SUGARCANE INDUSTRY’S GOAL FOR SURVIVAL IN LOUISIANA
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Although there may have been sugarcane earlier, records indicate that in 1750, Jesuit priests in New Orleans obtained sugarcane stalks from Santo Domingo and planted them in present day Jackson Square. These stalks later became widely known as the “Creole” variety. This variety was planted and harvested with attempts to produce syrup and extend it to a granulated product. Although sugar was not granulated there was a rum-like liquid made from the juice.

After several years, sugar was finally granulated by Etienne deBore in 1795, more than 200 years ago. This new process launched Louisiana into the sugarcane industry that is still viable, vibrant, and growing as we meet. The path has not been an easy one. From 100,000 pounds of granulated sugar produced in 1795, today Louisiana produces 2,543,000,000 pounds of raw sugar or 1,272,000 tons raw value. In 1795 sugar sold for five cents and in 1801 it was up to eight cents on the open market. Today, on the so called world market sugar sells for 11 to 12 cents per pound.

By 1827 there were 690 sugar houses producing 34,000,000 pounds of sugar. By the beginning of the Civil War there were 1291 factories in Louisiana producing 528,000,000 pounds of sugar. Then came the war and the industry was devastated for the next several years. By the end of 1865, only 175 factories remained and produced 12,000,000 pounds of sugar.

Total investments in the sugar industry before the Civil War were more than $200,000,000, and by 1865 that investment had dropped off to $70,000,000. In terms of dollars, more property had been destroyed in Louisiana than in any other state.

Meanwhile, per capita consumption of sugar in the U.S. had been increasing with the advent of the new processed foods industry. Cuba and Hawaii supplied most of this increase. Ninety per cent of sugar requirements were being supplied from overseas.

Although there were some technological advances between 1865 and 1875, little had changed the traditional way of producing sugar. Production costs were up and efficiencies were down. This forced the idea of the central sugar factory. Opponents pointed out that investment in such a large operation was risky for the central factory owner. Proponents believed that this approach would increase profits for growers and millers. By the mid 1890s the central factory concept of milling cane had become generally accepted in the Louisiana sugarcane belt.

By 1900, the Louisiana industry was up to 347 factories that were more modern, large, and efficient mills. These factories produced 604,000,000 pounds of sugar. By 1910, the number of factories had dwindled to 214 and was producing 650,000,000 pounds of sugar or 325,000 tons of sugar.
From that peak, the industry went through a major downsizing to 47,000 tons in 1925 due to the mosaic disease. Also, outside forces, exerting influences on the local industry were factors for modernization. Louisiana was forced to change its ways or face extinction because of world competition. Government tariffs to a small degree helped Louisiana move into the twentieth century.

As production moved upwards once more, the Great Depression came into play causing many financial failures. At this point in history, farmer-owned cooperatives begin to appear. Then came World War II. Labor was lost to the war effort. Sugar was the first commodity rationed for fear of the enemy using it for fuel. German prisoners were brought in to harvest the crop in 1943 and 1944. The war gave Louisiana an incentive to produce machinery and equipment to produce the crop more efficiently due to shortage of labor.

By 1950 only 54 mills existed in Louisiana and by 1974 that number had dwindled down to only 37. But those 37 mills produced 594,000 tons of sugar; a significant increase over the 456,000 tons of 1950.

A tremendous change in technology took place over the next 20 years in the Louisiana industry. Mechanization was maximized for more efficiency. Transportation from field to factory was also advanced with more powerful vehicles to move larger tonnage per load. During the 1960s Louisiana continued to increase capacity while at the same time continuing to achieve economical operations. Many of the less efficient factories closed and those in operation continued to grow in size and efficiency. Herbicides replaced hand hoeing and by the 1970s computers were introduced into mill operations. And, the core sampler replaced the subjective hand sampling for verification of cane quality.

By 1974, with the expiration of the Sugar Act, prices went through the ceiling and quickly settled below floor level during the latter part of that decade. This wide fluctuation of price from a high of 69 cents in 1974 to a low of 15-16 cents in the next couple of years took its toll on the farmers. Many opted out of sugarcane production.

