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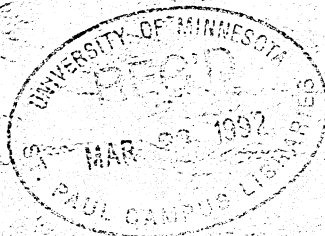
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AGRICULTURAL OUTLOOK CONFERENCE 1982

**'82**

**PRESENTED BY -**

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# AGRICON - 1982

## OUTLOOK FOR RED MEAT - 1982

### SIZE OF THE INDUSTRY

This paper will briefly outline the role of red meat in South African agriculture and present the outlook for the industry for 1982 as far as supply and demand and producer and consumer prices are concerned. It will also take a broad look at the role of substitutes and the prospects for the red meat industry.

The red meat industry (beef, mutton and pork) forms an integral part of most South African farming systems, whether as a specialised, complementary or supplementary branch of farming.

After maize, red meat is the most important product in terms of gross value of agricultural production. Table 1 reflects the importance of red meat and livestock products for South African agriculture in terms of gross value of production.

TABLE 1: GROSS VALUE OF RED MEAT AND ITS RATIO TO TOTAL LIVESTOCK AND AGRICULTURAL PRODUCTION

YEAR	RED MEAT	LIVESTOCK PRODUCTS	TOTAL AGRICULTURAL	RED MEAT AS % OF TOTAL
<u>R1 000</u>				
1971/72	303 801	622 496	1 738 072	17,5
1972/73	397 627	867 822	1 829 147	21,7
1973/74	469 006	994 938	2 663 608	17,6
1974/75	499 718	1 073 497	2 771 955	18,0
1975/76	534 882	1 224 086	2 976 568	18,0
1976/77	615 350	1 330 588	3 651 008	16,9
1977/78	632 896	1 409 538	3 968 992	15,9
1978/79	738 832	1 628 153	4 320 454	17,1
1979/80	951 762	1 982 884	5 651 982	16,8
1980/81 <sup>2)</sup>	1 221 901	2 464 155	6 642 077	18,4

1) Division of Agricultural Marketing Research, Dept of Agriculture and Fisheries

2) Provisional

It appears that red meat comprises approximately 20% of the gross value of agricultural production. In fact, in 1972/73 it was as high as 21,7%.

Table 2 indicates the volume of consumer spending on red meat, which is the most important single food item and exceeds the next important item (bread and grain products) by approximately 30%. In 1979/80 it comprised about 21% of total consumer spending on food, drink and tobacco.

TABLE 2: PRIVATE CONSUMER SPENDING ON RED MEAT AND FOOD IN THE RSA

YEAR	RED MEAT Rm	FOOD Rm	SHARE OF RED MEAT %
1972	700	2 534	27,6
1973	852	3 031	28,1
1974	982	3 469	28,3
1975	1 104	3 962	27,9
1976	1 209	4 453	27,2
1977	1 337	5 008	26,7
1978	1 514	5 667	26,7
1979	1 892	6 933	27,3
1980	2 394	8 672	27,6
1981 <sup>1)</sup>	2 950	9 628	30,6

1) Estimate

Source: Division of Agricultural Marketing Research, Department of Agriculture and Fisheries

#### SUPPLY OF MEAT

##### Beef

Supply is determined by production, exports and imports.

##### Production

Factors influencing production are herd size, slaughterings and carcase masses as reflected in Table 3.

