## VERTICAL INTEGRATION

### IN TEXAS AGRICULTURE

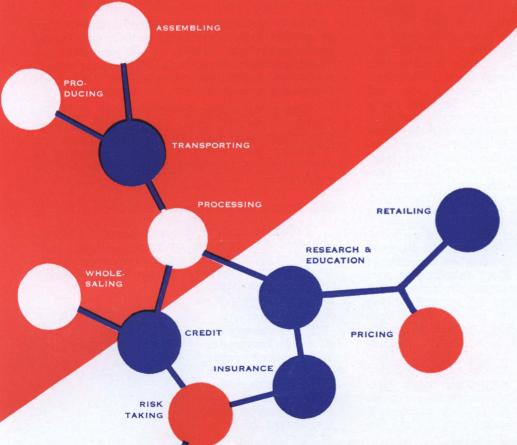


DECISION

MAKING

#### **Beef Cattle**

SOME FORM of vertical integration has existed in the beef cattle industry for many years. In fact, the earliest form of stock-raising was vertically integrated. Producers slaughtered their livestock and distributed the meat in nearby towns. The impetus behind integration has come from three different phases of the industry—the beef producer, the meat packer and the retailer.



#### JARVIS E. MILLER

Assistant Professor Texas Agricultural Experiment Station

#### TOM E. PRATER

Farm Management
Specialist
Texas Agricultural
Extension Service
in the
Department of
Agricultural Economics and Sociology

The Texas A. & M.
College System

TEXAS AGRICULTURAL EXTENSION SERVICE - - - TEXAS AGRICULTURAL EXPERIMENT STATION

College Station, Texas

# VERTICAL INTEGRATION

Beef

NEARLY A CENTURY AGO, some owners of large ranches owned packing plants in Texas coastal towns where cattle were slaughtered to fill an export demand for hides and tallow. Beef cattle producers at times have operated cooperatively-owned processing plants, marketing agencies and loan companies. In the other direction, the big packers also have owned ranches, processing plants for foods other than meat, retail outlets, stockyards and terminal facilities, tanneries, fertilizer plants, refrigerator cars, feedlots and banks and loan companies.

Complete vertical integration in the meat animal industry would involve the control by one individual or firm over the production, feeding and slaughtering of livestock, the distribution of the meat and its sale to the consumer. Today, such integration in the industry is rare, except on a limited scale, such as local butchers who operate retail meat markets.

### The Situation

The beef cattle industry is undergoing rapid technological and economic changes. Traditionally, this industry has been one in which each producer made most of his own decisions concerning the breeding, feeding and management of his herd. Cattle feeding was a farm enterprise on many Corn Belt farms and served as an outlet for surplus labor and grain produced on the farm. Because many producers and feeders either were located a great distance from the market or were small operators and knew little about selling livestock, public livestock markets, both terminals and auctions developed. Meat packers purchased the livestock which came to market, slaughtered it and merchandised the meat. Meat retailing was done by numbers of small retail establishments.

Today, the beef cattle industry has changed considerably. Perhaps the key to the change lies at the retail end. Meat retailing is now done by large firms engaged in mass merchandising. An estimated 30 percent of the retail grocery stores now handle more than 90 percent of food sales, including meat. These firms are geared to a steady, dependable flow of product of known quality. They require volume purchases on a specification basis. Many of these large-scale meat merchandisers now handle only one grade of beef. To sell to these firms, meat packers must meet their specifications concerning quality and delivery schedule, as well as price.

While they are faced with a few large buyers, packers also have two major operating problems—procurement and intrafirm efficiency (use of labor, equipment and facilities). Faced with increasingly inflexible labor costs and costly facilities, the maintenance of a steady flow of products through their plants has become more imperative to operate profitably. Therefore, packers seek ways of stabilizing their supplies of livestock.

