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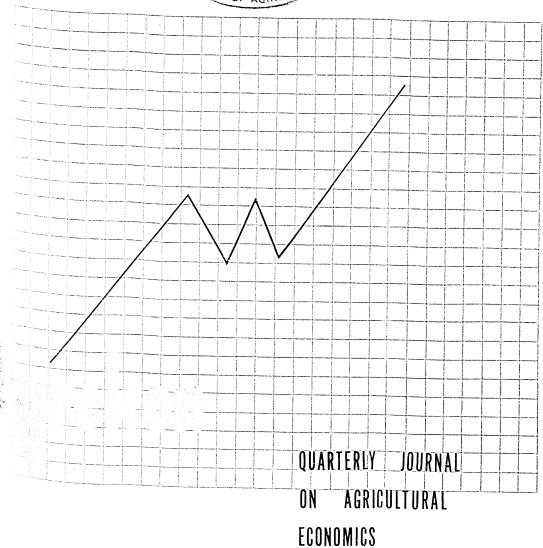
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#### REQUIREMENTS FOR CONTRIBUTION

Deserving articles in the field of agricultural economics, for publication in this journal, will be welcomed.

These articles should have a maximum length of 10 folio pages (including tables, graphs, etc.), typed in double spacing. All contributions should be submitted in triplicate (preferably in both languages) to the editors, c.o. Department of Agricultural Economics and Marketing, Pretoria, and should be received by the editors at least one month prior to publication date.

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## A Review of the Development of the Livestock and Meat Industries

by J. COETZEE

General Manager, Meat Board

Since the earliest years meat has been and still is one of man's main sources of food supply. As in the case of other pastoral products and field crops, the production of meat in South Africa has increased materially during the past decades.

In order to get a clear picture of the place occupied by cattle, sheep and pig production in agriculture, particulars of gross values of certain agricultural products, during some years since the establishment of the Union of South Africa, are furnished in the following tables. These gross values have been calculated by the Department of Agricultural Economics and Marketing at farm prices; that is, market prices less marketing costs, and include the numbers marketed plus consumption on farms and in Bantu areas.

The value of pastoral products represented about 56% of the total value of agricultural products in 1910/11, but

was about 43% in 1962/63, whilst the value of field crops, and horticulture came to 57%. However, the value of cattle, sheep and pigs in relation to the total value of all agricultural products has remained practically unchanged at 16-17% since 1910/11, but has acquired a more important place in the livestock industrydue largely to the more important place assumed by cattle.

The development of the livestock and meat industries can be conveniently divided into four phases, namely:-

- 1. The period before 1932 completely free marketing;
- 2. the period 1932 to 1944 supply control to certain markets:
- 3. the period 1944 to 1951/1958 complete price control and rationing; and
- 4. the period after the introduction of auction on the hook.

TABLE 1. - Gross value of field crops and pastoral products and certain products in these groups (R million)

Year	Grand total of field crops, etc. and pasto-ral products	Field crops and horticulture		Pastoral products						
		Total	Maize	Wheat	Total	Cattle	Sheep	Pigs	Wool	Poul- try
1910/11 1934/35 1950/51 1960/61 1962/63	57.9 100.8 005.0 820.7 882.0	25.3 53.1 269.9 454.7 500.7	8.0 14.2 85.7 158.0 184.4	3.1 8.9 34.6 46.0 42.4	32.5 47.8 335.1 366.0 381.3	7.9 47.2 82.2	4.8 7.0 26.4 44.4 46.8	1.1 2.1 12.5 13.3 11.3	6.3 13.5 159.3 82.0 95.3	22.6 31.9

Source: Department of Agricultural Economics and Marketing

TABLE 2. - Ratio of gross values of field crops and pastoral products and to the total gross value furnished in Table 1 (to nearest %)

Year	Field crops, etc.			Pastoral products						
	Total	Maize	Wheat	Total	Cattle	Sheep	Pigs	Wool	Poultry	
1910/11 1934/35 1950/51 1960/61 1962/63	45 55	14 14 14 19 21	5 9 6 6 5	56 47 55 45 43	8 8 8 10 10	8 7 4 5 5	2 2 2 2 1	11 13 26 10 11	6 6 4 4 4	

