, with the poor price expectations and the drought conditions over the past three years, producers have been less willing to include significant soybean acres into their crop mixes.

With the outlook for soybeans similar to each of the last three years, it is unlikely that Louisiana will experience any resurrection in soybean acres in 2001. At best, soybean acres may be able to hold steady at last year's level of 930,000 acres. More realistically, Louisiana will likely see a continued downward trend in soybean acres. The only saving factor in terms of the number of acres planted to soybeans is that no other attractive alternative exists at this time.

## **PRICE OUTLOOK**

The soybean market is clearly focused on soybean use and the development of the South American crop. The strong performance of both export sales and domestic crush helped push prices up from the harvest lows to above the \$5.00 level by the beginning of January. The release of the USDA reports on January 11, however, ended this upturn in prices. Despite strong 1st quarter use that showed a 2 million bushel increase over the same period last year, several factors have emerged that would suggest a significant slowdown in use. First, soybean crush will likely begin to moderate as both soybean meal and soybean oil values continue to lag. In addition, the large South American crops continue to loom over this market tempering soybean buyers' eagerness to continue to make purchases. Many soybean

users would rather take a wait-and-see approach because they expect prices to move down once the South American crop gets into full gear. Furthermore, the large amounts of soybeans purchased by China last year are not expected to be repeated this year. Finally, the concerns about soil moisture levels that kept some weather premium in prices last year are not expected to materialize this year. All of these factors will likely keep a limit on any price improvement that may materialize over the next few months.

Looking forward to the 2001 crop, the biggest factor will be the size of the U.S. crop. Early estimates for soybean acres in 2001 call for increases over last year's record levels. The continued movement by producers to a 50-50 rotational split with soybeans and corn would suggest higher acres in 2001. High nitrogen costs are expected to help move corn acres into soybean production. Additional soybean acres in 2001 and normal weather patterns would surely result in record soybean production. Another year of record production would essentially assure this market of another year of below-loan prices. This makes the USDA's recent decision to leave the 2001 soybean loan rate at the maximum level of \$5.26 per bushel a much more crucial development than first realized.

# SUGARCANE OUTLOOK

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## NATIONAL AND WORLD SITUATION AND OUTLOOK

Cane sugar production for FY (October through September) 2001 is projected at 4.168 million short tons (raw value), about 2.5% above the estimated total for FY 2000. Production increases in Florida, Texas and Puerto Rico are expected to more than offset declines in Louisiana and Hawaii; however, recent freezing temperatures in the Florida sugarcane area may have a negative impact on sugar production for that state as well. U.S. sugarbeet production is projected at 4.370 million short tons (raw value), about 3.0% below the record crop of FY 2000. Total U.S. sugar production for FY 2001 is projected at 8.538 million short tons (raw value).

The National Agricultural Statistics Service (NASS) forecasts Florida sugarcane acreage harvested for sugar and seed at 454,000 acres, a decrease of 6,000 acres. Florida's production was projected at 2.130 million short tons (raw value) but could be reduced by as much as 200,000 short tons because of the recent freezing temperatures.

NASS forecasts Louisiana sugarcane acreage harvested for sugar and seed at 490,000 acres, an increase of 35,000 acres over last year. Assuming that 31,600 acres are used for seed, Louisiana cane sugar production is projected at 1.650 million tons (raw value). Lack of adequate moisture for most of the state during the summer reduced production estimates below the record crop of FY 2000.

NASS forecasts Texas sugarcane acreage at 47,000 acres, up 16,000 acres, or 34%, from last year. Sugar production is projected at 160,000 short tons (raw value). Hawaii cane sugar production for FY 2001 is projected at 300,000 short tons (raw value). Since last year several mills have ceased operations on the islands of both Kauai and Maui.

Puerto Rican sugar production for FY 2001 is projected at 22,500 short tons (raw value); however, the two sugar mills on the island are expected to be back in production next year. Sugarcane area is expected to expand to about 11,900 acres, with plans for as much as 300,000 tons of sugarcane.

On August 1, 2000, the U.S. Department of Agriculture (USDA) announced the Payment-in-Kind (PIK) Diversion Program to help sugarbeet and sugarcane growers deal with low prices caused by an excess of domestic sugar. About 100,000 acres of sugarbeets were accepted under the PIK Diversion Program. Under the program, sugarbeet growers could choose to divert a portion of their beet acreage from production in exchange for sugar held by the Commodity Credit Corporation (CCC). Growers are limited to \$20,000 in PIK payments. It is estimated that beet production will be reduced by 320,000 short tons (raw value), because of the decrease in harvested acres primarily due to the PIK Diversion Program.

In general, domestic (No. 14) prices have improved dramatically since mid summer to 21.04 cents per pound on January 19, 2001. The USDA announcement of the PIK Diversion Program, the breakdown in U.S.-Mexico sweetener negotiations, the substantial loan forfeitures from the 1999 crop and the uncertainty about FY 2001 U.S. sugar production have boosted prices to their

current levels. Futures prices are likely to remain volatile in upcoming months because of expectations of the release of Government inventory of sugar into the market, higher FY 2001 beginning stocks, ongoing sugar syrup imports, larger FY 2001 sugar imports from Mexico, uncertainty about U.S. sugar deliveries and the likelihood of continued high U.S. sugar carryover stocks in FY 2001.

For FY 2000, there was an estimated ending stock of 1.934 million short tons (raw value), indicating an ending stocks-to-use ratio of 18.6%. Projected ending stocks are the difference between projected total supply and projected total use. Total supply is constituted by beginning stocks, production and imports. Total use is constituted by exports and deliveries. Total deliveries for FY 2001 are projected at 10.385 million short tons (raw value) with domestic food and beverage deliveries projected at 10.225 million short tons (raw value), about 1% higher than FY 2000. With domestic sugar production projected to fall, a reduction in projected ending stocks should lower the stocks-to use ratio, further strengthening prices.

World sugar production for 2000-01 is projected by USDA at 124.386 million metric tons (raw value), a decrease of 8.757 million metric tons (raw value) from the 1999-2000 crop year. Beginning stocks are projected at 32.993 million metric tons (raw value), an increase of 2.350 million metric tons (raw value) from the previous crop year. Total world domestic consumption is projected at 129.504 million metric tons (raw value), which should help to draw down stocks. Imports/exports are projected at 32.951 million metric tons (raw value), approximately 5.000 million metric tons (raw value) less than the preceding crop year.

The world market spot price reached a high of 11.60 cents per pound on August 3, 2000, and averaged 11.14 cents per pound for August, the highest monthly average since January 1998. According to USDA, some observers believe that the market has peaked, but that its underlying strength will keep it close to its present value through the end of the year.

#### **LOUISIANA SITUATION AND OUTLOOK**

The total acreage reported for the 2000-01 crop set a new record for the Louisiana sugar industry. Although the state experienced another relatively mild and dry winter in 1999-2000 and the crop was off to another good start in the spring and early summer of 2000, the crop suffered from record high temperatures and record low rainfall during the summer growing season that drastically limited growth. This was the second year in a row with abnormally low rainfall, leaving little residual moisture to sustain adequate growth. Sugarcane growth rates suffered, especially in the heavy clay soils. Once the milling season began in mid- to late September, most of the state received adequate rainfall that stimulated late growth but also delayed crop maturity. Although the first two months of the harvest were relatively dry, a wet weather pattern persisted for the remainder of the harvest; measurable rainfall occurred every three to five days. Heavy rains in November and December made harvesting difficult and generated a lot of mud and trash being delivered with the cane to the mills. This extra mud and trash dramatically reduced cane quality and reduced the yield of recoverable sugar per ton of cane.

On November 21, most of the sugarcane area experienced freezing temperatures of 27 degrees to 32 degrees F. Although this freeze caused little real damage to the stalk's storage tissue, most of the leaves in some areas were killed by the freeze. This



limited further sucrose accumulation. Then on December 20, there was the second in a series of many freezes with temperatures as low as 18 degrees F. With these freezes, all stalk storage tissue was affected by the freezing conditions that lasted for more than 12 hours on several consecutive nights. Fortunately, post-freeze temperatures remained low for most of the duration of the harvest with minimal loss of either recoverable sugar per ton of cane or standing cane left in the field because of deterioration. These weather conditions, however, ultimately resulted in less than normal yield of recoverable sugar per ton of cane in many areas.