Great changes also have occurred in the area of cattle feeding. The number of cattle fed has increased greatly in recent years. One striking change has been the growth of large-scale feedlots, especially in the western states. Large feedlots have the advantage of volume and appear to be highly efficient in purchasing, feeding and marketing.

The demand of large-scale meat merchandisers for dependable sources of beef of specified quality probably has been a major factor in the expansion of cattle feeding. Major changes in technology and equipment have influenced the growth of large-scale feedlots. Specialization and labor-saving equipment have reduced unit costs.

Cattle producers have faced the problems of market price risks and the failure of many local marketing outlets to differentiate between qualities of products. They have sought means of stabilizing prices and of being paid for quality production.

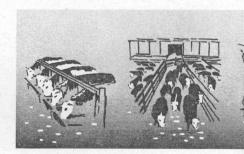
Today, all segments of the beef cattle industry strive for better coordination between production and marketing, with emphasis on efficiency and lower costs. One means of accomplishing this goal is known as *vertical integration*.

#### Nature and Extent

Effective control of management may be achieved by outright ownership by an individual or firm of more than one stage in the production, processing or marketing process,

or by some form of contractual arrangements.

The wide variety of conditions under which beef cattle are produced in this country makes it extremely difficult to determine the extent of integration in the in-



# N IN TEXAS AGRICULTURE

#### Cattle

dustry today. Most of the integration at present involves coordination and control over the feeding and meat packing operations. Some integration between the meat packing and the retailing stages has developed, but not extensively. Little integration between the producer of feeder cattle and the feedlot operator is evident. It has been estimated that between 10 and 20 percent of all fed cattle slaughtered in this country come from some form of integrated arrangement.

In Texas, many feeder cattle and calves are contracted for future delivery, but in most cases, the purchaser assumes no management control over production. Twenty to 50 percent of the cattle and calves fed commercially in Texas are fed under some integrated arrangement, either in a packer-owned feedlot, customfed for a packer or custom-fed by a cattleman. The number of firms engaged in feeding, slaughtering and meat retailing is limited.

Vertically integrated cattle feeding now appears to be centered in California and Arizona. Within Texas, it is scattered, with several of the larger commercial feedlots located on the High Plains.

Large-scale commercial cattle feeding is likely to expand considerably in Texas, particularly in the Panhandle and along the Gulf Coast. In these areas, it will be conducted on a custom basis and will be a specialized, separate business not connected with existing enterprises. One major limiting factor is the lack of an organized effort on the part of mass merchandisers to feature higher quality beef as they have done in other parts of the country.

## Current Management Practices

At present, vertical integration is being attained through direct ownership and contractual arrangements. Under direct ownership, the integrator holds title to the livestock. The livestock may be fed on a custom basis or they may be fed in the integrator's feedlots.

In the case of contractual arrangements, the integrator enters into a contract with the producer, feedlot operator or packer to purchase cattle or beef on certain specifications.

Varying degrees of integration exist

within the cattle industry. A less complete form combines the management of a chain of retail food stores, packing plants and feedlots. A major phase lacking for complete integration is the production of feeder cattle.

A number of meat packing plants own feedlots; others purchase cattle and have them fed in custom feedlots. Still others contract with feeders to deliver cattle of a certain specification on certain dates.

One large meat packing firm is conducting an experiment to determine the feasibility of artificially inseminating range cows with semen from performance-tested bulls. The packing company supplies the semen and the inseminator; the producer delivers the feeder calf to the packer at a certain date. The packer then feeds out the calf and slaughters it and processes the meat in his own plants. The packer is seeking a dependable supply of quality feeder cattle.

A number of large livestock producers feed out calves in their own or in custom feedlots.

Grain producers' cooperatives have built feedlots in some western states. They purchase feeder cattle, feed them and sell them to packers. Net proceeds are returned to members of the cooperative.