In 1994, 20 mills remained in operation in Louisiana and during 1998, 18 mills will be processing sugarcane produced by 690 growers. In 1963 there were 45 mills in operation with 1880 growers. The acreage has increased from 295,000 to 400,000 in that same period of time. Tons produced per grower went from 4000 tons in 1963 to more than 17,000 tons in 1998 while average acreage per farm went from 150 in 1963 to 600 in 1998.

In 1997, Louisiana harvested 12,019,497 tons of sugarcane on 379,247 acres. This amounted to 31.7 tons per acre and produced 6706 lbs. of sugar per acre. There were 1,271,537RV tons of sugar produced during the 1997 crop.

Where do we go from this point? I am reminded that old agriculture is family oriented and is small business while new agriculture is large-scale operations with little emphasis on family farm philosophy. Louisiana is not different. Volume and efficiency are the main objectives for a grower to remain in farming today. We must forget how things were done in the past. Nonetheless, a USDA commission has recently released its findings in attempts to save small
family farms.

Today, the Louisiana industry is expanding out toward the Texas border and Arkansas. East Texas is getting itchy at this time. The freeze line toward Arkansas is the only element stopping the forward movement. Acreage is moving out of livestock, rice, soybeans, corn, and cotton. The shift is toward sugarcane production. Sugarcane is a very hardy plant that can handle the constant hammering of hurricanes and heavy rainfall and moisture along the Louisiana coastline. It is a survivor to a degree even though freeze and other adverse weather conditions affect the crop. It is never a total loss.

The philosophy for growing sugarcane in the new area bordering Texas is to work in cooperative groups for planting, production, harvesting, and transporting of the crop back toward the central part of the state. There seem to be merits with this concept. However, the data is not fully available and the jury is still out on this area and the method of sugarcane production utilized by the growers.

In the case of Louisiana Sugarcane Cooperative (LaSuCa), cane would have to be transported far distances to increase the capacity of the two processing facilities. Therefore, a decision was made to eliminate one facility and increase volume and efficiency at the remaining factory. Through efficiency, low transportation costs, proper management, and a decent level in price with increased sugar per acre, the move should allow for a few years of stability in the cooperative. La Su Ca in 1998 has a projection of 820,000 tons of sugarcane for processing compared to 660,000 in 1997, an approximate 20% increase. However, this is probably just halfway to a necessary goal.

Louisiana needs to prepare itself for the time when the Freedom to Farm agreement comes to an end. How will this preparation take place? It can only happen with a hefty infusion of capital. How far is the consolidation movement going? It needs to go far enough to keep our growers in the business of growing sugarcane. Will we be ready for 2003? After having agonized five years to get two factories to merge, I doubt that we can move fast enough to get the necessary results. Louisiana farmers are probably no different from farmers from the rest of the nation. They are independent, culturally and geographically sensitive to changes, strongly opinionated, family oriented, historically conservative and leery of politicians. Any erosion of these traits sends up a red flag and many questions. However, I feel these characteristics have kept this country in a good position vis-a-vis an abundant and steady supply of food.

But times are changing. Do we maintain these traits and standards, suffer economically, and go out of business or do we attempt to adjust and continue to provide for our families? This question persisted for five years in the minds of board members of La Su Ca who were cognizant of their fiduciary responsibility to the members of their organization. However, often there was a lapse of responsibility and a return to the personal memories of how, in their opinions, the organization should continue to provide for the welfare of the farmers in a narrow regional setting. In the end, good, economic sense prevailed and differences were placed on the back burner and necessary decisions made to stay in business.

In my opinion, eventually, Louisiana should end up with three entities processing in the
southwestern part of the state with four factories, one in the northeast central area and six units in the south central area. These 11 factories will process 12 to 14 million tons of sugarcane per year with up to 1,500,000 tons of raw sugar. This tonnage, however, does not get us as efficient as Florida in the processing arena. Florida processes approximately 3.0 million tons of sugarcane per facility over a four to five month period. Louisiana is unable to process for more than 3 months due to freezing conditions.

To have an optimum processing tonnage in the future, Louisiana should be in the range of 1.5 million tons of sugarcane per processing facility. We are almost halfway there. Can this goal be reached in the next two to three years? That’s an impossibility with the present trend.

