By Daryll E. Ray

Water vs. land transportation of domestically used grain

Beyond the price of grain itself, the reliability and cost of transporting grain from its point of origin to the end user is a significant factor in determining where the grain purchase will be made. Tammara Cole, a M.S. student here at the University of Tennessee has been conducting a research project on the impact of relaxing the Jones Act on the cost and dependability of moving Midwest grain to North Carolina. She has been working under the guidance of Drs. Daniel De La Torre Ugarte and Burton English.

The Jones Act is a series of legislative actions that requires the use of U.S. ships for the transportation of goods between U.S. ports. As a result only higher cost U.S. ships can be used to move grain and other products from Great Lakes or Gulf port terminals to users in the southeastern United States. Up until now this higher cost, coupled with the lack of a port facility in Wilmington, North Carolina, has made the use of water transportation more expensive than rail.

For livestock feeders, the transportation of agricultural commodities to their facilities is a serious logistical issue. This is particularly true for poultry and livestock producers in a state like North Carolina which does not grow enough grain to meet the needs of its hog and poultry industries. As a result, these North Carolina producers need to bring corn in from other areas. Historically these producers have purchased their corn from the major corn producing states in the Midwest and arranged for transportation to their facilities in North Carolina, making the cost and reliability of transportation a significant factor in calculating their feed costs. Operating costs for these producers are sensitive to changes in transportation and storage costs and provide these producers with an incentive to utilize the most reliable and lowest cost transportation mode.

In the past, this corn has been shipped from the Midwest to North Carolina by railroad because trucking is not competitive for hauls over 100 miles and, because of the reasons mentioned, water transportation has been too costly as well.

Livestock producers in North Carolina face several challenges in using the railroads to deliver grain. While North Carolina is served by two major railroads most of its hog and poultry producers are served by one or the other of the two railroad. As a result the majority of the livestock operations are serviced by only one rail carrier and have little leverage when it comes to negotiating rail rates. Because they are a captive user they are subject to the market power of the railroad. The second concern is the level of service and scheduling dependability. The grain users, depending on their size, would like to have a unit train delivery either once a week or once every other week. From a cost point of view, the closer the railroads can adhere to a just-in-time delivery schedule the lower the grain inventory required, reducing storage capacity requirements and hence the cost of grain used by livestock producers.

The railroads, however, have not been providing that level of service. During times of peak demands the railroads give priority to highest revenue shipments and shippers who have a transportation alternative. The North Carolina grain users are served by only one railroad and at present lack a viable alternative. Because of this, sometimes the trains arrive early and the producers may not have enough storage available to handle the extra grain. As a result they have to pay demurrage or consider building additional storage facilities. At other times the trains are days late forcing the growers to hold a larger reserve of grain for emergencies. These factors can add an extra 2¢ to 4¢ a bushel to the cost of grain.

To help gain some leverage the poultry and hog producers in North Carolina have been seeking an alternate transportation option that would give them some leverage when negotiating with the railroads on rates and level of service. A new terminal facility is under construction at the Port of Wilmington. This will allow the poultry and hog producers to bring grain in by water mainly from South America.

The question Ms. Cole studied was whether or not the relaxation of the Jones Act would make water transportation of grain from Midwest and Gulf ports an alternative to international shipments and give the growers the leverage they need to negotiate with the railroads. A related question is whether the relaxation of Jones Act provisions will help Midwest grain growers maintain a competitive edge over South American producers in supplying the needs of North Carolina's hog and poultry industry. In next week's column we will find out what her research uncovered.

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