

THE RHODESIAN JOURNAL OF ECONOMICS

The Quarterly Journal of the Rhodesian Economic Society

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A. M. Hawkins (Editor), D. G. Clarke, J. A. C. Girdlestone, A. F. Hunt
and M. L. Rule.

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Articles

**Agricultural Marketing Policy
in South Africa**

Contributors

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AGRICULTURAL PRICE POLICY IN SOUTH AFRICA

by

H. I. BEHRMANN

HISTORY

Prior to the onset of the Great Depression from 1929 to 1932 there was no significant interference in agricultural pricing on the part of the State. Low prices, particularly for commodities that were exported, led to the passage of 5 acts of parliament from 1930 to 1935. The products affected were industrial dairy produce, maize, tobacco, livestock and wheat.

Maize marketing was done by means of export quotas, with traders being required to export a certain proportion of the grain that they handled at overseas prices, with the object of achieving a higher local price than the export price. This system was open to abuse with individual traders retaining more than their prescribed share for the local market. In the case of wheat the local producer was protected by means of a prohibitive import tariff, because he was unable to compete with the low prices of imported wheat. For livestock, supplies to city markets were controlled by means of a permit system. In each case a marketing board was established with producer members in the majority, the chairman from the Department of Agriculture, and with a limited number of trade representatives.

These first schemes tended to be sectional in nature. After the Secretary for Agriculture had studied marketing legislation overseas, particularly in the Netherlands and the United Kingdom, a more all-embracing measure, the Marketing Act, was passed in 1937. It was consolidated into a new act, No. 59 of 1968. The Act is a permissive measure and it allows for schemes administered by control boards, to be established to regulate the marketing of agricultural products. Provision is made for the grading of agricultural products and for the control over imports and exports. The Boards are financed by means of levies on the products that are being marketed.

The National Marketing Council, established under the Act, advises the Minister of Agriculture on matters arising under the Marketing Act and the control schemes. This Council has a membership of 6, 4 of whom are economists. The Minister is advised on matters affecting the interests of consumers by the Consumers' Advisory Committee, consisting of members drawn from women's and other organizations such as trade unions. The Consumers' Advisory Council has member representatives on marketing boards, while Marketing Council members regularly attend marketing board meetings.

The wine, wool, sugar, and wattle industries have their own separate acts of parliament.

STRUCTURAL FEATURES OF SOUTH AFRICAN FARMING

The third and final report of the Commission of Enquiry into Agriculture (1) has given a useful survey of the present situation in South African farming. At present there are about 90 000 independent farmers farming 101 000 farming units, employing about 8 regular workers per farm, most of whom are Bantu labourers. There has been no sign of a decline in Bantu labour on European-owned farms over the recent years. From 1960 to 1971, the physical volume of agricultural production as a whole increased 55 per cent, over 70 per cent in the cases of field crops and horticulture, and 30 per cent in the case of livestock.

Livestock production appears to be lagging when compared with crops and horticulture. Over the ten year period ending in 1971, agriculture's contribution to the gross domestic product declined from 12 per cent to 9 per cent.

The producer price index over the past 10 years has risen 28 per cent, the main rise having been for horticultural products, (37 per cent,) followed by livestock, (29 per cent,) and field crops, (24 per cent).

Per head of population it has been estimated that the intake of food was 3 200 calories in 1967/68, which means that there is enough food for every person. The population is oversupplied with cereals and sugar per head but it is still short in protein and protective foods. Malnutrition and undernourishment are probably widespread, particularly amongst the Bantu population.

Agriculture is an important supplier of raw material for industry, and a significant earner of foreign exchange. Exports of agricultural origin increased from R330m. to R430m. from 1960 to 1970, although as percentages of total exports they have declined from 45 to 30. It has been estimated by du Plessis (4) of the Reserve Bank that agriculture has a vital role to fulfil in earning foreign exchange. It earns a net favourable balance of trade and, along with mining, agriculture helps pay for the imported raw materials and plant for the manufacturing sector.

The Commission has also given attention to the farmer's financial position, so, as a general aim, it sets the maintenance of the per caput income in agriculture at parity with the rest of the national economy. The rate of growth of real prosperity per head should be equal to that of the national economy in general, with the long-term increase in the farmer's productivity keeping pace with that of the rest of the community.

