

Will the Mississippi and Louisiana Dairy Industry Survive Hurricane Katrina?

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Abstract

The Mississippi and Louisiana dairy industry was devastated by Hurricane Katrina when 400+ farms were severely damaged. These producers face difficult choices between repairing damages (estimated at \$120,000/farm) or ceasing operations. An estimated 25-30 percent of impacted farms may quit milking, which reduces the critical mass needed to sustain this industry.

Keywords: Dairy farmers, weather disaster, industry critical mass

Mississippi and Louisiana dairy farmers and processors suffered significant direct economic losses from the ravages of Hurricane Katrina. Approximately 75% of these states' 550 dairy farms are located south of Interstate 20 and more than 60% of these farms are concentrated in the hardest hit counties and parishes in South Mississippi (near Tylertown, McComb and Brookhaven) and Southeast Louisiana (near Franklinton, Amite and Tangipahoa). The loss of electrical power forced many of these farmers to dump the milk produced by their cows for about 7 to 10 days. Exacerbating this problem were fallen trees that blocked roads that prohibited the pick up of their milk. Extensive wind and water damages were also endured on these farms where downed trees destroyed barns, equipment, fences and other facilities. Obtaining dairy cattle feed is yet another difficulty encountered by dairy producers. These problems and a myriad of family troubles have already forced as many as 15 or 20 farmers to sell out and dispose of their milking cows because they could not milk or feed their animals.

Table 1. contains estimates of the immediate and short-term economic losses from wind and water damages totaled nearly \$18.2 million, or about \$43,000 per farm. The

longer term, secondary impacts of Katrina on the Mississippi dairy sector will be much greater and could threaten the continued existence of this important industry. An initial estimate of the short and longer term losses over the next 12-months totals almost \$59.0 million (or more than \$139,000 per farm), which includes a total of a 40% cutback in milk output caused by numerous factors (see table 1). For instance, this total includes a 25% reduction in milk production caused by the effects of irregular feed supply and milkings and various cow health issues such as heat stress, illnesses and diseases.

Additionally, milk output will likely be curtailed by another 15% due to lack of ryegrass forages instigated by farmers not having fuel and/or time that either delayed or failed the planting of ryegrass during late September and early October. The ryegrass situation has been made even more severe because of an extended dry period occurring after Katrina.

This “drought” resulted in zero rainfall during September and October followed by inadequate moisture to plant and germinate seed through November, December and early January. Resulting in essentially no ryegrass available for pasture grazing and forages to feed dairy cows. Ryegrass is the primary forage utilized by dairy cows from November until March or April on the farms located in the Katrina impacted areas. Yet another milk market disruption has been the temporary closure of three milk processing plants and the permanent closing of a fluid milk bottling plant located in New Orleans. For example, the Dairy Fresh plant located in Hattiesburg was not able to process any milk for three days because of the lack of electrical power and water.

These dairy farmers are facing a multitude of very difficult issues as they strive to recover for the storm’s impacts. Clearly, the most important of these questions is the decision to spend the necessary funds to repair buildings, equipment, fences and

infrastructure damaged by Katrina or to simply to sell their dairy cows and quit milking. The terrible affects of the storm of these farms can be demonstrated by the fact that the estimated immediate and long-term losses estimated at more than \$59 million is approximately equal to 40% of the total value of milk production produced in these two states in 2004 (\$146 million).

The question posed, “Will the Mississippi and Louisiana dairy industry survive Hurricane Katrina?” is relevant because of the critical mass of farms needed to sustain the businesses supporting and servicing dairy farms. In other words, will there be an adequate number of dairies to provide enough activity to keep feed stores, semen suppliers, electrical and refrigeration technicians in business. It has been estimated that 25 to 30% of the impacted dairy farms will likely cease farming within 12 months of Katrina hitting the Gulf Coast. This will threaten this industry’s ability to survive and may become yet another victim of Hurricane Katrina.

The general findings after interviewing dairy farmers, dairy cooperative representatives, farm organizations, dairy extension and research specialist are that the Mississippi and Louisiana dairy industry will survive this catastrophic event. But, this industry will face higher costs of production and operations. Farmers will be forced to obtain services from providers located further away and processors will endure higher average costs due to less raw milk supplies available for processing. In general, Hurricane Katrina will further weaken to abilities of farmers, cooperatives, and processors to take part in the highly competitive national and global dairy sectors.

Table 1. Estimation of Economic Losses to Mississippi and Louisiana Dairy Industry from Katrina

<u>Dumped Milk Impacts/Losses</u>		<u>Immediate/Short-term Impacts/Losses</u>		<u>Longer-term Impacts/Losses</u>	
Number of dairies	425 farms	Damages to Barns, clean up	\$10,000	Annual Milk Production/cow	13,000 lbs
Number of cows/dairy	112 head	Damages to Outbuildings, etc. per farm	\$10,000	Estimated Milk Production Losses due to cow stress, illness, disease	25%
Pounds milk/cow/day	45 lbs	Damages to fences per farm	\$5,000	Estimated Milk Production Losses due to Delayed/Failed Ryegrass Planting	15%
Total Pounds/day	2,142,000 lbs	Additional Equip/Fuel costs	\$5,000	Total Estimated Milk Loss	40%
Milk Price/cwt	\$16.50	Death of Cows/Heifers/Calves (2-3 animals) per farm	\$3,000	Estimated Production Loss/cow	5,200 lbs
Total Milk \$/day	\$353,430	Hay Losses + Additional Feed Costs per Farm	\$4,000	Number of dairies	425 farms
Losses Dumped Milk		Total Wind/Water Damages	\$15,725,000	Number of cows/dairy	112 head
for 3 days	\$1,060,290	Dumped Milk Losses (7 days)	\$2,474,010	Total number of cows affected	47,600 head
for 4 days	\$1,413,720	Total Losses	\$18,199,010	Reduction in Milk Production	247,520,000 lbs
for 5 days	\$1,767,150	Total Losses per Farm	\$42,821	Milk Price/cwt	\$16.50
for 6 days	\$2,120,580			Total Losses	\$40,840,800
for 7 days	\$2,474,010			Total Losses per Farm	\$96,096
for 8 days	\$2,827,440				
for 9 days	\$3,180,870				
for 10 days	\$3,534,300				
for 11 days	\$3,887,730				
for 12 days	\$4,241,160				
COMBINED SHORT & LONGTERM LOSSES ... TOTAL			\$59,039,810		
COMBINED SHORT & LONGTERM LOSSES ... PER FARM			\$138,917		