Overall, the 2000-01 crop was still the second largest crop in total production of sugar and the seventh consecutive crop above the 1 million tons for Louisiana. Sugarcane was grown on 491,994 acres by 785 growers in 24 parishes. An estimated 457,554 acres were harvested for sugar, with a total production of 1,559,313 tons of sugar. Sugar produced per harvested acre was 6,783 pounds, and sugar produced per total acre (including acres used for seed) was 6,339 pounds or approximately 5% lower than the yield reported in 1999. The gross farm value of \$365,068,377, as reported in the crop production statistics, is 61% of the total value of the sugar and molasses produced, with the remaining 39% going to processing and marketing. The value of the crop retained for processing and marketing is estimated at \$233,404,360. Therefore, the total estimated value of the 2000-01 crop at the first processing level is \$598,472,737.

The 2000 planting season was characterized by dry weather, with most growers completing planting by early September. Many planted billets (20- to 24-inch stalk pieces containing three to four vegetative buds) cut by the combine harvester instead of planting whole stalks cut by the

“soldier” or whole-stalk harvester. Although billeted planting is not recommended because of generally lower yields, growers are switching to this method of planting because of ease of planting and reduced labor costs. Because of the uncertainty of price, Louisiana’s sugarcane acreage is expected to remain relatively stable with little further expansion above the 490,000-acre mark.

# **RICE OUTLOOK**

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## **INTRODUCTION**

Ample supplies and weak prices characterize both the domestic and international rice markets in 2001. In the United States, a near record 2000 crop, reduced exports and weaker international prices are behind the bearish outlook. U.S. farm prices have been declining since September of 1998 and remained at low levels throughout 2000.

Globally, record or near record crops in nearly all exporting countries, except China, combined with a decline in import demand, have been responsible for the weaker world prices. Internationally traded rice prices have generally declined since late 1998, when record purchases by Indonesia and the Philippines were completed.

## **WORLD SITUATION AND OUTLOOK**

Since last summer, international rice prices have been the lowest in seven years, a result of bumper crops in 1999-2000 in most major exporting countries, and, except for Iran, no significant production problems were reported in a major importing country. For 2000-01, even with global rice production projected to drop more than 1 percent from a year earlier record to 397.7 million tons (milled basis), there is little expectation of any price strengthening. This forecast assumes normal weather for the remainder of the 2000-01 market year. A major weather problem could alter this projection.

China accounts for the bulk of this year's expected reduction in global rice production, but China is expected to have plenty of supplies for both its domestic market and to expand exports. Other major exporters – Thailand, Vietnam and India – are expected to produce record or near record crops in 2000-01. Drought reduced Pakistan's crop in 2000-01, and the United States' crop is down because of weaker plantings. With the exception of a severe drought in parts of the Middle East that has reduced crops in Iran and Iraq, most major importers expect to harvest bumper crops in 2000-01.

Global rice trade is projected at 24.6 million tons in 2001, up 8% from a year earlier but still 10% below the 1998 record of 27.3 million tons. On the import side, Indonesia accounts for the bulk of the increase in global trade, with imports expected to rise 1 million tons to 3 million, a result of steady production and rising population. Iran and North Korea are the only other countries where imports are projected to rise more than 100,000 tons in 2001. Smaller increases in imports are projected for the Philippines, Saudi Arabia, Russia, Cuba, Guinea and China. In contrast, imports are projected to decline in 2001 for Bangladesh, Malaysia and South Africa. On the export side, Thailand, Vietnam, India and China are all expected to ship more rice in 2001. Pakistan's exports are projected to drop slightly, and U.S. exports are expected to remain unchanged from 2000. Both Australia and Egypt are projected to export more rice in 2001, indicating strong competition with the United States in the eastern Mediterranean.

Global rice prices have remained relatively unchanged since July 2000. Quoted prices for Thai 100% Grade B have averaged about \$190 per ton since mid-July, with prices trading within a very narrow range around this level. These are the lowest quoted prices

for any significant period since the late 1980s. Prices for Vietnam's 5% broken have remained between \$175 to \$185 since July, even with severe flooding during much of late summer and fall.

#### **UNITED STATES SITUATION AND OUTLOOK**

Total U.S. rice supplies for 2000-01 are projected at 230.2 million hundredweight (cwt) (rough basis), down more than 3% from a year earlier record. A 7% drop in production to 192.4 million cwt is behind the projected smaller total supplies. In contrast, beginning stocks and imports are up slightly from a year earlier.

U.S. rice plantings for 2000-01 are estimated at 3.11 million acres, down 12% from a year earlier near record. Lower prices, as well as some drought-related problems in Louisiana, are behind this year's decline in acreage. In contrast, the average yield is projected to be a record 6,236 pounds per acre, up 6% from a year earlier. Generally good weather in most rice-producing areas and a greater share of total U.S. plantings in California -- which achieves the highest yields in the United States -- are behind the stronger yield this year.

Long grain accounts for almost all decline in production. Long grain production in 2001 is projected at 130.6 million cwt, down 14% from a year earlier record. Low prices at planting were behind a major drop in long grain plantings across the South. In contrast, combined medium/short grain production is projected to rise 14% to 61.8 million cwt, the largest since 1994-95. The larger crop is the result of expanded acreage in both California and in the South. California produces the bulk of the United States medium/short grain crop and is expected to produce a record crop in 2000-01. At planting, medium grain prices were substantially higher than long grain prices.

Total use is projected at 202.9 million cwt in 2000-01, down nearly 4% from a year earlier record. Exports account for all of the expected decline in total use. Domestic disappearance is projected to increase fractionally. U.S. rice exports are projected to drop more than 10% to 80 million cwt, the lowest since 1996-97. While rough rice exports are projected to remain virtually unchanged at 25 million cwt, milled rice exports are projected to drop 14% to 55 million, the smallest in more than 20 years. Smaller U.S. supplies and expectations of very strong price competition in the international market are behind the substantial drop in U.S. milled rice exports.

With both total supply and total use each declining by nearly 8 million cwt, ending stocks are projected to drop just fractionally to 27.3 million cwt in 2000-01. The stocks-to-use ratio is projected at 13.4 %, barely above a year earlier 13.1%.

The 2000-01 season-average farm price is projected at \$5.75 to \$6.25 per cwt, with a mid-point of \$6.00, nearly unchanged from a year earlier \$6.11. The price situation by grain type is expected to be very different, however. Long grain prices have already risen from the recent lows of last spring and summer, a result of expected tighter supplies and several food aid purchases early in the 2000-01 market year. In contrast, medium/short grain prices began dropping at harvest in both the South and California from the relatively high levels of the past two years. The recent decline was caused by much larger supplies this year.

U.S. prices for both long and medium grain milled rice are well below a year earlier. In late November, prices for high quality southern long grain (U.S. No. 2, 4% broken, fob mill in Houston) were quoted at \$276 per ton, down from almost \$300 a year earlier;

however, U.S. long grain milled prices were as low as \$248 in May before rising on several large food aid purchases and expectations of tight supplies in 2000-01. Prices for California medium grain milled rice (U.S. No. 1, 4% broken, fob mill in Sacramento) were quoted at \$342 per ton in late November, down from \$452 a year earlier. Prices for California medium grain have been dropping since mid-summer on expectation of a record California harvest.

## **FEED GRAIN OUTLOOK**

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### **INTRODUCTION**

With another large corn crop in 2000, the 2000-01 marketing year had all the markings of another in the line of years with large supplies, burdensome stocks, and low prices. With improved prospects for demand and the potential for reduced corn production in 2001, however, the corn market began, what many thought, was a resurrection to a more attractive price range. From the end of harvest through the beginning of January 2001, the corn market had been, for the most part, in an upward trending pattern. Expectations for a slightly lower-than-projected 2000 production level, prospects for increased feed demand, and lower world corn and feed grain production all pointed to better times for this corn market. Unfortunately, this momentum came to an abrupt halt with the release of the January 11th Supply and Demand report and the Quarterly Grain Stocks report. Both reports shocked the market by indicating higher-than-expected supplies and lower-than-expected use during the first quarter of the 2000-01 marketing year.

### **NATIONAL AND INTERNATIONAL SITUATION**

U.S. corn production for the 2000-01 marketing year was estimated at 9.97 billion bushels in the January 11th Supply and Demand report. This was an 86 million bushel decrease from the December estimate but is still an increase over the previous year of more than 500 million bushels. With the large production figure, total corn supplies in

the United States for the 2000-01 marketing year now stand at 11.7 billion bushels, the largest since the 1987-88 marketing year. While the reduction in corn production in the January report was expected, the real surprise came from the magnitude of the reduction. The 9.97 billion bushel production figure was at the high end of trade guesses and was viewed as bearish by the market. The higher-than-expected production figure was supported by a grain stocks report that showed 6% more corn stocks on hand on December 1, 2000, compared to the previous year. With both reports providing fuel for the market bears, corn futures prices fell from \$0.05 to \$0.06 and are now about \$0.15 below the pre-reports level.

