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BEEF MARKET SPECIFICATIONS AS THEY AFFECT THE PRODUCER

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SUMMARY

Individual producers must plan their beef production according to the climatic, topographic and financial circumstances with which they are faced. However, a few basic parameters can be formulated to guide his decision-making:

- (1) Most beef marketing authorities agree that prices are unusually high at present because of the gap between supply and demand. For the future, the guide should be the general trend of prices over the past ten years.
- (2) While analogues (or substitutes) are not expected to make substantial quantitative inroads into the manufacturing beef trade, their availability must have some effect on holding price levels for manufacturing beef.
- (3) To continue to compete successfully in world markets it is necessary to exploit the natural advantages New Zealand enjoys for beef production and to improve these by a more careful selection of suitable breeds and by progeny testing programmes.
- (4) New Zealand cattle are generally regarded as only average yielders by world standards. Too much cost both at the processing and producing end is involved with fat, and lean meat yield must therefore be increased.
- (5) Increasingly in the future greater margins between heavy and lightweight beasts within grades can be expected. Emphasis should be towards a heavier carcass.

INTRODUCTION

The dramatic increase in worldwide demand for beef in recent years has reflected the generally higher levels of affluence in most developed countries. This increased demand has, particularly over the past twelve months, resulted in an escalation in price to a level which, while it has stimulated production, has at the same time dampened down consumption. One would indeed be a "prophet of doom" to predict other than a bright future for beef, but there is a danger that we may be lulled into a false sense of security in the belief that price increases to the extent encountered in the past twelve months will continue in the future.

While it is difficult to obtain accurate information on beef herds, available evidence indicates that cow herds are increas-

ing in the United States, Australia and in most of the South American producing countries. When consumers buy more beef, normal supplies are insufficient and prices therefore show an upward tendency. Rising beef prices are a stimulus to production; the effect is not immediate, however, because it takes three years from the time a decision is made by a farmer to increase production until the beef is available for the consumer.

It will probably become increasingly important in the future that beef producers carefully plan their operations to optimize returns. In this context beef production must not be considered in isolation from consumer needs. If we are to have a healthy beef industry, the problems of the farmer and of the retailer must be mutually appreciated and understood. Providing the consumer with his wishes, on the one hand, and operating an efficient beef industry on the other, often causes sharp conflict and one of the skills of the marketing function is to endeavour to strike an acceptable balance between these opposing elements.

Although the requirements of individual markets are different, one can, nonetheless, summarize the objective of beef production as "the need to produce at the most economic cost, a beast with a maximum amount of red meat, the minimum amount of bone and the optimum amount of fat". This question of the optimum amount of fat is of course a very difficult one and markets have varying requirements in this respect. Very broadly, the luxury and retail trade require an even and light outer fat cover, whereas the manufacturing trade do not want fat at all.

THE SCHEDULE

Contrary to general opinion, there is no mystique as to the method by which schedule prices are determined. The meat operator selects the best prices for the individual cuts from all the markets he is servicing, assesses the yield of red meat he knows from experience he can expect from the particular grade concerned, and deducts all costs from delivery at the works to f.o.b. or c.i.f. in arriving at a net price to the producer.

The major difficulty arises in assessing the yield because no two carcasses are identical in terms of fat cover distribution, muscle/bone ratio, etc. A system of averages based on experience provides a reasonably accurate standard. Ideally, each beast should be individually yielded, but until such time as a fast and accurate scientific method is established, it would be quite impractical and uneconomic to record yields from individual bodies.

The new grading system introduced for a trial period in the 1973-4 season was designed to encourage and compensate the farmer producing high yielding carcasses. Under the old grading system all classes were classified according to sex and, with the exception of bull beef, each class was subdivided on the basis of quality into either G.A.Q., F.A.Q., Y.A.Q., Trimmer or Boner. The most important changes in the new trial system include:

- (1) Two new grades for chiller-type beef and one for young, well-muscled and adequately-finished cows and in-calf heifers;
- (2) The establishment of four weight ranges replacing the single weight range in the prime grade and the elimination of the Y.A.Q. grade altogether.

The Chiller grade for ox and heifer includes the already well-known chiller type of beef cattle with a complete and light fat cover and well-muscled conformation. G.A.Q. grade for heifers and steers incorporates the balance of the old G.A.Q. and the top of the F.A.Q. F.A.Q. grade incorporates the lower end of the previous F.A.Q. and the top of the previous Y.A.Q. The new F.A.Q. grade comprises medium- to heavily-muscled carcasses carrying little or no fat cover. Many of the dairy-type animals previously graded Y.A.Q., along with certain of the new high-yielding exotic breeds with high muscle development but low fat cover could now meet the F.A.Q. standards.

Some further points on yield which may be helpful in understanding the price differentials incorporated in the beef schedule are:

- (1) Top-grade ox will yield anything between 60 and 68% of saleable meat and to achieve this a trim of 6 to 12% of fat and tissue must be taken from the saleable cuts. Bulls in the South Otago area yield round 70% of 90% visual lean, requiring only a 1% to 2% trim, a good cow about 65%, down to about 45% for overfat and boner.
- (2) It is generally accepted that heifers deposit larger amounts of fat at an earlier age and at lighter weights than do steers and thus at the same carcass weight will have slightly lower yields.
- (3) For bulls in particular the greater yield at heavier weights is one of the factors influencing price.
- (4) Increasingly with the luxury trade, buyers are requesting primal cuts in the heavier weight ranges. Prices for strip-locks for example in the 1.3 to 2.3 kg range can be quoted as much as 10 cents below those in the 4 kg plus range.