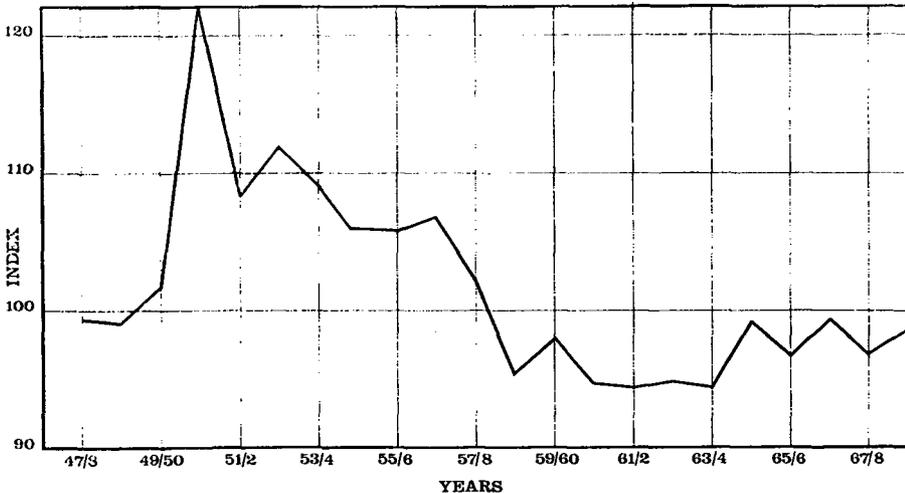


FIGURE 1. The ratio of the prices of agricultural products to the composite prices of cost items (price parity index) from 1947/48 to 1968/69. (Base: 1947/48 - 1949/50 — 100).

Source: Commission of Enquiry into Agriculture, Third Report.

Figure 1 shows the parity ratio for South African agriculture from 1947/48 to 1968/69. After the wool boom of 1950 and 1951, the trend was continually downward until a low point was reached in 1961/62. From that time there has

been a small improvement. Input items such as fertiliser and fuel have latterly shown much smaller relative price increases than stock feeds, tractors, implements and spare parts.

In 1947 the net income per White farmer was estimated at R1 200, but there has been a remarkable improvement, for in 1971 it was estimated at R6 700 per farmer. During the sixties the real rate of growth of personal income in farming was 4,8 per cent per annum, which compares favourably with the trend in real personal income outside agriculture.

Instability in physical output, and real income, is an overriding characteristic of farming. Generally grain farmers tend to be in a better financial position than cattle and sheep farmers, and there is an uneven regional distribution of farm income. The potential of the extensive regions tends to be exploited to a relatively greater degree than the potential of the more intensive regions, where the marginal productivity of inputs is much higher.

It is estimated that 20 per cent of South African farmers produce over 70 per cent of the gross value of agricultural production, and 60 per cent produce about 95 per cent. Forty per cent of producers account for 5 per cent of the total agricultural output. Many of the 40 per cent are part-time farmers, but many are also poor farmers on uneconomic units.

This skewed distribution of agricultural income is significant from the price policy point of view. Most of the benefits from a generous price policy will inevitably go to persons already getting a good income from farming. Improved prices will bring few extra benefits to those with low incomes, and generally policy should work towards enabling farmers on small farms to either leave the land, or to enlarge the scale of their operations.

THE AIMS OF POLICY UNDER THE MARKETING ACT

The aims of the Marketing Act were set out by the Marketing Council in its first reports, as follows:

- (1) To secure a greater measure of stability in the prices of farm products.
- (2) To reduce the price spread between the producer and the consumer.
- (3) To raise the productive efficiency of farming.

The third aim has been dropped in later reports, but it is represented as ancillary to the first two, or as incidentally dependent upon them.

In its first aim, the Boards have been particularly successful in the case of some products, notably maize and winter cereals, which are durable products that can easily be stored. Measures taken in other cases have varied considerably, and Table 1 gives a summary of the measures in operation for all South African products.