While the corn market is limited by the large supplies, the grain sorghum market finds itself with a relatively small crop. Sorghum production was set at 470 million bushels in the January report, a 2% increase over the December report but a 21% decrease from the 1999 production level. The 9.2 million acres of sorghum planted in 2000 was the smallest level seen over the past 20 years, and the production level of 470 million bushels is the smallest level since 1995 when the yearly average price rose to more than \$3.00 per hundredweight. The major difference from the 1995 situation and today's situation for sorghum is that, in 1995, the corn crop was at relatively low levels and the high corn prices were able to carry sorghum prices up as well. This year, however, large corn supplies and poor price performance will limit the ability of sorghum prices to move higher, regardless of the tight supply situation. What the small sorghum crop has done, however, is allow sorghum prices to strengthen in relation to corn prices. While sorghum prices have historically been 80% to 90% of the price of corn, they are running in the range of 95% to 97% of the value of corn.

On the demand side of the equation, reductions were seen in the expected use of corn while sorghum use increased slightly. The estimate for corn exports for the 2000-01 marketing year was dropped by 50 million bushels on increased competition and a slower-than-expected export pace thus far in the marketing year. Through mid-January, corn exports lagged the previous year's pace by roughly 140 million bushels (a 13% decrease). Increased competition and the controversy of Starlink corn have helped dampen the demand for U.S. corn. Argentina has been aggressive in the market with old-crop corn sales, and a large corn crop in Brazil is expected to increase Brazil's role in the world market. The only bright spot in the current situation for corn exports is that the USDA, despite reducing its expectations in January, still remains optimistic about how exports will finish up the 2000-01 marketing year. The USDA's estimate of 2.150 million bushels represents a 10% increase from the previous year. While Argentina has been aggressive with sales, a smaller crop in 2001 will help to temper its ability to remain active in the world market in the 1st half of the 2001-02 marketing year. In addition, a smaller crop in the China and increased domestic use in the European Union should help reduce the amount of competition for world market share from both.

Feed use for corn was decreased in the January report. The estimate for feed use was reduced by 75 million bushels to 5.775 billion bushels. This, however, is a 111 million bushel increase from the previous year. Despite the grain stocks report showing a slower-than-anticipated pace of feed use in the first quarter of the marketing year, a strong livestock sector should help keep feed demand at relatively strong levels. The Cattle on Feed report indicated cattle in feedlots was up 2% in December and that total beef production is expected to be up slightly in

2001. The poultry industry is projected to continue its expansion in production, and the pork sector is expected to increase production by 2%. All of these factors should continue to give support to feed demand. In addition, the extremely low temperatures experienced in the last portion of 2000 and the beginning of 2001 should help boost feed demand as livestock producers are forced to increase the amount of grain fed.

Food, seed, and industrial use were decreased by 10 million bushels in the January report. But much like the other sources of demand for corn, food, seed, and industrial use is expected to increase in the 2000-01 marketing year over the previous year. Much of the increase is attributed to increased ethanol production. The high fuel prices experienced for most of 2000 have increased the competitiveness of ethanol in the market and helped to spur additional production.

The estimate for world coarse grain production for the 2000-01 marketing year now stands at 858 million metric tons, down 18.2 million metric tons from the previous year. This would be the lowest level of coarse grain production in the last five years. Global corn and sorghum production declines make up the largest portion of the reduction in coarse grain production. World corn production for the 2000-01 marketing year is expected to decrease by 20.72 million metric tons from the previous year. World ending stocks of both coarse grains and corn are each expected to drop by more than 20 million metric tons. The lower world production and lower world stocks level should help ease competition in the world market in the later half of the 2000-01 marketing year and the beginning of the 2001-02 marketing year.

## LOUISIANA SITUATION

After reaching a peak of 700,000 acres in 1998, corn acres in Louisiana saw a dramatic reduction in 1999 -- falling 340,000 acres, more than a 50% decrease. The biggest factors in the huge decrease experienced from 1998 to 1999 were the drought and related aflatoxin experienced in 1998. The difficulties producers faced in 1998 significantly affected their crop enterprise selections in 1999. Corn acres did rebound slightly, however, in 2000, increasing by 40,000 acres to 380,000 acres. Near record yields in 1999 eased some of the concerns held by producers and a lack of truly attractive alternatives ultimately led to the increased acres in 2000.

Unlike corn acres in Louisiana, sorghum production has interested by producers in the state. While corn acres declined by more than 50% from 1998 to 1999, sorghum acres increased by 85%. Sorghum acres did, however, fall slightly in 2000, but two consecutive years of record production (82 bushels per acre in 1999 and 83 bushels per acre in 2000) should help stabilize sorghum acres.

With the price outlook for corn taking a major hit with the January reports, it is difficult to anticipate any increase in corn acres for 2001. In addition, with the drought conditions experienced in each of the last three years and the related aflatoxin problems faced by producers, many producers may shy away from increasing acres and, in fact, reduce corn production. Sorghum production, on the other hand, may see some increased interest by Louisiana producers. With direct costs of producing sorghum roughly one-half that of producing corn, and with sorghum prices running 95% to 97% of the value of corn, Louisiana producers may attempt to increase sorghum's share of their total crop mix.

## PRICE OUTLOOK

With corn prices gaining value in November and December and with projected world corn production expected to fall dramatically in the 2000-01 marketing year, all factors pointed to higher corn prices. In addition, when the fact that early projections called for as much as a 2-million acre reduction in corn acres in 2001 was factored into the equation, the prospects for corn looked extremely strong. That all came to an abrupt halt, however, when the January reports were released. While the initial reaction to these reports has been fairly severe, it is important to not lose sight of the fundamental factors that still exist. World production of both coarse grains and corn in 2000-01 will likely be the lowest in the last five years. This should help alleviate some of the effect of the large supplies that exist in the United States and the world.

For corn prices to rebound from the aftermath of the January reports, exports and domestic use will have to play a huge role. Exports, in particular, will have to increase pace dramatically to give this market more confidence in USDA's estimate of record export sales. Several strong weeks of export sales could do a great deal toward helping this market regain some of the lost momentum. A significant reduction in corn acres in 2001 could also give some additional support to this market. This, however, has become a more difficult task with the increase in corn ending stocks seen in the January reports. The increase in ending stocks to 1.86 billion bushels will likely require for a more-than-expected decrease in corn acres to get this market excited.

Despite the roller coaster this corn market has been over the past few months, there is still some potential for a slight strengthening of prices over the previous year's level. This would be particularly true if

there are weather problems in the United States or in another major producing region. While the U.S. ending stocks situation gives some cushion for this market to absorb production scares, the world ending stocks situation has improved significantly enough that adverse weather could get this market stirred up. While the fundamental supply and demand factors of the sorghum market all point to an improved outlook, sorghum prices are obviously limited by corn prices.



# WHEAT OUTLOOK

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## INTRODUCTION

Unlike many of the other commodities grown in Louisiana, wheat production in the United States has seen declines in both planted acres and production since 1996. With lower production and smaller total supplies of wheat in the United States, the expected outcome would be an improvement in prices. Unfortunately, wheat producers have not experienced dramatically improved prices. Some of the blame on weak prices in the face of decreasing supplies must be placed on wheat demand. Nearly at the same time at which the wheat market saw decreased acreage and smaller supplies, total wheat demand began to falter. From the 1997-98 marketing year to the 1998-99 marketing year, total wheat use fell by nearly 600 million bushels. Despite the lower supplies, the anemic demand for wheat resulted in significantly higher ending stocks. This effectively eliminated any of the impact of reduced supplies. With two additional years of lower supplies and with improved wheat demand, however, the market may finally be at a point at which the lower production levels may indeed spur price improvement.

## NATIONAL AND INTERNATIONAL SITUATION

With the 2000-01 more than half over, the biggest factors in the current wheat market are the pace of wheat exports and the size of the 2001 winter wheat crop that will be harvested later this spring and summer. In the January Supply and Demand report issued by the USDA, total wheat use increased by 48

million bushels over the December estimate. The current total wheat use figure of 2.454 billion bushels is a 64 million bushel increase over the previous year. The biggest component of the expected increase in total use is a 35 million increase in wheat exports over the previous year, a 3% increase. Despite the lower production and higher demand in the 2000-01 marketing year, wheat prices have yet to move upward significantly. Concerns of the market to reach USDA's current projections for wheat use have been the biggest drag on this market.

Through mid-January, U.S. exports of wheat were running about 2% below last year's pace. This is particularly troubling, given that USDA is calling for increased exports for the entire marketing year. For this objective to be met, the performance of wheat exports will definitely have to improve. To meet USDA's export projection, weekly shipments must average over 25 million bushels per week from now until the end of the 2000-01 marketing year on May 31. Adding to concern over wheat use was the Quarterly Grain Stocks report. Even though wheat stocks on December 1 were 4% lower than in 1999, wheat use in the September-December quarter was 2% lower than in the same period in 1999.