TABLE 3: CATTLE NUMBERS, SLAUGHTERINGS AND MASS OF BEEF PRODUCED IN WHITE AREAS OF THE RSA

YEAR	NUMBER <sup>1)</sup>	POPULATION GROWTH	SLAUGHTERINGS	SLAUGHTERINGS & GROWTH	EFFICIENCY <sup>2)</sup>	MASS SLAUGHTERED	
		MILLION				AV (kg)	TOTAL (t)
1972	8,0	+0,2	1,596	1,796	23,0	203,9	325 424
1973	8,2	+0,2	1,702	1,902	23,8	199,3	339 209
1974	8,5	+0,3	1,353	1,653	20,2	209,7	283 724
1975	8,8	+0,3	1,378	1,678	19,7	212,2	292 412
1976	9,1	+0,3	1,590	1,890	21,5	209,0	332 310
1977	9,3	+0,2	1,747	1,947	21,4	213,0	372 111
1978	9,4	+0,1	1,979	2,079	22,4	208,1	411 830
1979	9,0	-0,4	2,338	1,938	20,6	201,0	469 938
1980	8,4	-0,6	2,545	1,945	21,6	196,7	500 602
1981 <sup>3)</sup>	8,6	+0,2	1,890	2,090	24,9	208,0	393 120
1982 <sup>4)</sup>	8,8	+0,2	1,950	2,150	25,0	207,0	403 650

1) Division of Agricultural Marketing Research, Department of Agriculture and Fisheries

2) (Slaughterings and growth) + population previous year

3) Estimate

4) Forecast

Non-commercial slaughterings are not known and estimates thereof are ignored for purposes of this outlook. This in fact moreover amounts to an assumption that non-commercial slaughterings will remain constant. Commercial slaughterings increased gradually from 1974 to reach a peak in 1980, followed by an expected sharp decline. The herd has been severely depleted since 1978, as is reflected by cattle numbers, and it must be assumed that the herd build-up which started in 1980 will continue in 1982 and thus have a dampening effect on any significant increase in slaughterings. It can nevertheless be assumed that the increase in cattle numbers and production efficiency would also affect total slaughterings and that a slight increase, possibly of the order of 3%, could be expected in 1982.

More favourable price/cost ratios also favoured the average carcass mass produced in 1981 but it is unlikely that these factors will improve further in 1982 and average carcass masses are expected to remain virtually the same as for 1981.

To summarise, commercial slaughterings for 1982 may be expected to amount to approximately 1,95 million, with a total estimated production of beef of 403 650 tons.

#### Imports and exports

The Republic is still dependent to a certain extent on imports to meet its total consumer needs. Table 4 reflects the production, imports, exports and available supply of beef (excluding veal) since 1972.

TABLE 4: AVAILABLE SUPPLY OF BEEF<sup>1)</sup>

YEAR	PRODUCTION (1)	IMPORT (2)	EXPORT (3)	AVAILABLE (1 + 2) - 3
	t			
1972	325 424	125 801	25 956	425 269
1973	339 209	107 162	21 229	425 142
1974	283 724	98 664	1 731	380 657
1975	292 412	100 228	333	392 307
1976	332 310	95 708	704	427 314
1977	372 111	74 208	9 596	436 723
1978	411 830	57 218	12 463	456 585
1979	469 938	56 289	11 244	514 983
1980	500 602	58 243	12 357	546 488
1981 <sup>2)</sup>	393 120	90 000	130	482 990
1982 <sup>3)</sup>	403 650	40 000	150	443 500

1) Statistics of National States excluded

2) Estimate

3) Forecast

As far as imports are concerned, imports from SWA can be expected to decrease still further since the industry first has to restore its herd numbers and also intends to concentrate on processing to a greater extent. Imports from Botswana will be maintained at roughly the same level as the previous year while imports from Zimbabwe are negligible.

In view of the above factors, imports for 1982 will amount to 40 000 tons at most.

Exports can be expected to be maintained at the same low level as the previous year mainly in order to supply existing dependent markets and will probably not exceed 150 tons.

The estimate of the total available supply for 1982 therefore amounts to 443 500 tons compared with the estimate of 482 990 tons for 1981.

### Mutton

The size of the sheep flock, number of slaughterings and mass of meat produced are set out in Table 5.