TABLE 1
PERCENTAGE COMPOSITION OF THE GROSS VALUE OF
AGRICULTURAL PRODUCE, SOUTH AFRICA, 1970/71

	<i>Percentage of the gross value of agricultural produc- tion %</i>
(1) Schemes in terms of the Marketing Act	
(a) <i>Single-channel fixed-price schemes:</i>	
Maize	23,54

Winter cereals	..	..	..	..	6,69
Industrial milk and cream			..	..	3,54
					<u>33,77</u>
(b) <i>Single-channel pool schemes:</i>					
Leaf tobacco	..	..	..	..	1,60
Deciduous fruit	..	..	..	..	2,90
Citrus fruit	..	..	..	..	2,76
Dried fruit	..	..	..	..	0,33
Chicory	..	..	..	..	0,08
Oilseeds (Groundnuts and sunflower seed)					3,39
Lucerne seed	..	..	..	..	0,03
Rooibos tea	..	..	..	..	0,01
Fresh milk and cream*	..	..	..	..	2,13
Bananas*	..	..	..	..	0,21
Buckwheat	..	..	..	..	0,02
					<u>13,46</u>
(c) <i>Surplus disposal schemes:</i>					
Slaughter stock	..	..	..	..	18,28
Eggs	..	..	..	..	2,45
Dried beans	..	..	..	..	0,57
Soya-beans	..	..	..	..	0,01
Sorghum	..	..	..	..	1,64
Potatoes	..	..	..	..	1,80
					<u>24,75</u>
(d) <i>Supervisory schemes:</i>					
Canning apricots and peaches	..	..			0,56
(e) <i>Sales promotion schemes:</i>					
Mohair	..	..	..	..	0,20
Karakul pelts	..	..	..	..	0,69
					<u>0,89</u>
(2) Control in terms of specific legislation					
Wool	..	..	..	..	4,27
Sugar	..	..	..	..	5,16
Wine	..	..	..	..	2,50
Wattle bark	..	..	..	..	0,34
Lucerne hay	..	..	..	..	1,45
Ostrich products	..	..	..	..	0,10
Total	..	..	..	..	<u>13,82</u>

(3) Uncontrolled products	12,75
Grand Total	<u>100,00</u>

* Only quantities controlled by the Boards concerned.

Source: Annual Report of the Secretary for Agricultural Economics and Marketing, 1970/71. R.P. No. 33/1972.

Cotton in South Africa is an uncontrolled product, although the government does assist in price negotiations between processors and producers.

The Marketing Council (6) is not unmindful of the factors which have to be taken into account in determining prices, which it gives as the following:

- (a) The relationship between supply and demand;
- (b) Costs of production and the reaction of the supply to the prices determined;
- (c) the general level of agricultural prices in relation to other prices and to themselves;
- (d) the relationship between domestic and world prices;
- (e) the general economic policy of the government.

Figure 2 shows the trends in prices of the main agricultural products from 1958/59 to 1970/71. Summer and winter cereals, fruit and dairy products have shown moderate, and relatively steady, increases. Slaughter stock prices have increased over 60 per cent, but the wool industry finds itself in a less happy position. Its price index declined to 83 in 1970/71, although Government support enabled the industry to bring the earnings of wool farmers near to the level of the previous year. The graph gives convincing evidence that it is not possible to keep prices stable over a long period.

The second aim, to reduce the price-spread between producer and consumer, is a contradiction in terms, for historically the price spread has tended to widen because of greater processing, and because of the provision of extra specialist services by middlemen.

Steps that may be taken to lower the costs of marketing, fall under the following headings:

1. *Assembling, storage, and distribution*

Generally, boards leave these functions to private business. Agents may be appointed to handle products on behalf of boards particularly in the cases of maize and wheat. Much cross haulage has been eliminated, and grading has facilitated price determination and the sale of products.

2. *Determination of processing and distribution margins*

Agents fees for the handling services of durable products such as the grain and dried beans are fixed on the basis of cost studies. The same applies to certain processing costs.

3. *Restrictive registration of processors and distributors*

This applies, for example, to dairy manufacturers, maize and wheat millers, and bakeries and butcher shops.

4. *Control over trade prices*

This is confined to a few products: Butter, bread, cheese, milk and sugar.