While short-term prices will likely be affected by the performance of both domestic use and exports of wheat, the price paid for wheat harvested this spring and summer will likely be determined by the performance of this winter wheat crop. Hard red winter wheat acres were placed at 28.9 million acres in the January report. This is a 5% decrease from the previous year. Texas and Oklahoma lead the way in smaller acres, with Oklahoma having 700,000 fewer acres and Texas 400,000 fewer acres. The soft red winter wheat acres also are down for the 2001 harvest season. Soft red winter wheat acres

are estimated at 8.9 million acres, down 6% from the previous year.

In addition to the reduced acres, the other factor on the mind of the market is the condition of the winter wheat crop. Adverse weather at harvest and through the first part of the growing season has left many areas in which emergence has been hindered. Both in Texas and Oklahoma, dry conditions followed by excessive rainfall and extreme cold have hindered the progress of those state's wheat crop. The adverse conditions early in the planting and growing seasons have left many areas in both states reporting emergence of the wheat crop of more than a month behind. In addition, the extreme cold experienced over the region in December and January has stopped wheat growth and some freeze damage was reported.

The hard red winter wheat crop in Kansas (the leading hard red winter wheat-producing state) was rated with only 46% of the crop in good to excellent condition. Later-than-normal emergence followed by dry conditions across most of the western part of the state has started to take a toll on the progress of the wheat crop. The wheat crop in Colorado also has experienced slow development, with some of the crop having a poorly developed root system that could give rise to problems as harvest nears.

The world wheat market has trended in much of the same fashion as the U.S market. Current estimates for 2000-01 world wheat production indicate a world wheat crop of 578.81 million metric tons, down 1.5 million metric tons from the December estimate and down 9 million metric tons from the previous year. This would be the lowest level of world wheat production in the last five years. Reductions in the United States, China and Australia are expected to more than offset the record wheat crop expected for

India. With the large reduction in world wheat production and only minimal reductions in world wheat consumption, world wheat stocks are expected to fall for the third consecutive year to the lowest level in five years.

#### **LOUISIANA SITUATION**

Wheat production in Louisiana has never been and will likely never be a major component of the crop mix in Louisiana. After reaching a peak of 400,000 acres in 1990, wheat acres in Louisiana have averaged only 151,000. Louisiana producers planted 160,000 acres for production in 2001. In the past three years, many producers have had some increased interest in wheat production, primarily as a source of cash flow for their enterprises. For the most part, producers who have planted wheat in the past three years have had success. The unusually mild and particularly dry winters the past few years have resulted in very good yields. The 10-year average of wheat yields in Louisiana is roughly 38 bushels per acre. With the favorable conditions in 1999 and 2000, however, average Louisiana yields have been 47 and 53 bushels per acre, respectively.

With a return to more normal winter conditions, it may be difficult for Louisiana yields to stay at the same levels experienced the past two years. Producers may find it increasingly difficult to include wheat in their crop enterprise mix. The wild card to acres planted in Louisiana this fall will likely be the performance of wheat prices from now until planting time. If wheat prices do indeed move higher through the fall, producers may find it difficult to leave wheat out of their farming plans.

## **PRICE OUTLOOK**

With fewer acres, lower production, and steady to slightly increasing demand, all of the fundamental supply and demand factors point to an improved price situation for wheat. With winter wheat plantings the lowest since 1971 and with the production problems already faced by this crop, it is difficult to imagine prices staying at their current levels. In addition to the decreased supply level in the United States, world production for the 2000-01 marketing year is projected at a five-year low.

The only really negative factor in the market at this point is the slow pace of exports. With exports running 2% below last year's pace, many market watchers question the market's ability to reach the USDA's projection of wheat of 1.125 billion bushels. The market will likely need to see several weeks of good export numbers strung together to get prices moving higher short term. Looking farther out to the harvest of this winter wheat crop, price movement will almost certainly be tied to the progress of the crop. The \$3.15 area for the July wheat futures contract at the Chicago board of trade has proved to be a key resistance level for the past two rallies. That will likely be an important price target to watch.

# **SWEET POTATO OUTLOOK**

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## **National Situation and Outlook**

The estimated planted sweet potato acreage for 2000 was 96,000, up about 11,000 from last year. With drought and insect problems, however, fewer than 96,000 acres were harvested. Most of the increase in planted acreage came from North Carolina, with a reported 5,000-acre increase, Louisiana with a 2,000-acre increase and Mississippi with a reported 2,000-acre increase. North Carolina, with approximately 40,000 acres, and Louisiana, with approximately 27,000, accounted for more than 60% of the national acreage. Other major producing states are California, Mississippi, and Alabama. Acreage and production in East Texas have dropped significantly with three consecutive years of drought. Acreage in George and South Carolina, two previous major producing states, has basically vanished. The anticipated 2001 planted acreage is expected to stabilize at the current level. The Beauregard variety developed by the LSU AgCenter accounts for 75% or more of the acreage grown in the United States. Plantings of virus-tested Beauregard seed and plants will increase and could result in higher yields and quality.

Per capita consumption of sweet potatoes is around 4 pounds compared to 126 pounds for Irish potatoes. Unfortunately, sweet potatoes are considered a holiday food, and most of the consumption occurs around Thanksgiving, Christmas and Easter, even though sweet potatoes are available all year either fresh or processed. The nutritional value of sweet potatoes, especially the high beta-carotene content that has been shown to

reduce the risk of certain types of cancer and stroke, makes it an attractive vegetable nutritionally. Louisiana, North Carolina and California have national advertising and promotional efforts, but they lack the funds to cover the United States adequately. The low per capita consumption means there is little room for increased acreage and production. A small overproduction has a significant negative impact on prices producers and shippers receive.

Prices for the 2000 crop were lower than expected, especially for the early crop, because of sales of "kiln dry" potatoes from the stored 1999 crop. North Carolina reported a "normal" crop for 2000 because of excess rain in some parts of the production area. Louisiana, Texas, Mississippi and Alabama experienced severe drought and extreme temperatures that not only reduced production, but also slowed sizing of the crop. A severe sweet potato weevil infestation in south Louisiana further reduced marketable yields. California, on the other hand, reported a bumper crop, resulting in lower than normal prices for Thanksgiving.

There is some concern that the "green" sweet potato market (potatoes harvested and marketed in July, August and September) will become a smaller component of sales. This is the result of an increase in curing and refrigerated storage facilities, especially in North Carolina. These facilities give shippers/brokers the ability to sell last year's "kiln dry" potatoes during the summer when Louisiana and other southern states normally sell "green" sweet potatoes. The kiln-dried sweet potatoes are sweeter than green or freshly harvested, and the skin is set and doesn't damage as badly when washed and packed. The cured potato is a more attractive product. Growers who have been selling "green" potatoes may be at risk of losing market share.

There also has been movement of Louisiana-grown Beauregards by North Carolina shippers/ brokers. The appearance and taste of Louisiana-grown Beauregards are perceived as better than the North Carolina-grown Beauregards, and buyers often ask for the Louisiana product. This has caused some North Carolina shippers to look to Louisiana for Beauregard sweet potatoes. One North Carolina shipper/broker has purchased a production and packing facility here. Another major North Carolina broker buys and ships Louisiana Beauregards.

#### **LOUISIANA SITUATION AND OUTLOOK**

In 2000, Louisiana's growers harvested about 25,000 of the 27,000 acres planted. Delays in sizing because of the drought and temperature extremes caused the harvest to begin about three weeks late. Late season rains prevented harvesting of significant acreage. Average yields statewide were considerably lower than normal because of weather and also the weevil infestation in south Louisiana. There has been a major shift in the acreage in Louisiana. West Carroll Parish now has about 30% of the state acreage, and the combination of West Carroll, Morehouse and Franklin parishes accounts for more than 60% of the state acreage. Ten years ago St. Landry, Evangeline and Avoyelles made up about 70% of the state acreage. Canner prices averaged about \$2.00 per bushel. There is concern among sweet potato producers about the price received for canners and whether it is feasible to harvest them. The new 4-row bulk harvesters allow a high percentage of the canner size roots to fall back on the ground. This could affect the quantity of canners available.

Soil insects continue to plague sweet potatoes. The cost of pesticides, less than adequate control and reduction in marketable yield as a result of soil insects are major concerns. Louisiana remains the leader in

quality in fresh sweet potatoes. The grade standards used and the Beauregard variety have allowed Louisiana shippers to recapture lost markets and maintain traditional ones. High-grade standards will have to be maintained by shippers to keep the markets that have been recaptured. There is, however, some concern that the virus-tested Beauregard now grown in North Carolina on about half of its acreage will increase the level of competition for Louisiana shippers.