TABLE 5: SHEEP NUMBERS AND PRODUCTION IN WHITE AREAS

YEAR	NUMBER <sup>1)</sup>  MILLION	SLAUGHTERINGS	MASS	
			AVERAGE	TOTAL
			kg	t
1972	29,1	6,736	15,2	102 387
1973	29,6	5,310	15,5	82 305
1974	30,3	5,295	16,1	85 250
1975	31,0	6,075	16,2	98 415
1976	31,0	6,171	15,9	98 119
1977	31,9	6,059	16,5	99 974
1978	32,0	6,796	16,1	109 416
1979	31,6	7,161	16,3	116 724
1980	31,4	6,888	16,6	114 341
1981 <sup>2)</sup>	31,3	6,550	17,0	111 350
1982 <sup>3)</sup>	31,0	6,500	16,8	109 200

1) Division of Agricultural Marketing Research - Dept of Agriculture and Fisheries

2) Estimate

3) Forecast

After 1979 when slaughterings reached a peak of 7,161 million, a steady decline set in and it is estimated that total slaughterings for 1981 will amount to 6,550 million.

Early spring rains this year in the major sheep grazing regions give cause for optimism. There has been a sharp increase of 33% in wool prices at the opening auction of the new season compared with the corresponding period last year. These buoyant prices will naturally give rise to a further moderate build-up in the



wool-sheep flock. Since roughly 60% of slaughterings consist of wool sheep this could lead to a slight drop in slaughterings, which would consequently be reflected in the 1982 estimate of 6 500 million. Hence mutton production could decrease by only about 2 000 tons or 1,9%.

### Pork

Pig numbers, slaughterings and production are indicated in Table 6.

TABLE 6: PIG NUMBERS, PRODUCTION AND IMPORTS AND EXPORTS OF PORK

YEAR	NUMBERS <sup>1)</sup>	SLAUGHTERINGS	MASS		IMPORTS	EXPORTS	AVAILABLE SUPPLY
	1 000		<u>Average</u>	<u>Total</u>			
			kg	t		t	
(1)	(2)	(3)	(4)	(5)	(6)	(4+5)-(6)	
1972	825	1 305	51,8	67 599	183	1 054	66 728
1973	865	1 530	50,7	77 571	586	4 057	74 100
1974	859	1 579	50,8	80 213	135	2 458	77 890
1975	882	1 425	49,8	70 965	715	562	71 118
1976	891	1 463	50,0	73 150	1 648	1 759	73 039
1977	916	1 511	49,8	75 248	1 722	3 584	73 386
1978	921	1 493	51,1	76 292	737	4 435	72 594
1979	913	1 339	52,9	70 833	159	1 371	69 621
1980	937	1 292	54,5	70 414	22	2 093	68 343
1981 <sup>2)</sup>	978	1 300	54,7	71 110	650	630	71 130
1982 <sup>3)</sup>	1 000	1 330	54,0	71 820	700	650	71 870

1) Division of Agricultural Marketing Research, Department of Agriculture and Fisheries

2) Estimate

3) Forecast

It would seem that the drop in slaughterings since 1979 has been checked. In fact, an upward trend in the number of pigs marketed already became apparent in 1981. This can be largely attributed to the more favourable price levels which have been maintained since 1980.

The existing export markets are maintained as far as possible in order to retain an established outlet for processed pork. Because of an increasing shortage of certain pork items there is also scope for increased imports.

As far as the consumption of pork is concerned, it remains a less sought-after meat among South African consumers. Positive action will be taken in 1982, however, to improve the image of pork among consumers.

It can be expected that production capacity will be expanded further in 1982 as a phase of long-term planning. It can be predicted with reasonable certainty that numbers as well as slaughterings will show an increase of the order of 2% to 3% in 1982.

### Total supply of meat

The total supply of meat, excluding non-commercial slaughterings, is summarised in Table 7.

TABLE 7: TOTAL DOMESTIC SUPPLY OF MEAT, EXCLUDING NON-COMMERCIAL SLAUGHTERINGS

YEAR	BEEF	MUTTON	PORK	TOTAL RED MEAT	CHICKEN <sup>3)</sup>	TOTAL
		t				
1972	425 269	102 387	66 728	594 384	160 000	754 384
1973	425 142	82 305	74 100	581 547	194 000	775 547
1974	380 657	85 250	77 890	543 797	232 000	775 797
1975	392 307	98 415	71 118	561 840	265 000	826 840
1976	427 314	98 119	73 039	598 472	287 000	885 472
1977	436 723	99 974	73 386	610 083	299 000	909 083
1978	456 585	109 416	72 594	638 595	300 000	938 595
1979	514 983	116 724	69 621	701 328	302 000	1003 328
1980	546 488	114 341	68 343	729 172	308 000	1037 172
1981 <sup>1)</sup>	482 990	111 350	71 130	665 470	322 000	987 470
1982 <sup>2)</sup>	443 500	109 200	71 870	624 570	355 000	979 570

