

CATTLE FATTENING ECONOMY : REGIONAL OR NATIONAL IMPLICATIONS

M. CREEK

SUMMARY

Intensive feeding is the only possible means to increase meat production rapidly in traditional husbandry. 32,500 head pass into the feed-lot each year and add 2,250 tons of carcass meat to the cattle.

There is no opposition between production for export and for local consumption. It is simply a question of the sections of the carcass.

The example of Kenya shows the possibility of profit for this business. Here unskilled labour is employed and investments are relatively low. Working capital turns over rapidly (several times a year) which increases the annual profit.

RESUME

Economie de l'embouche bovine : Implications régionales ou nationales

L'alimentation intensive est le seul moyen possible pour accroître rapidement la production de viande de l'élevage traditionnel. 32 500 têtes passent chaque année en feed-lot et ajoutent au bétail 2 250 tonnes de viande en carcasse.

Il n'y a pas d'opposition entre la production pour l'exportation et pour la consommation locale. C'est une question de parties de la carcasse.

L'exemple du Kenya montre la possibilité de profit pour l'entreprise. Celle-ci utilise de la main-d'œuvre peu spécialisée et les investissements sont relativement faibles. Le roulement des fonds est rapide (plusieurs fois par an), ce qui accroît le profit annuel.

The development of a cattle feeding sector appears to be possibly the only practical way in which beef production from a traditional cattle economy can be rapidly increased. If national or regional development plans require a rapid increase in beef production, either for local consumption or for export, then the development of a cattle feeding sector can be regarded, as in Kenya, as a matter of high priority.

Potential rapidity of production increases

Feedlot throughput in Kenya in 1973/74 is estimated at 32,500 head for the year, probably amounting to about 22 percent of the likely total cattle intake of the Kenya Meat Commission for the same period. On a carcass weight basis the feedlot proportion would be substantially higher, due to the higher carcass weights of fed cattle. This level of commercial feedlot production has developed in less than two years from almost nothing and now comes from twelve individual cattle feeding operations.

In terms of increased beef production, these 32,500 head of fed cattle will probably represent an additional 2,250 tons of carcass weight, based on a minimum average carcass gain of 70 kg in 100 days on feed. This figure in fact may be rather higher, as, of the estimated throughput, 58 percent are Large Crossbreds, 36 percent are Improved Boran and only 6 percent are NEP Boran. This total of carcass gain

in feedlots can fairly be regarded as an overall increase in beef production, as the grazing vacated by these fed animals will certainly be fully utilized by other stock, largely breeding cows.

In this connection, longer-term production increases arising from changed herd structures are already in the pipeline and several major commercial ranches are beginning to build up their breeding herds, as they sell younger and younger immatures to feedlots. When the pastoralists are enabled to do the same, really major increases in production will be in train.

Production for local consumption or export

There is no necessary conflict between the two types of production once export markets for quality beef become available. The two can be complementary rather than mutually exclusive and indeed the very development of intensive feeding methods with a quarantine potential, as in Kenya, may open up new export markets that previously did not exist. High priced export opportunities for specific parts of the beef carcass may at the same time both keep down local beef prices and enable the processing plants to pay incentive prices for intensively fed cattle, to stimulate stratification and specialization within the industry.

Concept of increased value added

The feeding of locally available feeds to locally available cattle, partly for export in a highly finished form, to increase locally added value can indeed be a realistic concept, but only if the basic infrastructural requirements can be met to enable intensive feeding methods to develop. The Kenya example, where existing developments in disease control, stock routes and marketing facilities enabled a feeding sector to emerge, is again relevant. And within Kenya, a social cost/benefit analysis of a cattle feeding enterprise based so far as possible on world prices for inputs and outputs (undistorted by local price controls, subsidies or taxes) has revealed a greater « social » than commercial or market profitability for the enterprise. A commercial market rate of return of 27 percent gross became 38 percent on a « social » basis, at the same point in time and based on the same technical coefficients and price relationships.

(Newbery, Cambridge UK, 1972. Chapter VII, Table 5 « A Feasibility Study of Intensive Cattle Feeding in Kenya ».)

Provision of employment

A cattle feeding sector is not a large direct employer of labour, but the jobs provided are skilled and semi-skilled and likely to be much sought-after in many developing economies. Newbery's study (1972) gives a total capitalization of £K 3,930 (US \$ 11,390) per job opportunity, of which 68 percent is working capital. Capital in fixed improvements and machinery totalled only £K 1,280 (US \$ 3,700) per job, compared with a figure of £ 6,000 (US \$ 17,400) quoted for Gross Fixed Capital per job in the manufacturing

sector of Kenya's economy. Land per worker for an integrated grazing and forage growing feedlot/farm totalled 12.3 hectares.

The costs of establishing a feeding sector

Standard commercial feedlot budgets developed in Kenya show a total initial investment of £K 158,000 (US \$ 458,000) for a feedlot with a throughput of 6,400 NEP Boran animal par annum. In 1971, over 80,000 head of young immature cattle (40 percent of the total intake) were slaughtered by the Kenya Meat Commission at low grades and carcass weights. To divert this throughput for grazing and feeding out before slaughter would require thirteen standard feedlots involving a total capitalization of £ 2,100,000 (US \$ 6,000,000) of which much less than half is required for land, buildings and mechanical equipment. This is a low overall figure in relation to the potential annual export value of the additional meat of US \$ 8,000,000. The speed with which working capital can be turned over, several times a year, is a notable feature of feedlot finance.

In general, the commercial feedlots new being established in Kenya are achieving technical and economic performance levels closely in line with those derived from the experience of the Project. Target feedlot margins of the order of Ksh. 1.00 (US \$ 0.07) per yarded animal day above all costs are being achieved or exceeded as a general rule, and imply returns to total capital of around 20 percent or more per annum. With the availability in some cases of over half the total capital requirement from Government sources, at relatively low rates of interest, the gearing effect greatly improves the pre-tax returns of many individual operators to their own capital.