Publicity about the nutritional benefits of beta-carotene continues. Sweet potatoes have four times the RDA of beta carotene, plus a high dietary fiber content, and they contain about one-third of the RDA vitamin C, essentially no fat and cholesterol. Several major restaurant chains have begun to offer baked sweet potatoes on their menus. The popular "Sugar Busters" diet promotes sweet potatoes over traditional Irish potatoes as being more nutritional and less fattening. This information could lead to a greater per capita consumption of sweet potatoes and a more stable market if funds are available to promote the message. The outlook for 2001 is for acreage to decrease by about 5% below the 2000 acreage.

# COMMERCIAL VEGETABLE OUTLOOK

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## NATIONAL SITUATION

Per capita use of fresh vegetables in the United States has trended steadily upward the past 25 years, rising from a level of 110 pounds farm weight in 1976 to 138.5 pounds in 1990 and on to 165 pounds in 2000 (USDA/ERS ). The trend appears to be continuing. This increase has occurred as the result of increased awareness of the health benefits of fresh vegetables. Information about these benefits has been demonstrated by research, and government policy in the form of dietary recommendations has helped stimulate consumption. Also, industry efforts to enhance quality and to get dollars into promotional efforts have been put in place. Broccoli was the most impressive gainer among fresh vegetables, moving from 1.1 pounds to 5.7 pounds over the period. Some of the most important fresh vegetables grown in Louisiana also were ahead of this trend. Per capita use of bell peppers increased from 2.7 pounds to 6.8 pounds, cantaloupes moved from 5.3 pounds to 12 pounds and cucumbers more than doubled. Other important products didn't share fully in the trend. Tomatoes and watermelons increased by 40% to 50% over the period. Still others were stagnant - sweet corn, cabbage and eggplant are examples of this group.

Strength in demand brought price increases. In an overall context, the consumer food price index for fresh vegetables rose from a 1982-84 base of 100 to a level of 240 in October 2000. In other words, the products a consumer paid \$1.00 for in that base period now cost \$2.40.

## LOUISIANA SITUATION

In Louisiana, the vegetable industry involves 2,300 growers who produce 50 different vegetable crops for a farm value of \$38 million. The two largest vegetable-producing parishes are Plaquemines and Tangipahoa with farm values of \$3.5 million and \$3.0 million, respectively. Plaquemines growers produce tomatoes, eggplant, cauliflower, mustard greens, collards, turnips, cucumbers and squash for the wholesale markets. Many produce these and other vegetable crops for local sales. Tangipahoa Parish growers produce bell peppers, cucumbers, cabbage, tomatoes and eggplants for wholesale markets. In these parishes, vegetable production has been stable for several years, and no changes are expected.

In Northeast Louisiana, several farmers have produced machine-harvested butter beans and southern peas during the last several years. These farmers sell shelled beans and peas at the farm and to fruit stands and grocery stores. Because of good demand level and a high quality product, prices have been good. Strong prices and good yields in the last two years have made this enterprise successful.

Overall, the commercial vegetable industry in Louisiana has declined in acreage in recent years, but farm value has been steady to a little higher, mainly because of the higher prices growers have received for produce by direct marketing. Several farmers' markets operate in the state, providing a means for growers to move a considerable amount of produce directly to the consumers at a retail price. Higher prices in the wholesale markets also have contributed to the stability of farm value of commercial vegetables.

# NURSERY CROP OUTLOOK

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## NATIONAL SITUATION

Production of commercial nursery crops (woody ornamentals, floriculture/bedding plants, foliage and fruit/nut trees) continued to increase nationally in 2000. Wholesale production increased 4% to 5% for woody ornamentals in 2000, and floriculture/bedding plant crops increased by 2% to 3%. Foliage and fruit/nut tree crops were similar to 1999 levels. The strong national economy since the early 1990s has positively influenced production and sales. Similar increases in production are expected in 2001, and most forecasters anticipate continued growth in wholesale nursery crop sales through 2002.

## LOUISIANA SITUATION

Woody ornamentals are responsible for most of the wholesale farm gate commercial nursery crop value in Louisiana. The LSU AgCenter estimated \$58 million in woody ornamental production at the wholesale level in 2000. Production has increased significantly in the last five years. Major crops produced are azaleas, hollies, crape myrtles, Indian hawthorns and ground covers. Field production is losing acreage. Container production is increasing in acreage. Growers are expanding production into larger container sizes, too. Acres in production are increasing significantly. The summer drought in Louisiana and Texas significantly reduced woody ornamental sales in 2000, especially in the Forest Hill area.

Floriculture/bedding plants typically represent about 30% of Louisiana's nursery crop production. About 40% of bedding plant/floriculture crop sales at the wholesale level occur during the late winter and early spring. Floricultural crop and bedding plant production (includes poinsettias, garden mums, lantana, impatiens, petunias and periwinkles) is projected to increase by 2% to 3% in 2001, but the success of this projected increase will depend on the early spring retail sales period. Summer and fall droughts in Louisiana in 2000 significantly reduced retail garden center bedding plant sales.

Foliage plant production in Louisiana has slowed in recent years. Most foliage sold at the retail level now is imported from Florida. This has hurt Louisiana foliage producers. Interest in wholesale production of tropical plants, however, has increased recently in Louisiana, and a number of greenhouse growers have profitable markets for these products.

Louisiana's fruit/nut tree production has experienced a slight increase in the last several years at the wholesale level. Availability of container-grown improved pecan cultivars is significantly below market demand.

# **POULTRY AND EGGS OUTLOOK**

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## **NATIONAL SITUATION AND OUTLOOK**

Total broiler production for 2000 is an estimated 30.4 billion pounds, which is up 2% from 1999. Wholesale price of broilers averaged 56.2 cents per pound, down 2 cents per pound from 1999. Despite the lower wholesale price of broilers, producer net returns remained in the double digits (10.28 cents/pound, Dec. 2000) because of continued low feed prices. Total broiler exports for 2000 are estimated to be 11% higher than in 1999. Increased exports are caused by an increase of 94% in shipments sent to Russia and an increase of 18% in shipments sent to Hong Kong/China. Egg production increased 1.7% in 2000, and egg prices increased 3 cents per dozen. Per capita consumption of eggs increased an estimated 0.9%.

In 2001, broiler production is expected to be similar to 2000. Broiler prices are expected to remain the same in 2001, and producer net returns are not expected to remain in the double digits. Therefore, broiler producers have begun to slow production. Broiler exports are expected to increase in 2001. The increased export shipments are expected to go to Asian markets and to a recovering Russian market. Egg production is expected to increase 1% to 2% in 2001. Wholesale prices should remain similar to 2000, so producers' net returns are expected to be slightly negative in 2001.

## **LOUISIANA SITUATION AND OUTLOOK**

Approximately 1.1 billion pounds of broilers were produced in 2000. The gross farm value of broilers was \$615 million. The number of broiler producers decreased again

in 2000, down to 553. The number of table egg producers in 2000 also decreased. Total eggs produced decreased by 13.5%, from 41.3 million dozen to 35.7 million dozen. Therefore, farm value of commercial egg production decreased by \$5 million in 2000. Broiler production should remain similar to 2000. Net returns for broiler production may weaken. Also, wholesale egg prices should decline because of increased production nationally. This would result in negative net returns. Thus, the number of egg producers should continue drop.



# LIVESTOCK OUTLOOK

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## INTRODUCTION

This report provides the authors' assessments of the outlook for the Louisiana beef and pork industries for 2001. Specifically, the discussion concentrates on the outlook for cattle and hog production since farm-level production is the major emphasis for both industries in Louisiana. Given the differences in industry structure, pricing and organization of the beef and pork industries nationwide and in Louisiana, the authors take somewhat different approaches in analyzing the outlooks for each industry. The cow-calf and stocker segments of the beef industry continue to be largely composed of independent entrepreneurial operations throughout Louisiana and the United States, although limited coordination with downstream feedlots and packers is slowly evolving. On the other hand, the pork industry is becoming increasingly composed of quasi-vertically integrated firms that contract with producers to raise hogs to company specifications.

The relative sizes of the two industries in Louisiana also are quite different. Of the animal agricultural industries in Louisiana, the beef industry is second only to poultry in gross farm income; whereas, hog production ranks fifth in the state in gross farm income coming from animal agriculture. As a result of these differences, this report concentrates on specific strategies that independent Louisiana cattle producers can take in 2001. Alternatively, the hog outlook concentrates more heavily on broad industry trends and the future structure of the hog industry in Louisiana.