1) Provisional

2) Forecast

3) Division of Agricultural Marketing Research, Dept of Agriculture and Fisheries

Since 1972 the domestic supply of all meat increased steadily to the peak of 1980. Estimates for 1981 show a drop of 4,8%, however, while the estimate for 1982 foresees the probability of a further drop of 0,8%. These declines will be largely due to decreased beef production in 1981 as well as mutton production in 1981 and 1982, and to an expected decrease in beef supplies from neighbouring countries in 1982.

The substantial decrease in the availability of red meat will be largely compensated for by an increase in the availability of chicken, the market share of which could increase rapidly from 29,7% in 1980 to 32,6% and 36,2% in 1981 and 1982 respectively.

## DEMAND

The demand for meat is a function of price, income and need. Table 8 reflects the pattern of consumer spending on meat and meat consumption over 11 years.

TABLE 8: CONSUMPTION OF/AND CONSUMER SPENDING ON RED MEAT, TOTAL RSA<sup>1)</sup>

YEAR	EXPENDITURE R MILLION	CONSUMPTION 1 000 t
1972	700	868
1973	852	849
1974	982	813
1975	1 104	777
1976	1 209	799
1977	1 337	867
1978	1 514	884
1979	1 892	909
1980	2 394	1 025
1981 <sup>2)</sup>	2 950	880
1982 <sup>3)</sup>	3 300	900

- 1) Division of Agricultural Marketing Research, Dept of Agriculture and Fisheries
- 2) Estimate
- 3) Forecast

The sharp increase in consumer spending since 1979 is not due as much to increased consumption as to higher consumer prices. As is reflected in the table, the total consumption of red meat dropped from 1980 to 1981 whereas expenditure increased by as much as 23%. According to experts such as the Bureau of Economic Research, Standard Bank, Senbank, RAU and others the increase in real consumer spending for 1982 is expected to vary from 3,0% to as low as -3,0%. Consequently it can be assumed with reasonable certainty that at constant prices the consumer will not spend more than 2% more on food in 1982 than in 1981, but consumers are expected to have 11,9% (R350m) more disposable income available for red meat compared with an increase of R556m in 1981.

## PRICES

### Producer prices

Auction price trends for the different types of meat are indicated in Table 9.

From these figures it is clear that while beef prices showed a downward trend since March 1981, the converse applied in the case of mutton and pork.

In fact, it is expected that auction prices for beef will tend upwards for the greater part of 1982 while increases in auction prices for mutton and pork will be maintained. This will be the inevitable result of the reduced supply of beef and mutton, because of population increase and expected increased consumer spending on food.

TABLE 9: AUCTION PRICES OF BEEF, MUTTON AND PORK

YEAR	BEEF		MUTTON & LAMB	PORK
	SUPER	ALL GRADES	ALL GRADES	ALL GRADES
c/kg				
1972	57,6	49,5	76,1	50,0
1973	76,9	68,9	93,1	50,6
1974	100,5	92,2	115,8	65,1
1975	100,4	87,8	117,2	78,6
1976	108,0	90,6	134,0	83,8
1977	106,2	92,0	136,3	83,7
1978	106,5	92,6	133,4	90,1
1979	118,9	103,0	148,1	113,5
1980	171,3	151,3	191,7	137,4
1981 Jan	228,1	215,9	222,7	149,1
Feb	235,3	219,3	229,9	148,9
March	242,7	217,0	229,2	150,0
April	241,1	214,1	242,1	150,1
May	228,4	206,2	238,9	148,7
June	225,3	209,9	249,5	153,7
July	232,6*	211,4	248,9	163,0
Aug	219,6	205,2	251,7	164,0
Sept	215,2	206,1	266,5	167,2
Oct	221,9	210,8	262,3	191,2

\*New grading system as from 1 July 1981

Consumer prices

Consumer price trends from 1974 up to and including August 1981 are reflected in Table 10.