With only three months of processing in Louisiana, there isn’t a potential for serious trials during the processing period due to time constraints. Lost time among factories in Louisiana average approximately five to 7% during the harvest. These factories run 24 hours per day and seven days per week.

So, will Louisiana continue to be able to compete with the rest of the country in sugarcane production? An immediate and obvious observation is that there is sufficient land for expansion and more than enough moisture for sugarcane production. Florida, Texas, and Hawaii have their problems with the environment, lack of water, and high labor costs. With reduction in rice and cotton acreage there will be pressure by landowners and growers to find another crop that is suitable and economically viable. Sugarcane is the only secure crop due to its robust tropical and subtropical qualities.

Now, will we be able to compete with the beet industry? That depends on weather conditions and infusion of capital. Normally, the sugarcane growing areas are less likely to sway as much as the beet growing area in tonnage. Weather may be our best trump card.

We look forward to areas in bio-genetics to assist the industry in the future. Tissue culture is already the backbone for disease-free seed cane that is used to propagate three good years of sugarcane tonnage. Varieties are being developed that is “Roundup ready”. That would assist in reducing the pressure of weed infestations. Another area being considered but not fully understood at this time are cold-tolerant varieties capable of withstanding mild freezing conditions. It may sound far-fetched but in the Progressive Farmer of March 1996 there is an article titled “Ag Biotech’s Destiny”. The following is mentioned: “Researchers using genes from fish (flounder from the Arctic) as a new source of antifreeze for plants. This could result in strawberries, potatoes, and other crops that can grow in freezing weather”. Sugarcane is also being looked at seriously. That could give us that slight competitive edge that is so important for the Louisiana industry. With varieties withstanding the cold further developments could occur in ethanol production and co-generation.

There is a deadline for the Louisiana industry to be aware of in 2002. At that point we must be in a position to deal with what we believe will be the onslaught of foreign-subsidized sugar that will lack phyto-sanitary restrictions. We contend in Louisiana that we will not be able to depend on our trade negotiators to look out for our best interest. The family farm may fade out of the picture forever. Let me assure you, however, that erasure of government subsidies worldwide
would place our growers in a good posture. The problem is we don’t believe this utopia can exist by the year 2002.

(Just recently having visited Guatemala gave me the notion that this sugar-producing country will not be able to comply-or may not want to- with the same regulations and rules that our growers have to live by in the U.S. They are moving ahead with increased tonnage. There seems to be absolutely no concern about the environmental state at present. Pollution is rampant around the processing plants.) There will have to be serious negotiations by our trade representatives to bring everyone in line for a true competitive level-playing-field situation. Again, that will be next to impossible.

The future of the Louisiana sugar industry could well be held in balance by our actions to develop other economical benefits for sugarcane and sugar. Molasses, a by-product of sugarcane, normally a cattle feed in the U.S. is also being used to neutralize chromium and make it harmless to the environment. Just last week at the Louisiana Association of Sugar Technologists there was a hard plastic material demonstrated that was made with sugar. Pharmaceutical products may be in the formula down the road.

When we look at cost of production to the grower based on actual and projected data from LSU, we see that a grower who farms 800 acres averages less than two cents per pound on his net returns to management and risk. This acreage produces about 5667 lbs. of sugar per acre. On 800 acres of sugarcane(with 239 acres of fallow land), tenant farmer operator, and at 21 cents/lb. the gross value is $832.00 per acre. Thirty nine per cent is required for the processing of the grower’s crop with a remainder $523.00 per acre. One sixth is paid to the land owner for rental of the land as the majority of cane grown in Louisiana is rented land. That reduces the cane grower’s income to $411.00 gross per acre prior to fixed and overhead costs. He must account for his fertilizer, herbicide, labor, and other variable costs. According to LSU this cost amounts to $345.00 per acre with the grower receiving $66.00 per acre or 1.7 cents per pound. More details are available in the booklet “Projected Costs and Returns--Sugarcane, Louisiana, 1998” by Michael E. Salassi and G. Grant Giesler.