Almost 40% of the packed weight of prime beef is now sold in weight ranges and this factor has a bearing on the variations in price between weight ranges. Indeed it is likely that the differential on prime cattle between the weight ranges will tend to increase in the future.

KILLING AND PROCESSING CHARGES

The continually escalating costs of dressing and fabricating beef are having an increasing effect on the final return to producers. The situation has also been aggravated by the trend towards killing beasts at lighter weights. The average cost of processing a beast is round \$30 per head. A 180 kg carcass is equivalent to 16.5 cents per kg, whereas a 320 kg carcass reduces the effective processing cost to 10.0 cents per kg. The additional cost of packing the heavier animal would be more than compensated for by the higher offal recovery. Another major cause for concern in the cost of fabricating beef is the time taken in the boning room to trim excess fat from cuts. As wages continue to rise, this will become an increasing cost factor which will be reflected in schedule values.

NEW ZEALAND BEEF PRODUCTION AND ITS DISPOSAL

In the 1971-2 season, total New Zealand production of beef fell into the following classes: Boner ox, heifer, cow and bull, 58%; prime ox and heifer, 36%; cow, 5%; veal, 1%.

The total export tonnage for the same year was 176 000 tons, the principal destinations being: United States, 112 000; Canada, 20 000; United Kingdom, 12 500; West Indies, 7 000; Chile, 4 000; Japan, 3 500; Hawaii, 3 500.

It is interesting to note that while New Zealand's total beef production in 1971 was 391 000 tons, the world's figure was 33 620 000 tons, with United States heading the list at 10 025 000. New Zealand ranks third after Australia and Argentina as a beef exporter, but only 7.6% approximately of the total world beef production is traded internationally. This fact is significant when considering New Zealand's relative importance in world beef production.

MARKET OPPORTUNITIES AND THEIR REQUIREMENTS

MANUFACTURING BEEF

Over 90% of New Zealand exports of beef to the United States are destined for the manufacturing trade and the demand here is for lean beef which is blended with fat trimmings from domestic production for sausages, hamburgers and other processed meat products. Boner bull, of dark colour, generally commands a worthwhile premium because manu-

facturers know from experience that this mature meat binds better and has better water absorbent qualities, factors which are of vital importance in this trade. Despite the implications of access and the increasing use of analogues in manufactured products, demand is likely to increase in this market and there appears scope for increased production of bull beef. When the present prices being offered for bull beef are considered, one wonders why more farmers do not produce this type of meat, although there are no doubt many problems associated with handling uncastrated bulls.

PRIMAL CUTS

Luxury Trade

The increasing affluence and rapid growth in the tourist industry in the Pacific, South East Asia and the Caribbean is creating increasing opportunities for the sale of both chilled and frozen primal beef cuts. In all these markets buyers are generally looking for cuts heavy in muscling with adequate fat cover for cutting into steaks. It appears that a carcass in the 270 to 320 kg range is required to service these markets and if we are to increase our share of this business it is obvious that heavier beasts must be produced in increasing numbers.

Europe

It has been estimated by FAO that the enlarged EEC will require approximately 780 000 tonnes of beef imports by 1980, an increase of 26% on the 620 000 tonnes imported in 1970; this despite an expected decline in imports to the United Kingdom largely because of projected local production increases of up to 42% during the years 1970 to 1980.

Demand for frozen primal cuts has tended to diminish in the United Kingdom in favour of vacuum pack cuts which are becoming far more popular as retailers realize their advantages. For the United Kingdom markets steer beef desirably should be trimmed to 7 mm of fat and, as consumers there and in Europe are now very fat and waste conscious, this trim is likely to be more rigidly applied in the future. For Continental Europe 7 mm is excessive even now, and if we are to capitalize on opportunities there a fat trim below this level will be required. It appears in this respect that there are obvious opportunities for some of the exotic breeds with their heavy muscling and very light fat cover.

Japan

Few markets offer such exciting potential as Japan and, provided its economy continues in a healthy shape and ade-

quate container shipping is available, increasing opportunities will be available for New Zealand beef.

There are broadly five grades of beef recognized by the Japanese meat trade, the two top grades being produced exclusively from home production. The degree of marbling in these two grades is such that it could almost be described as "fat marbled with meat". The third grade is similar in almost all respects to the United States choice grade and U.S. imported beef is very popular in Japan whenever it is available. Australian feedlotters are in some cases obtaining this same classification when cattle have been fed on grain for an extended period, but generally the Australian and New Zealand chilled beef makes only the two lower grades, and it is obviously in these lower grades that future potential exists.

Fat and meat colour and texture are very important in this market and because consumer tastes are largely attuned to traditional methods of cooking, tenderness is vital. For this reason there appears little future for frozen beef as aged in our traditional processing operation.

FEEDLOTING OF BEEF

Over the past few years my own company has done considerable research aimed at establishing the viability of feedlotting of cattle in our area. The results show that while store cattle and grain prices remain at their present levels, the premium obtainable for grain-fed beef is insufficient to make this type of finishing an economic operation, at least from a farming point of view. However, the proposition of finishing cattle on a pad with traditional feed, that is, hay, lucerne, silage, etc., does appear to have more interesting possibilities for the following reasons:

- (1) Additional quantities of heavyweight cattle will be required for the luxury trade referred to earlier.
- (2) The economics of processing heavier carcasses will be increasingly reflected in higher schedule values for this class of stock in the future.
- (3) Producers can plan to finish cattle to those weights providing the best return by arranging supplies of additional feed in advance, either from their own units or from outside sources.
- (4) Only minimal capital costs are involved with this type of operation.

The future is ours — if we are prepared to do the research. to plan, innovate and market beef aggressively to those people who are in a position to pay for it.