TABLE 10: CONSUMER PRICES OF BEEF, MUTTON AND PORK<sup>1)</sup>

YEAR	BEEF <sup>2)</sup>	MUTTON <sup>2)</sup> CENT PER KG	PORK <sup>2)</sup>
1974	132,1	188,4	125,1
1975	141,2	199,7	140,7
1976	144,6	210,0	152,7
1977	149,7	225,2	159,8
1978	158,2	230,3	173,0
1979	176,7	257,3	201,5
1980	231,7	320,0	257,4
1981 Jan	314,0	389,1	318,8
Feb	312,8	388,4	318,4
March	315,0	393,9	321,8
April	319,4	396,7	324,3
May	327,3	397,0	323,1
June	319,6	402,4	324,3
July	322,5	407,9	326,9
August	323,4	408,6	329,0

1) Department of Statistics

2) Weighted average prices of various cuts in all urban centres

Beef : Rump steak, sirloin, topside, brisket, chuck

Mutton: Leg, loin, shoulder

Pork : Cutlet, leg

The table reveals that the upward trend in all consumer prices is being maintained. Consumer prices of mutton and pork are commensurate with auction prices as indicated in Table 9. Consumer prices of beef, on the other hand, show a slight increase since January 1981 despite a drop in auction prices.

The latter occurs largely as a result of increased retail profit margins on beef cuts which apparently have to compensate for butchers' reduced sales as well as the stiffer price competition against bulk sales which are not reflected in the consumer price index.

The more rapid rise in consumer prices for mutton and pork is probably due to increasing demand for these meats as a result of the reduced availability of beef and a gradual orientation in consumers' taste preferences (for beef) because of the relatively higher prices for the most sought-after beef cuts.

#### SUBSTITUTES

##### Chicken

The production and consumption of chicken are reflected in Table 11.

TABLE 11: PRODUCTION AND CONSUMPTION OF CHICKEN<sup>1)</sup> -

YEAR	PRODUCTION 1 000 t	CONSUMPTION
1972	163	160
1973	197	194
1974	236	232
1975	269	265
1976	292	287
1977	313	299
1978	321	300
1979	324	302
1980	342	308
1981 <sup>2)</sup>	361	322
1982 <sup>3)</sup>	400	355

1) Division of Agricultural Marketing Research, Dept of Agriculture and Fisheries

2) Estimate

3) Forecast



Since 1972 there has been a sharp increase in the production as well as consumption of chicken. Whereas broilers comprise about 82% of total production the increase was mainly due to increased broiler production. (The balance of chicken production consists of poissons, culled hens and cocks.) Since 1977 there has been a slackening in the rate of increase in production which can be attributed mainly to limited production capacity.

Substantial expansion is now being envisaged in the industry and production and consumption are consequently expected to increase by approximately 10%. Total production for 1982, including slaughterings of breeding and laying hens, is therefore estimated at 400 000 tons and total consumption at 355 000 tons.

A fundamental change in the consumption pattern of chicken has also occurred in recent years. Whereas broilers were traditionally consumed mainly by White households, the Black consumer has emerged to an increasing extent. According to UNISA's Bureau of Market Research<sup>1)</sup> Blacks' expenditure on chicken has increased from 12,5% of total expenditure on chicken in 1970 to 39,0% in 1975, while that of Whites declined from 69,5% of total expenditure to 35,4% in the same period.

With regard to the relative importance of the different species of meat in household expenditure in 1975, chicken comprises 18,4% of the market share among Blacks as against only 9,3% among Whites.

Thus the growth in the chicken industry is very clearly due to the growth in Black buying power.

### Textured vegetable protein

This industry, which is still in its infancy in the RSA, has already assumed giant proportions in countries such as the USA.