FIGURE 2
INDEXES OF PRODUCER'S PRICES 1958/59 - 1970/71

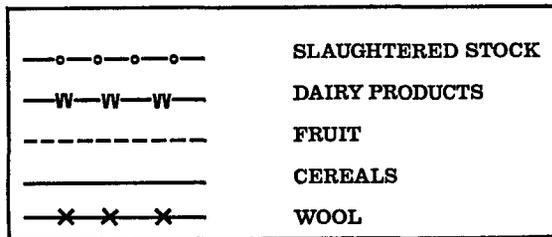
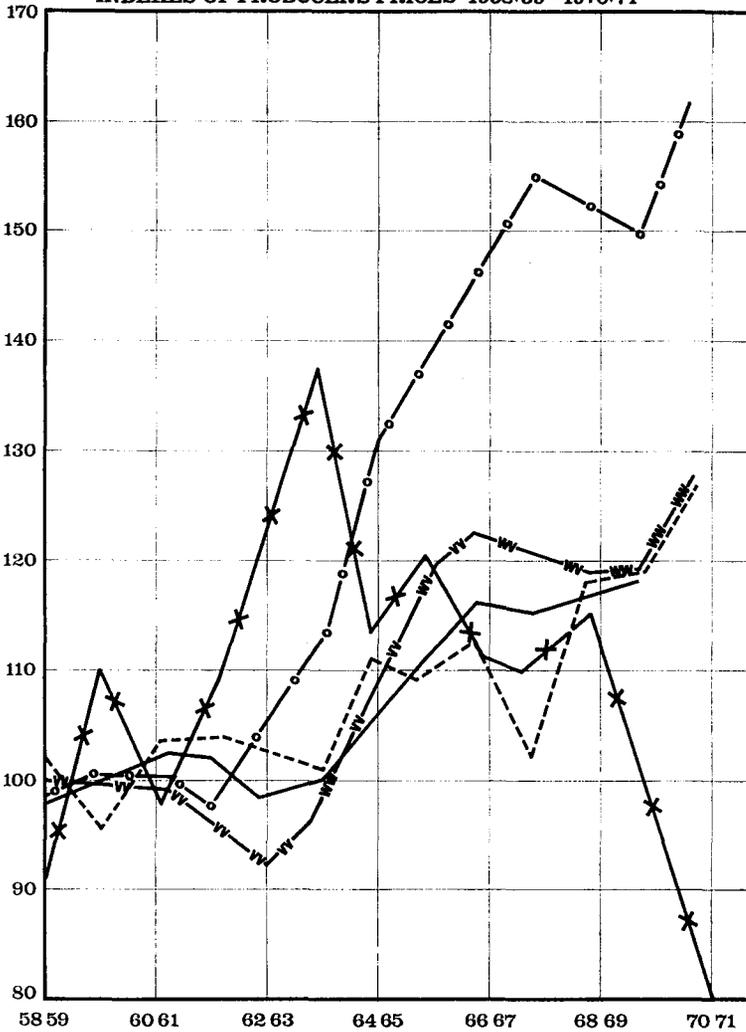


FIGURE 2

INDEXES OF PRODUCER'S PRICES 1958/59 — 1970/71

Source: Annual Report, Secretary for Agricultural Economics and Marketing 1970/71).

Base: 1958/59 to 1960/61 — 100.

5. *Subsidisation of products*

Consumer subsidies are paid on maize, wheat (bread), and butter.

Marketing boards in an indirect way have done much to improve the productive efficiency of farming. Through grading, quality has been improved. Much money has been given for research and for bursaries for both under- and post-graduate students. Many Ph.D. degrees held by personnel in the Faculties of Agriculture have been acquired by means of bursaries to overseas universities, financed by various control boards.

UNCONTROLLED PRODUCTS

Products that do not fall under controlled marketing are mostly sold on municipal produce markets. Boards do regulate the marketing of citrus fruit, deciduous fruit, potatoes, and bananas, but sales on municipal markets are effected in a similar way to other perishable commodities. Of interest here is a change of policy that has been introduced over the last few years in the method of selling. Auctions as the main method of sales have almost entirely disappeared on the main municipal markets. Produce is consigned to commission agents who sell it out of hand to buyers. Auctions are resorted to in special cases, where, for example, the producer specially requests that his products be sold by auction, or where a commodity is particularly scarce, such as in the case of early season cherries, or out-of-season oranges. This avoids any difficulty that may arise in rationing out scarce supplies.

This system of selling has found much favour on the part of producers and buyers. Sales are effected more efficiently, competition still exists between commission agents, and prices are set by supply and demand forces with agents watching the sales of their competitors. Buyers can effect their purchases in a shorter time than when auctions were in effect, because they do not have to wait for individual consignments to be offered for auction. The market is quieter, and short-term fluctuations, that can take place within a morning, are to a large extent eliminated. New municipal market buildings with cold storage and ripening chambers have been erected in some of the main centres, notably Cape Town, Pretoria, and Pietermaritzburg. The Pietermaritzburg new market was opened in February this year, and already the turnover of the market has shown a substantial improvement.