## BEEF OUTLOOK

The year 2000 was one of the most favorable pricing years for feeder calves and feeder steers in recent times. A combination of fewer beef cows, low grain prices, increased beef exports and increased domestic beef demand improved the pricing picture for the Louisiana cow-calf producer. A slower than expected rate of beef heifer retention and an unexpected larger liquidation of cows, mostly due to drought conditions in several sections of the United States, have extended the period of favorable prices for cow calf producers. The few gloomy factors for 2001 are a slowdown in the national economy, expected beef exports and a growing concern with beef packer concentration. Louisiana cow-calf producers can expect 2001 feeder calf prices equal to or slightly higher than in 2000.

The beef production cycle can be either a curse or a boom to the Louisiana beef cattle industry. Cow-calf producers experienced the cycle's pain during 1994-97 as low cattle prices caused producers to delay replacement of fixed assets and "tighten their belts." Survivors learned new ways to reduce production costs and/or get more output per cow. The low price period was made even more difficult for some producers by a severe drought and the resulting higher feed bills. The boom period began in 1999 and should continue for three to four more years. Factors that have tended to prolong the good prices include: a) higher cow slaughter, which was larger than expected primarily because of drought conditions, b) lower beef heifer retention rates, held down by producers choosing to sell both steers and heifers to feedlots to replenish their assets and increase current incomes, c) little evidence of new entry into cow-calf production, and d) a long-awaited increase in beef demand, both domestic and export.

Any additional lengthening of the good pricing period, however, likely ended in 2000. A number of factors point to this: a) The buildup of the beef cow herd should accelerate in 2001 as the rate of cow slaughter decreases. Two years of favorable calf prices should encourage producers to reduce their cull rates. As weather patterns return to normal, pasture conditions should improve, further encouraging cow-calf producers to lower their cow culling rates. Likewise, heifer retention rates should increase as optimism toward the future grows among both existing and potential cow-calf entrants. b) Domestic beef demand is likely to be affected negatively by the slowdown in the U.S. economy. The demand for beef is affected by the national business cycle. This particular downturn comes at a less troublesome time than if it had come in the mid-1990s when it was expected (based on previous business cycles). c) Production of competitive meats should rise. d) Higher U.S. beef prices are likely to take a toll on U.S. beef exports as buyers seek cheaper beef elsewhere or look for cheaper substitute meats.

Some temporary bright spots include: a) An unusually hard winter could slow rates of gain in feedlots, lowering beef production during the first quarter of 2001. It could also have a dampening effect on the nation's calf crop, reducing the supply of beef 15 to 18 months in the future. b) Feedlot occupancy and placements dropped in late 2000, which could hold feeder steer prices higher than expected during first quarter, 2001. As a result, feeder (steer) calf prices should average around \$97 during 2001, feeder steer prices should average \$87 and utility cows around \$40. First quarter 2001 prices should be above these averages by \$2 to \$3.

In last year's Beef Outlook, we recommended that producers not retain heifer calves in 2000 to add to the herd. In

retrospect, heifer calves retained in 2000 could actually prove profitable because of the lengthening of the current production cycle. If a heifer calf was retained in 2000 instead of being marketed at six months of age and bred to calve at age 24 months, its first calf would be marketed in the fall of 2002. The producer could expect to obtain perhaps two more calves before price became of concern. This would be sufficient time to justify the addition to the herd. We again recommend, however, that producers not retain heifer calves in 2001 to add to the herd because the expected time frame in the current cycle would not justify the addition. Given the higher prices expected for cull beef cows over the next 12 months, 2001 is an excellent time to replace low producing cows with higher producing heifers.

A shortage of cow slaughter facilities in the South-Central United States adds to the difficulty in marketing Louisiana cull cows and bulls. Cows purchased in Louisiana auctions must be trucked to slaughter plants in Arkansas or Texas, because no federally inspected plants are located in Louisiana or Mississippi. While statistical data are not available as to the impact of these trucking costs on cow prices in Louisiana auctions, the cow-calf industry is justified in being concerned. Sellers of cows in Louisiana auctions can expect to receive less per hundredweight than for comparable cows sold in Arkansas or Texas.

The Louisiana beef industry has not encountered the evolutionary changes in industry structure that the beef packing, poultry and hog industries have experienced. As a result, industry members have maintained their independence but perhaps at the cost of failing to produce the inputs needed by downstream firms to meet consumer demand more effectively. The increasing use of value-based pricing,

however, will spur changes in pricing patterns at the feedlot level and, hence, upstream at the Louisiana beef cow-calf level.

## **PORK OUTLOOK**

Structural change in the U.S. hog/pork industry has evolved rapidly in recent years, with contracting similar to that in the broiler industry becoming more common. An estimated 33% of U.S. hogs are now raised under contract with a vertically integrated firm (USDA-NASS). These firms are able to raise large quantities of hogs of consistent quality. The resulting product conforms to the demands of slaughter-processors and, ultimately, to consumers. This trend is likely to continue, as well as the continued introduction of new farmer-owned cooperatives that provide producers with many of the benefits associated with contracting, while allowing them to maintain their independence. Most U.S. producers continue to be independent, selling hogs directly to packers or through local auctions. With a wide array of business arrangements available to U.S. hog producers, the eventual shares that will be produced by independent, contracted, and cooperative producers are highly uncertain.

Along with the changes in business arrangements, major regional shifts in U.S. pork production have taken place. While the Midwest has continued to expand production over the past decade, several states outside the region have become major players. Iowa, the largest hog-producing state, has increased its total inventory of hogs and pigs with modest growth. December 1 Iowa inventory of total hogs and pigs over the period 1990-2000 ranged from 12.4 million in 1996 to 15.4 million in 1999 and 2000. In contrast, North Carolina's total December 1 hogs and pigs inventory increased from 2.8 million in 1990 to 9.6 million in 1997, making it the second largest producer of hogs. The state's hog

production has since leveled off, primarily because of environmental constraints facing the industry. Other states experiencing new growth in the past decade have been Arkansas, Colorado, Oklahoma and Utah. Much of the expansion in these states has been through vertically integrated firms. Overall, total U.S. hog production has continued to expand modestly. December 1 inventory of hogs and pigs increased from 54.4 million head in 1990 to a high of 62.2 million in 1998. The inventory of hogs and pigs as of December 1, 2000, was 59.8 million.

Along with a modest increase in hog production, the industry has experienced a substantial decline in the number of hog producers as hog operations have become ever larger to benefit from the economies of size associated with technologies such as all-in / all-out production, split-sex feeding and segregated early weaning. From 1990 to 2000, the total number of hog farms fell from 268,140 to 85,760. Continued decline in hog farm numbers can be expected as producers react to declining real hog prices and new technology by either exiting the industry or expanding to benefit from economies of size.

Several short-term trends will affect the market in 2001. USDA-ERS discusses the trade outlook. Pork exports are expected to increase during 2001 from 1.26 billion pounds to just over 1.3 billion pounds. Much of this change will result from increased exports to Russia. The Russian economy has revived, fueled by strong petroleum and gas sales, contributing to increased demand. This favorable economic condition, along with higher U.S. production and a discontinuation of European export subsidies on low-value pork products, could help to boost U.S. pork sales to Russia. While more than 4.4 million hogs were imported into the United States in 2000, 4.1 million are expected to be imported

in 2001. Much of Canada's exports to the United States has been because Canadian hog production expanded faster than Canadian processing capacity. Also, the lower-cost U.S. packers are able to outbid Canadian packers for hogs because of lower labor costs and economies of size.

Based on pig crops, farrowing intentions and inventories, USDA-ERS expects a rise in pork production of 2% to 3% in 2001. Slaughter hog prices in 2000 ranged from the upper \$30s per hundredweight to the upper \$40s, with an average price in the mid-\$40s. This is \$10 to \$11 higher than in 1998 and 1999, the bottom of the typically three-to four-year hog cycle. At that time, hog prices dropped for two months to levels below \$20 per hundredweight, mainly because of oversupply and limited processing capacity. Though the U.S. economy is expected to remain strong, albeit a modest slowdown is expected, and trade will be favorable in 2001, increased pork production is likely to push down hog prices by \$2 to \$4 per hundredweight in 2001. Based on production expectations, prices could range from the mid-\$40s during most of 2001 to the mid-\$30s in the fourth quarter.

Louisiana hog production has steadily declined over the past decade, with 2,500 operations in 1990 and 600 operations in 2000. Total December 1 inventory of hogs and pigs in Louisiana also decreased, from 50,000 in 1990 to 29,000 in 2000. It is unlikely that this trend will be reversed in 2001. Future growth in Louisiana hog production is likely dependent on a decision by a vertical integrator to place operations in Louisiana. With the nearest commercial slaughter facility in eastern Mississippi, Louisiana may be more attractive for farrow-to-nursery operations than for farrow-to-finish or finishing operations.