This protein originates from the processing of the soya bean into three basic products, namely soya flour, soya concentrate and soya isolate. Soya isolates are used mainly for the manufacture of TVP and represent a highly concentrated form of protein.

Statistics on the industry are not readily available but it is estimated that approximately 6 000 tons of soya beans are used for human consumption in the Republic, although not all of this in TVP form of course.

Because of its less acceptable taste for the South African consumer, TVP cannot be regarded as a serious threat to the meat industry at this stage. It does, however, play an important role as a meat extender in the processing industry and as a meat substitute in workers' rations at major employers such as mines and even farms and hospitals.

### OUTLOOK

#### Production

Production prospects are determined by the profitability of production and the application of changed technology. As far as increased production is concerned, there is very little scope for large-scale horizontal development but the beef herd could at least recover to its previous size.

Capacity could be increased vertically by intensifying existing resources, such as increasing carrying capacity by means of supplementary feed and cultivated pasture. However, the marginal costs thereof tend to be even higher than the marginal product

although the grain/meat price ratio is more favourable at present. Improved breeding practices by means of genetic aids are a long-term development, the result of which are gradually becoming apparent. Nevertheless, birth and weaning percentages in particular are still very low and in this as well as several other respects improved management could bring about an immediate improvement in productivity. In this connection the efficient coordination of existing and expanded extension and management services to producers would have been able to make an important and speedy contribution to livestock production.

Feedlots are playing an increasingly important role in the provision of beef to controlled markets. The capacity of existing feedlots in 1981 has been estimated to have reached approximately 250 000 while the throughput capacity for 1982 is estimated at approximately 750 000.

The stock feed/beef price ratio which is expected to remain reasonably favourable during 1982 and to leave a favourable feed margin, will serve as an incentive for increased utilisation of enlarged feedlot capacities but limited numbers of suitable types of feeder cattle could have a hampering effect on both utilisation and carcase mass.

More favourable grain/meat price ratios apply particularly in the summer grain areas where the net price received for many grains has since May 1981 been much lower for grain producers than the prices buyers have to pay.

Because of the expected large quantities of exportable maize and grain sorghum and the expected unfavourable world market prices and high export costs, the abovementioned price differences between producers and buyers will probably be maintained during 1982/83. The consequent cost benefits and more favourable grain/meat price ratios for summer grain producers should render the livestock factor of increasing importance in the summer grain areas. Hence the potential for beef and mutton production in those regions should in due course and already in 1982 be better utilised.

Although conditions are favourable for intensification, large-scale intensification of mutton industries is not expected as soon as 1982.

The moderate 2% to 3% expansion in pig production is due to cautious optimism in the industry and the anticipated expansion in 1982 forms part of a longer term expansion program now being implemented by some entrepreneurs. The heavier demands it makes of financing, however, precludes larger or more rapid expansion.

### Marketing

Decreasing red meat consumption since the latter part of 1980 and increased consumption of other animal proteins have largely stemmed from the reduced availability of beef. Hence the cause of the dwindling market share of red meat must be sought mainly in supply factors. This also applies to 1982, which will apparently be characterised by a further important factor, namely dwindling imports. Expectations for local cattle slaughterings and hence red meat are likewise much lower for 1982 than in 1979 and 1980 and for this development long-term factors which cause the typically contrasting supply fluctuations in production cycles must bear the blame. The high slaughtering rate of 1979 and 1980 was due to herd reduction because of diminishing profitability and farmers' cash flow problems. The expected reduced slaughtering rate of 1981 and 1982 on the other hand (apart from the smaller numbers) is the result of a build-up of cattle herds because of prospects of increased profits and improved cash flow rendered possible by higher prices.

This cyclical phenomenon will in all probability make ever higher demands on the marketing system's ability to achieve stability in the industry.

Since the production cycles and the accompanying marketing phenomena affect the red meat industry's competitiveness and market shares adversely in the long term, it has not only become imperative that marketing endeavours and efficiencies should be further improved at all levels but that in addition, a long-term production strategy aimed at securing stability as well as continued growth for the industry in future years, should be developed.