#### The Juture Course

Because of forces at work in the livestock and meat economy, vertical integration in the cattle business likely will increase in importance. There will be closer coordination in the production, processing and marketing of beef cattle. More of the fresh beef consumed in the United States will be from heavy, fed cattle, and in Texas more of this type will be consumed, but the majority will come from lighter weight animals that have been creepfed or fed for a short time in a drylot. Increasing amounts of beef for consumption as fresh meat will be bought and sold on the basis of government grades with rigid specifications concerning quality and delivery schedule.

Retailing organizations may contract several months in advance for future delivery. Meat packers probably will devote less emphasis to merchandising and more emphasis to plant efficiency, cost and quality. More of the fed cattle will come from large-scale commercial feedlots. Meat packers will be less concerned with operating their own feedlots, but probably will continue to have cattle custom-fed for their own accounts. They probably will contract in advance with cattle owners and in



many cases before the cattle enter the feedlots. Producers of feeder cattle, to be assured of a market and a predetermined price, will need to contract in advance for the sale of their cattle. The contract will involve provisions for breeding and management designed to produce the quality desired by the feeder or the packer. Producers of slaughter calves probably will contract in advance to meet buyers' specifications. Existing marketing agencies, in order to maintain adequate volumes of business, may act as middlemen in a vertically integrated system.

## Opportunities for Texas Cattlemen

Vertical integration can offer Texas cattlemen several opportunities: to increase the output of beef as a result of further efficiencies in production and marketing; to assure more price stability; to receive proper payment for quality production; and to share in profits from feeding, processing and distributing livestock and meat.

### Problems

Vertical integration also raises several problems. Among these are the possibility of scheduling accurately and meeting buyers' specifications; the bargaining power of the individual cattleman under such a system; the value of decision-making freedom and costs of services furnished by integrators.

### Alternatives

Texas cattlemen have several alternatives. The first is to continue to produce and market independently. Such a system involves considerable price uncertainty. If vertical integration proceeds rapidly, price uncertainty for these cattlemen might increase greatly. They might find fewer buyers for their cattle, since feeders, packers and other integrators would be operating on fixed schedules.

Another alternative is to locate buyers (packers, feedlot operators, etc.) and produce according to their specifications. Under this alternative, production efficiency might be increased and price uncertainty might be reduced considerably, although prices might be lower than at present.

Another alternative involves placing feeder cattle or calves in custom feedlots and contracting with packers for delivery to their specifications. This would allow cattlemen to

take advantage of any profit from an efficient feeding operation without making the investment required for their own feedlots. If the cattle were produced to the buyer's specifications, the margins might not be large, but they probably would be rather stable.

Cooperatively owned feedlots could be another alternative for Texas cattlemen. This would enable members of the cooperative to receive the advantages of feeding as well as the profits from feedlot operations. If these became large enough, cooperatively owned packing plants might offer producers the opportunity to participate in the meat packing industry as well.

#### Cautions

Since increased vertical integration will mean an increase in direct marketing, cattlemen should consider some of the problems involved in direct marketing. One major problem in direct marketing involves price determination. Producers should seek to obtain price bids from as many prospective buyers as possible. They also should study all available market information.

If a cattleman produces the type of livestock that is in demand, he should have little trouble in obtaining bids from a number of buyers.

Another major problem in direct marketing involves *terms of the contract*. All contracts for future delivery of cattle should be in writing and be approved by the producer's attorney.

Vertical integration refers to the linking together of two or more stages of production, processing or marketing activities under one management. The key feature of vertical integration is the centralization of decision-making, risk-bearing, and supervision.

This is the fourth leaflet in the series "Vertical Integration in Texas Agriculture." Similar releases on other crops and livestock important to the Texas economy will follow.

By bringing together present knowledge and current practices regarding vertical integration in Texas agriculture, the staff of the Texas Agricultural Extension Service and Texas Agricultural Experiment Station in the Department of Agricultural Economics and Sociology hope to help you make wiser decisions about this matter.

#### Tyrus R. Timm

Head, Department of Agricultural Economics and Sociology