## SUMMARY

Overall, the outlook for both industries is relatively favorable for 2001. Both industries experienced higher prices in 2000 relative to other recent years. This period of relative prosperity is likely to continue through 2001, with particularly favorable prices for the beef industry. Experience suggests that an eventual price downturn is inevitable for both industries. The Louisiana beef and pork industries are too small relative to their national industries to have any observable influence on the pricing of either cattle or hogs. With few mechanisms available to most Louisiana producers to reduce the risks associated with price fluctuations over time, the Louisiana producer must largely bear these risks alone. It is, thus, important for Louisiana producers to be knowledgeable of the economic forces that are likely to cause price fluctuations.

# DAIRY OUTLOOK

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## LOUISIANA AND UNITED STATES SITUATION

The 2001 outlook for the Louisiana dairy industry is relative to and shaped by events occurring in and before 2000. The Louisiana dairy industry continues to be more heavily influenced by events affecting dairying outside Louisiana than to events in Louisiana. In 2000, changes occurred in the federal order milk pricing regime, and there was a further consolidation of federal milk market orders. Changes in the federal order pricing regime increased the relative values of milk components (skim milk and solids).

The economic well-being of both the U.S. and Louisiana dairy industries in 2001 will be influenced by developments in both the national and state agricultural and non-agricultural economies, prevailing demand and supply conditions and politics. No developments are likely to occur in 2001 that will change the on-going evolution in the dairy industry toward fewer numbers of larger dairy herds populated with higher-producing cows, resulting in more production concentrated in fewer areas. The evolutionary shift in U.S. milk production away from traditional dairy states toward groups of southwestern and western states continues. The concentration of the Louisiana's dairy industry continues to occur in the traditional tri-parish production area of Tangipahoa, Washington and St. Helena.

In 2001, the demand for dairy products is expected to expand ever so slightly over record level demands in 1999 and 2000. Expectations are for some expansion in demand greater than the growth in milk production, so that there will be upward pressures on milk prices in the range

of 3% to 5% or \$0.37 - \$0.62 per hundredweight.

The demand for dairy products at intermediate and retail levels has been positive in both 1999 and 2000 because of a strong economy that provided for full employment and low inflation for a record-long period. The strong demand for dairy products is expected to continue throughout 2001, even though the economy is not expected to be as uniformly robust as in 2000. The increased demand for dairy products is attributable to favorable product prices. They, in turn, are a consequence of record year-to-year increases in milk production that are expected to continue into 2001. Even though milk production in 2001 is expected to be greater than the record production in 2000, there are signs of a slowing growth. The slower growth is expected from declining cow numbers and less rapid gains in milk production per cow. Net removals of dairy products through government purchases, on both a milkfat and skim solids basis, increased in 2000 and are expected to fall between 1999 and 2000-year levels in 2001.

The demand for dairy products varies among products. Fluid milk, ice cream and cottage cheese sales continue to remain essentially flat. The growth in demand for dairy products in 2000 occurred in cheese and butter uses by restaurants and food processors. Commercial nonfat dry milk usage continues to lag behind production, creating surpluses that are most likely to be removed by government programs. In 2001, no major changes are expected to occur in these demand patterns.

## UNITED STATES OUTLOOK

The record level of milk production in 2000 exceeded record 1999 production. Farm level milk prices were both relatively low and volatile in 1999 and lower still in 2000.

Generally, low prices for the product (raw milk) reduce its supply. That did not happen in 1999 or 2000 for the same reasons. These reasons include relatively cheap feed grain supplies and a built-in productive capacity. The productive capacity is inherent in dairy cow numbers, replacement dairy heifer numbers and capital investments. The relatively large productive capacity is a consequence of high milk prices in 1996, 1997 and 1998 along with relatively low feed grain prices in 1998, 1999 and 2000. Relative high milk prices and low feed grain costs created favorable milk-feed price ratios that encouraged production and capital investment in additional productive capacity. Because dairy specific capital investments have few uses outside milk production, they continued to be used even under adverse economic conditions. That productive capacity is expected to be diminished by an accelerated rate of dairy farm exits during 2001. These exits are attributable to diminished supplies of old forages and to farmers who have either exhausted their equities or who want to preserve their remaining equity. Overall, the low milk prices in 2000 slowed, but they have not stopped the expansion in milk production that is expected to grow by between 1% and 3% in 2001.

The favorable milk-feed price ratios of earlier years were responsible for the increase in milk cow numbers in 2000. They were also responsible for increases in milk production per cow. Those ratios remain favorable for milk production although cow numbers in 2001 are expected to decline because of expected increases in cull cow prices. The decline in cow numbers is expected to be offset by increased production per cow although per cow production increases are not expected to be very dramatic because of low quality forages and slight increases in protein costs. Replacement heifer prices are expected to remain relatively high in 2001, so the gap

between slaughter prices and replacement prices will remain wide. The favorable milk-feed price ratios are primarily attributable to low feed prices, which, in turn, are attributable to bumper crops and to government payments that have retained grain productive capacity despite low grain prices.

Politics will continue to influence the economic well-being of the dairy industry. Dairy specific appropriations in the 2001 legislation provide for \$667 million for Dairy Market Loss Assistance (DMLA) payments that will provide an average payment of \$8,300 to every U.S. dairy operation. In addition, 2001 legislation continued dairy price support at the level of \$ 9.90 per hundredweight for 3.67% milk through 2001. Efforts to introduce a Southern Dairy Compact will be continued in 2001. The economic argument for it is likely to be that milk prices in the South should reflect the costs of bringing in marginal supplies of milk.

## **LOUISIANA OUTLOOK**

Reports of record-breaking U.S. milk production can be misleading for Louisiana and the other 27 states that experienced declines in total production in the first half of 2000. The first-half increase in U.S. production can be attributed to the 22 states whose milk production increases were large enough to offset the decreases in production experienced by the other 28 states. Fourteen of those 28 states, including Louisiana with a production decrease of 19.6% decrease, had production decreases larger than their average decrease of 16.6%. Most of Louisiana's milk production occurs in a concentrated milk production area of Louisiana and Mississippi. Those two states, however, were among the 14 states experiencing declines in production above the 16.6 % average among the 28 states experiencing first-half year 2000 declines. Similar to 1999, the even larger percentage

declines in milk production occurring in Kentucky and Tennessee in 2000 will be of particular significance to Louisiana processors in 2001 and beyond. In the past, these states have been a reserve source of supply when Louisiana was deficient in milk production. The implication is that future reserve supplies of raw milk for Louisiana processors will necessarily have to come from more distant sources at higher transportation expense.

Declines in production are associated with either declines in cow numbers and/or declines in production per cow. Louisiana experienced both in 2000. Declines in cow numbers are most likely to be associated with declines in numbers of dairy farms. Dairy cow numbers for Louisiana and neighboring southern states have declined at faster than the overall U.S. decline in cow numbers. Thus, the evolutionary trend toward increased concentration of production in pockets is expected to continue in Louisiana in 2001.

The trend in increased production per cow continues, but the absolute increases in production per cow have been greater for the United States than for Louisiana. In a comparison of first-half year 2000 production per cow rankings, Louisiana's ranked 50th or last. The combination of fewer cows as a consequence of fewer dairy farms and marginal gains in production per cow has resulted in decreased total milk production for Louisiana. Decreased total milk production for Louisiana in 2001 will have a negative multiplier effect on economic activities in rural areas. It also translates into reduced promotion board revenues and more milk imports into Louisiana. Growth in imports has negative implications for the viability of milk processing plants in Louisiana.

## SUMMARY

The Louisiana producer is encouraged to become competitive by emphasizing increased production per cow and lowering the average costs of production. Increasing production per cow is one of the most effective and efficient methods of coping with a tighter price-cost margin caused by lower raw milk prices. Where economically feasible, increasing the size of the cow herd is also an effective response to income-threatening tighter price-cost margins. A larger herd generates larger quantities of milk for sale and lowers the average costs of production. Past recommendations to adopt recommended production management practices, use sound production and financial management systems to control farm costs and personal living expenses, and use futures markets to market milk and purchase feed inputs, when applicable, continue to apply. The introduction of the new federal milk market order pricing regime in 2000 has placed greater value on milk components. The producer, through breeding and feeding decisions, can influence the components of the milk produced that can translate into higher raw milk prices. In combination with cost minimizing production enhancements, the producer can enhance the probability of surviving the technology-driven dairy industry

# AQUACULTURE OUTLOOK

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## LOUISIANA SITUATION

Louisiana continues to support one of the most diverse aquaculture industries in the nation, including species and products such as crawfish, catfish, alligators, oysters, tilapia, baitfish, hybrid striped bass, redbfish, soft-shell crawfish and crabs, ornamental fish, baby turtles and a variety of freshwater game fish. In spite of this, many sectors of production have been in decline for several years. Total estimated farm value for Louisiana aquaculture crops in 1999 was \$128,538,935. This is a decrease of 15.5 percent from the 1998 estimate of \$152,126,748. In 2000, this figure dropped further to \$119,748,499. Louisiana's producers lead the nation in crawfish, soft crawfish, oyster and alligator sales. Louisiana is still the fourth leading state in production of catfish.