TABLE 3. - Ratio of gross values of certain pastoral products to the total gross value of pastoral products furnished in Table 1. (Percentage)

Year	Cattle	Sheep	Pigs	Total Cattle, sheep and pigs	Wool	Poultry
1910/11 1934/35 1950/51 1960/61 1962/63	14.5 16.5 14.1 22.5 23.0	14.8 14.6 7.9 12.1 12.3	3.4 4.4 3.6 3.6 3.0	32.6 35.6 25.7 41.6 38.2	19.4 28.2 47.5 22.4 25.0	10.5 13.0 6.4 8.7 8.9

#### 1. The period before 1932

Before 1932 marketing was characterised by a complete absence of control. Slaughter stock and meat were sold at the livestock markets in the main consumer areas, at municipal produce markets, rural auctions or by private treaty between the farmer, the speculator and the butcher. This period was further characterised by strong price fluctuations; from high levels during and after the first world war, to extremely low prices during the depression of 1930-1932.

Particulars of the trend of producers' prices in respect of some years since 1911/12 are given in Table 4.

In 1921-1922 livestock prices dropped to about half the levels which ruled two years before, due to an over-supply aggravated by increasing introductions of livestock from adjoining territories into

South African markets. Special efforts were made to export surpluses; and during the five years 1926/1930, the equivalent of about 50,000 head of cattle and 16,000 sheep were exported annually.

This period of low prices convinced producers that they should endeavour to obtain a greater say in the marketing of their products. They, therefore, established producer organisations to promote export, to market at the terminal markets and to sell direct to wholesale and retail butchers.

The object of these organisations, one of which was the "Meat Producers' Exchange" on the Witwatersrand, was to stabilise prices at a more economic level by means of regulating supplies to the markets. They failed, however, due to supply difficulties and other problems which they encountered.

TABLE 4. - Producers' prices of slaughter stock including hides, skins and offal less marketing costs - (transport costs not deducted).\*

July/June	Cattle	Sheep	Pigs
	(Cold weight)	(Cold weight)	(Warm weight)
	c per lb	c per lb	c per lb
1911/12	3.22	3.83	≠
1915/16	3.27	5.17	≠
1919/20	5.20	9.42	≠
1921/22	2.86	4.33	≠
1926/27	2.66	5.42	5.87
1931/32	2.13	2.58	3.66
1932/33	1.95	2.92	3.46
1934/35	2.46	4.92	5.56
1939/40	3.31	4.75	5.87
1943/44	5.79	8.25	8.47
1950/51	7.17	14.92	10.61
1952/53	9.23	19.00	12.87
1957/58	11.87	21.25	12.52
1959/60	12.27	18.82	14.87
1960/61	11.97	19.41	13.38
1962/63	12.64	20.23	13.24

<sup>\*</sup> Source: Department of Agricultural Economics and Marketing

As already indicated, prices dropped sharply from 1920/21 to 1921/22 and thereafter remained fairly steady, although mutton and pork prices improved somewhat in 1924/25 and beef prices in 1928/29. The depression of 1930/32, however, caused a total collapse of prices, and farmers were compelled to market increasing numbers of livestock in order to meet their obligations. The position was further aggravated by the catastrofic drought of 1933 – so that prices reached their lowest levels on over-supplied markets.

#### 2. THE PERIOD 1932 TO 1944

These circumstances gave rise to grave concern, and caused the Government of the time to take two steps in an endeavour to alleviate the position:-

(a) Regulating the supply. - The first step was the establishment in 1932 of a Meat Board of three members, with the

power of regulating the supply of slaughter stock to the Johannesburg and Pretoria markets by means of a permit system.

(b) Removing surpluses by means of export. - The second step was to remove the surpluses from the markets by exporting against payment of subsidies. In this manner the equivalent of almost 56,000 head of cattle and 187,000 sheep were exported during the period 1934 to 1941, against a subsidy of R528,000 (£264,000) paid out by the Meat Board.