Do we look at returning to the refining of raw sugar as an end product in Louisiana to assist our growers? Some Louisiana factories used to produce plantation white. However, fierce competition in the past 40 years caused sugar factories to produce only raw sugar and refining was done by others. Lack of marketing skills may have had an impact on letting others refine raw sugar. Now we may have to re-think this event. Louisiana may very well have to position itself as Florida is doing today so that we can squeeze every penny to give the growers a necessary income to survive. It will be necessary for the factory side of sugarcane to produce added income for growers. There is still some efficiency to be had on the field production side; however, greater efficiency through increased volume and increased extraction in the factory may give the growers the necessary edge to stay in business.

Two recent developments in the sugarcane industry has assisted in increasing production. The variety LCP85-384 is a very prolific variety that is capable of producing upwards of 40 to 50 tons per acre with sugar reaching approximately 10,000 lbs. per acre. This variety has increased from 15% in 1996 to 29% in 1997. Projections are 40% for 1998. The other development is that
of chopper-harvesters. This harvester tends to sweep up all the lodged cane, chop the stalks up into 10 to 12 inch billets, and increases tonnage per acre. It is also increasing sugar per acre. There is a problem, however, with the processing of sugarcane harvested with this system. During dry periods, green cane trash content is satisfactory despite the fact that it produces greater trash over the sugarcane. It is loaded and sent to the factory where washing of the soil is necessary to remove the soil. If too much water is poured over the short billets, sugar is removed from the exposed cuts. Losses can be as much as 12 to 15 lbs per ton. Whole stalk losses are in the vicinity of two to 5 lbs. per ton. There is a concerted effort to change the formula of the core sampler to better reflect the higher trash and fiber content. During wet conditions, there is an abundance of dirt and mud that accompanies the billets to the factory causing poor extraction in the processing.

Today, competition is fierce for the acquisition of sugarcane in Louisiana. But, in the future, as processors mature into an optimum or maximum capacity situation, farmers who continue to expand may not find sufficient processing to handle their crop. Expansion can become a problem for some factories in the future. Fronted on sides either by subdivisions or towns that have encircled the factory, there will be little room for plant expansion and plenty of residential complaints. Due to these reasons, consolidation will become inevitable and factories that are in a rural setting will likely increase in volume.

Until American agriculture has a fair break and is able to compete with other farmers of the world and not with other governments, we will have a difficult task at hand. Developing countries that say they cannot afford the environmental, labor, and safety regulations will be given leeway by our negotiators to “adjust and overhaul over time” and that will afford them the continued advantages they have today. This cannot be tolerated if we are to survive and continue to produce and receive a necessary income to keep us in the business of farming, regardless of the commodity. But even more so with the commodities that have to compete with those exported to the U.S. Let us hope that one day we do not wake up to find that the majority of food consumed in this country is imported because our trade position was in favor of other farmers around the world due to a “break” given to them. Although other farm commodities may revert to permanent legislation after the 1996 farm bill, sugar farmers can take no such comfort, since sugar policy was not included in the original farm bill written in the 1949 act. Although our costs of production are well below world average, the field is even more steeply sloped against the American farmer. Despite the Uruguay Round reforms, EU price supports are still 40% above U.S. levels. That will not change until the year 2000. The European Union relies on an elaborate export subsidy program that effectively drives down the world price to 10 or 11 cents, approximately half the average cost of production worldwide.

We must continue to look toward the year 2003. Louisiana will hopefully be ready to compete with all the variables that will exist at that time. More research, more efficiency, greater volume, and some assistance from our trade negotiators should give us the hope to survive in this great industry.

To quote Mr. Ramon Billeaud who was active in the Louisiana industry until his death this past year, “What a remarkable industry! Born in the 1790s basking in the success of the “Golden
Age”, brought to its knees by the Civil War, recovering and rebuilding only to be ravaged by mosaic disease and the Great Depression, rebuilding through research and technology, only to be shocked by the loss of the Sugar Act and the onslaught of corn sweeteners, reestablishing good legislation with growth potential through the Farm Bill(s), and now facing yet another challenge in the form of liberalizing of international trade. I am supremely confident that this great industry will rise to the occasion, as it has so many times in the past, and that this new challenge will be met and mastered. I only wish that I could be here 200 years from now to hear someone tell the story. It will be interesting!!"

References:

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