**Catfish:** Pond-bank prices for farm-raised catfish continued in the acceptable range throughout most of 2000, exceeding the cost of production for all but the smallest or least-efficient operations because of low feed prices. This reflects, in part, a documented 4- to 5-year price cycle throughout the industry. Reductions in Louisiana's acreage and total production slowed considerably in 2000. At 14,390 acres and 67,147,426 pounds, these values were virtually unchanged from the previous year in spite of limited marketing outlets, a shortage of capital for prospective growers and a corresponding lack of new producers entering the industry to replace older growers as they retire or die. The typical catfish facility in Louisiana was established years ago as an accessory source of income within a diversified family farm operation based on row crop production. This is in contrast to the typical operation one might

find in surrounding states. These are generally much larger and dedicated solely to the production of catfish. Louisiana producers have largely compensated from reduced economies of scale by maximizing production efficiency and taking advantage of a comparatively longer growing season.

**Crawfish:** Louisiana crawfish acreage in the 1999-2000 season was estimated at 84,016 acres, down considerably from the previous year. Farm-raised crawfish production (16.2 million pounds) was drastically reduced compared to the previous year. Extremely low production across the industry was attributed to drought conditions and high fall temperatures. Unfortunately, this pattern of drought impact continued throughout the industry through the summer of 2000. Fall rains, however, were more regular in 2000, suggesting good recruitment of young-of-the-year crawfish, at least in those regions where sufficient subsoil moisture allowed broodstock to survive in burrows.

A series of unforeseen events over the past several years has resulted in drastic changes for crawfish producers. Labor shortages and market competition from imported tail meat from China resulted in economic strain on the processing sector during the mid-1990s, and it suffered even more as the supply impacts of the prolonged drought set in. Additionally, lucrative export markets for large, whole-boiled crawfish in Europe have now all but disappeared in the face of low-cost competition from Spain and China. The industry is at a crossroads. The processing sector has all but ceased to exist because of limited supplies and the difficulty obtaining a suitable labor force on an interim basis.



**Alligators:** The number of farm-raised alligators approached all-time highs again in 2000. The total farm value of farm-raised skins was estimated at \$11.5 million, up 12% from the previous year. The number of active farms, however, continued a trend of decline that began several years ago, reflecting further consolidation within the industry.

**Oysters:** Oyster production continues to be an important component of aquaculture in Louisiana, although production and value were down 19% and 32%, respectively, in 2000. Oyster leaseholders in many areas continue to face uncertainty over possible impacts of projects to restore wetlands. Diversion of fresh water into estuaries, in certain circumstances, can adversely affect productivity of some oyster leases.

**Baitfish:** Although Louisiana production has been relatively unchanged for a number of years, farm production and value were down 18% and 24%, respectively. Observers attribute these declines to a shifting of ponds and resources to catfish production, as a result of low feed costs and potentially higher profits.

**Tilapia:** Tilapia fillet imports continued to increase throughout 1999 and 2000. Although live market prices east of the Rockies remained below the cost of production for many facilities during the first six to eight months of the year, delivered prices increased dramatically in the last quarter of 2000. This increase reflected continued reductions in the number of operating facilities over the past year; growers have been forced to sell what stocks they can below cost of production in the face of severe cash flow pressures.

**Soft-shelled Crabs:** Production has remained stable in recent years, depending on and responding to supplies of wild crabs suitable for stocking into shedding facilities. In 2000, however, production and value both declined by approximately 14%. Observers suggest these declines reflect an overall shortage of peeler crabs caused by economic problems throughout the crab fishery.

## LOUISIANA OUTLOOK

**Catfish:** As established growers reach retirement, the availability of capital for new acreage and for producers attempting to purchase or lease existing ponds will be critical for sustained production in Northeast Louisiana. Although declines in local acreage may bolster prices for Louisiana producers in the short term, associated declines in supply may critically affect the competitive position of the processors to whom they must sell their harvests.

**Crawfish:** Even with the normal precipitation experienced during the fall of 2000, impacts of the 1999-2000 drought are expected to continue throughout the crawfish industry for several more seasons. Many ponds appeared to require re-stocking to establish commercially viable populations, but shortages restricted these activities in many areas. Federal regulators are contemplating potentially crippling effluent limitations, which could make pond production difficult or impossible to carry out, especially in impaired watersheds. Renewed research and extension efforts are required for the industry to move forward in a changing economic and regulatory climate.

**Alligators:** Prices for alligator skins, like farm-raised catfish, tend to be cyclical in nature based on supply and demand. Current interest in alligator leather among high fashion designers and producers has bolstered prices in 2000. Farmers and potential

investors should be concerned whether prices are declining or increasing, and project where, within the cycle, future harvest will fall. Meat sales continue to improve but are difficult to estimate since most farm-raised animals continue to be sold alive to processors.

**Oysters:** Technology related to disease management and reproductive control over exotic or modified oysters continues to advance and may be widely used in Louisiana in coming years.

**Baitfish:** Major expansions remain unlikely because of control of marketing and distribution channels by the industry in Arkansas. Demand and prices should remain high for the near future as a strong economy continues.

**Tilapia:** Domestic production is expected to continue to decline somewhat as a result of prolonged low prices. The live market, the largest outlet for domestic producers, is not expected to expand as quickly as sales of processed products to the foodservice market. Increasing pond production throughout the hemisphere will continue to depress fillet prices, but it should translate into lucrative export markets for high-quality fry and fingerlings also.

**Soft-shell Crabs:** Established firms control access to most of the available product, but some fishermen are experimenting with gear that targets peeler crabs. As imports of crab meat continue to take market share from domestic fishermen, sources of peeler crabs also may be reduced.

# **HUNTING LEASE ENTERPRISE OUTLOOK**

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## **NATIONAL SITUATION AND OUTLOOK**

Outdoor recreation has changed dramatically in the United States over the past years. Changing land use patterns, the greater abundance of disposal income by many Americans and greater amounts of leisure time have led to tremendous opportunities for hunting leases to provide substantial economic gains to private landowners nationwide. In many states, the number of farms is declining while farm size is increasing. Farm and forestlands are becoming smaller and increasingly fragmented as populations increase. These same factors provide the opportunity for alternative products and services such as the development of hunting leases. Numerous federal programs are available through the farm bill that promotes wildlife enhancement and conservation. These same programs, which at one time heavily subsidized crop production, are now providing the means whereby landowners can greatly increase wildlife populations on their lands. These wildlife habitat improvement programs allow landowners to demand greater lease rates for lands under their control.

Private rural lands in the United States make up more than 60% of this country's total land area and cover approximately 1.28 billion acres. Because of the many farm bill programs that promote the planting of trees, there has been a trend toward increasing numbers of ownership and total acreage of private lands that are in forest cover. Much of 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 landowner's management options.

## **LOUISIANA SITUATION AND OUTLOOK**

Landowners involved in hunting lease enterprises are an important part of the overall wildlife management program in our state. The habitat improvements implemented on their lands provide target and non-target wildlife species with the food and cover necessary for their success. In 2000 about 5,653 individuals were involved with some type of hunting lease operation on their lands. The total acreage of land leased was 6,872,351 acres with a gross farm value of \$33,998,232. Hunting leases averaged \$4.95 per acre in our state with great variations between the highest and lowest lease rates. Waterfowl hunting leases brought in as much as \$40 per acre in some of the Delta regions while some marshlands in the southern areas yielded landowners \$2 to \$3 per acre. Deer hunting leases ranged from \$25 to \$3 per acre, depending on habitat quality and game abundance as well as the area's proximity to population centers.

Public demand for hunting leases should continue to drive a strong market. As population centers spread out into once rural areas, places to hunt and fish will be lost at the rate equal to this urban sprawl. Forest landowners who are able to resist these changing land use patterns will have an excellent opportunity to continue to provide the public with quality hunting experiences. A competitive market for hunting leases will continue to be the driving force that provides landowners with the potential for significant income gains from this resource.



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