Although these two methods were the most important in the stabilisation programme, attempts were made to concentrate competition at the terminal markets by imposing restrictions on the introduction of livestock by the trade, and applying restrictions in respect of very light animals from adjoining territories.

<sup>≠</sup> Not available

An enlarged Meat Board of 11 members was established in 1934 in terms of the Livestock and Meat Industries Act; and provision was made for the collection of levies on cattle and sheep, in order that such funds could in turn be utilised for subsidisation and the improvement of the meat industry generally. At that time pigs still offered no problem.

It is generally recognised today that some measure of success was achieved with the stabilisation efforts.

At the end of the period, from 1939 and during the war, the demand for meat increased to such an extent that prices showed an exceptional increase and created new problems in the opinion of the Government of the time, viz. the danger of inflation in consequence of a growing shortage. To cope with the situation, two measures were employed:-

- (a) Ceiling prices were introduced for the retail butcher. This system could not function, however, since under strong Competition it was not possible to purchase at the purchase price indicated by the authorities - and the ceiling-price system failed.
- (b) Consumption was curtailed by the imposition of restrictions on the slaughter of slaughter stock in certain areas.

#### 3. THE PERIOD 1944 TO 1951/1958

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Because ceiling prices and restrictions on slaughterings failed, a Meat Commission was appointed in 1943. In consequence of its recommendations the third phase in meat control was introduced, viz. complete price control from producer to consumer, and rationing by means of quotas calculated on a weight basis in the nine controlled areas, as well as ceiling prices and rationing on numbers or weight in the outside areas. Grading according to the quality of carcases derived from slaughter stock slaughtered in controlled areas and marking of carcasesaccording to grade were

introduced. Producers, dealers and consumers became more quality-conscious, and this resulted in an improvement in the quality of animals produced.

At the controlled markets the Controller of Food Supplies, and later the Meat Board, operated as the sole buyer of meat at fixed producers' prices according to grade, which served as the basis for the calculation of wholesale and retail prices at fixed margins.

Under the system of fixed prices there were continual meat shortages, uneven distribution of meat between controlled centres and between controlled and outside areas. Black market transactions and distribution of meat were the order of the day; and when the position proved intolerable, price and quota control on mutton were abolished in 1951 and on beef in 1956 - when auction on the hook was introduced. Pork followed in 1958.

4. THE PERIOD AFTER THE INTRODUCTION OF AUCTION ON THE HOOK (1951 FOR LAMBS, SHEEP AND GOATS, 1956 FOR CATTLE AND 1958 FOR PIGS

Auctioning of dressed carcases with guaranteed minimum prices according to grade (except for the lowest grades which have no guarantee) at present applies to all classes of meat in the nine controlled areas, viz. the Witwatersrand, Pretoria, Cape Town, Durban, Port Elizabeth, East London, Bloemfontein, Kimberley and Pietermaritzburg. Marketing is free at country auctions.

From Table 5 it is clear that the system of auction on the hook resulted in a much better distribution of supplies between controlled areas and the outside area. Because market price levels are able to draw slaughter stock to markets to a greater or lesser extent, a more even distribution between centres and seasons also followed. Exceptional climatic and disease conditions, about which little can normally be done, are the only factors causing bottlenecks from time to time.

TABLE 5. - Slaughterings in the Republic (according to levy returns) to nearest thousand

Cat		Cattle	Sheep≠		Pigs		
Year	Total	%slaughtered	Total	% slaughtered	Total	% slaughtered	
1001	slaught_	in controlled	slaught-	in controlled	slaught-	in controlled	
	ered	areas	ered	areas	ered	areas	
1938/39	665	63	3,541	59	*		
1939/40	677	$\epsilon$ 9	3,741	59	*		
1940/41	765	71	4,186	64	396	69	
1941/42	824	75	4,618	67	489	68	
1942/43	872	74	4,265	66	525	66	
1943/44	810	69	4,019	60	524	68	
1944/45	776	69	3,505	50	560	69	
1945/46	848	72	3,512	51	576	63	
1946/47	1,031	73	3,487	49	444	54	
1947/48	1,140	71	3,033	43	545	58	
1948/49	1,117	71	2,976	44	723	68	
1949/50	1,215	65	2,454	30	825	62	
1950/51	1,127	59	2,553	43¢	817	62	
1951/52	1,129	59	3,085	58	752	58	
1952/53	1,159	60	3,933	61	686	53	
1953/54	1,278	62	3,730	59	599	51	
1954/55	1,139	56	4,034	63	584	49	
1955/56	1,175	57 <sup>Ø</sup>	3,942	63	641	51	
1956/57	1,250	59	3,836	62	771	56	
1957/58	1,301	61	3,990	63	851	60	
1958/59	1,325	62	4,344	65	704	56 <sup>ø</sup>	
1959/60	1,379	62	4,858	66	646	58	
1960/61	1,475	63	4,941	63	685	56	
1961/62	1,475	63	5,255	66	750	56	
1962/63	1,555	63	5,354	65	764	57	

<sup>≠</sup> Lambs, sheep and goats

There has also been greater price stability after the introduction of auction on the hook.

By effecting refinements to the system of guaranteed prices for different grades of meat from time to time, constant endeavours are being made to develop the livestock and meat industries - in order to keep pace with the ever-increasing demand for meat.

#### Exportation of meat

Traditionally South Africa is not an exporting country as far as meat is concerned. Under the guaranteed price system, however, the Meat Board must from time to time buy in carcases which cannot be taken up by the trade due to

<sup>\*</sup> Not available

ø Auction on the hook introduced

the seasonal nature of marketing. This meat must subsequently be disposed of to best advantage. Due to the generally high local price levels for sheep and pigs, these types of meat cannot be disposed of overseas on an economic basis, but in the case of beef the local price levels are more or less in relation to those overseas – so that the Board is able to dispose of surpluses overseas without loss or at slight losses in quarters or in deboned form. The disposal overseas of deboned beef, especially of the lower grades, has been found to be profitable.

During 1963 a total of about 8,200 tons of beef was exported being the equivalent of about 39,000 carcases, out of a total marketing figures in the Republic of 1,635,000 carcases.

## The results of the various control measures

The question may well be asked as to what has been achieved by the various forms of control over the marketing and distribution of meat. The answer is quite simple.

In the case of the producer of slaughter stock a measure of price protection has been achieved, and during the past 30 years prices have fluctuated much less than would have been the case if prices had been allowed to find their own levels. During and after the Second World War farmers made great sacrifices in that they received lower prices for their products than they would have obtained under free marketing conditions. However, farmers were prepared to make this sacrifice in the hope and expectation that prices would be supported if a substantial decline should be experienced.

During the period of fixed prices, the payment of incentive premiums in respect

of carcases derived from young high-grade cattle was introduced, in order to stimulate the production of high-grade young animals in particular and beef in general. As a result, producers were encouraged to feed slaughter cattle and to market them at a younger age; which made it possible for them to keep more breeding stock and to secure increased production from the same livestock population due to quicker turnover.

With the introduction of auction on the hook in 1956, the incentive premiums were included in the producers' floor prices for young animals in the high grades. Because the floor prices for young cattle were higher than those for older cattle in the same grade, and the trade could not recover the higher prices within the same grade from the consumers, the Meat Board was obliged to buy in the major portion of the young high-grade carcases marketed and to dispose of them later in frozen form at reduced prices.

Since the premium is based on age and not on quality as such, special minimum prices for the trade were later introduced, which enabled the trade to buy these carcases at prices at which they could be sold to the consumers.

The Board also introduced positive educational publicity for the sale of meat, particularly high-grade meat, because the gradual switch-over from extensive to intensive production methods, to ensure a greater volume to meet the increasing demand, is bound to lead to improvement in quality; and it is essential to create a market for such meat so that production will not be discouraged.

(This article will be followed with one explaining the position at present in connection with meat control. - Editor.)

"Farm cost analyses often seem to show that cattle feeding on a small scale is not profitable. But when these cost studies are interpreted, they indicate that many feeders of small droves can remain in a good competitive position because they use many resources that cannot be converted into a marketable product except through cattle."

CO-OPERATIVE EXTENSION SERVICE, ILLINOIS (SEPTEMBER 1963).