EVALUATION OF PRICE POLICY

1. Price stabilization

It has not been possible to eliminate price fluctuations, particularly from season to season, or even within seasons, but most producers today have a much more certain market to face, in that they either have knowledge beforehand of the prices they may expect in marketing, or they know that if markets should be glutted some authority will be able to intervene to protect the product from a complete collapse in prices. A policy of price stabilization does not, of course, effect income stabilization. Under certain conditions income can be more uncertain if prices are stabilized.

TABLE 2
COEFFICIENTS OF VARIATION FOR YIELDS, PRICES, AND
GROSS INCOME EXPRESSED AS PERCENTAGES

(Trend eliminated, 1947 - 1969)

	Maize	Wheat	Potatoes	Wool	Dairy & fresh milk	Pigs slaught- ered	Cattle slaught- ered	Sheep slaught- ered	Poultry
Yield	19,7	17,7	13,0	3,6	2,6	10,5	5,6	9,1	12,2
Gross Income	21,2	18,5	32,9	31,2	5,1	11,3	8,2	14,8	13,7
Price	7,9	5,5	23,6	27,8	6,4	6,9	9,3	10,9	3,4

Table 2 is taken from a recent paper by Nieuwoudt (7) which shows the coefficients of variations of yields, prices, and income for selected agricultural products in South Africa. Although yield variations of maize exceed those of potatoes, the opposite is true in regard to income variations. This may indicate that the Maize and Wheat Boards were successful not only in reducing price uncertainty but also in reducing income uncertainty. Nieuwoudt points out that this is in accordance with Paarlberg's point of view that stabilizing the price of a product with an inelastic demand could have a stabilizing effect on income. Price variations, however, perform important functions and these are borne in mind in price determination.

2. Reducing the price spread

As pointed out above, this aim under the Marketing Act is a contradiction in terms. However, there is a fair degree of interference in normal trade channels which may be justified if the competitive system is not working properly. To quote from the Marketing Act Commission of 1947 (5): "It must be remembered that while the case for the Marketing Act flows from the defects in the working of the competitive system, remedial action by the boards can have comparable defects. The exercise of control inevitably involves rigidities, and while a degree of certainty and security is conducive to progress, it is damaging to initiative if pushed too far. Unfortunately, these rigidities are easily overdone, not merely because of excessive concern for sectional interests but also because of the human factor." There is a real danger in effecting control for control's sake.

3. Quotas

There is no provision for acreage control in terms of the Marketing Act. It does provide for marketing quotas for producers. These have applied in the cases of meat, deciduous fruit (in this case only in emergencies), bananas, and fresh milk; sugar cane, wattle bark and the production of wine are subject to control in terms of their own Acts. In terms of Act 61 of 1970 poultry producers require permits to keep more than 10 000 laying hens.

In the sugar industry quotas have been in effect since 1936, a period of 36 years. In this whole time, I doubt whether the quotas have rigidly been applied with the object of controlling production for more than about five years. Total production of sugar has increased from approximately 400 000 tons to nearly 2 000 000 tons. The Commission of Enquiry into the Sugar Industry (3) which recently completed its report found no justification for the quota system apart from the fact that South Africa is a signatory to an international agreement to control production. For that reason alone it recommended the retention of sugar cane farm quotas; but it did recommend the free exchange of quotas within mill group areas, a policy which has now been put into effect.

The advantage of a quota is that output reduction along an inelastic demand curve leads to an increase in total and net income. In the case of milk, where there is a more elastic demand for industrial milk than for fresh milk, price discrimination should have a favourable effect on the income of fresh milk farmers. This is clearly the case in parts of South Africa where milk quotas are in effect. These are in Natal, and in the East London and Port Elizabeth areas. Quotas are granted by the distributing firms which are in most cases farmer-controlled. Allocation of quotas is then made by boards of directors which themselves consist of producers who have vested interests in the quotas. The system is not considered equitable because producers already having quotas are in a privileged position, and are usually able to increase their quotas as their scale of production increases. A recent study (2) comparing Natal where there are quotas, with the Transvaal where a pool system was being conducted showed that large scale producers in Natal producing more than 60 000 gallons of milk per annum constituted 21 per cent of producers and they accounted for 76 per cent of the total output. In the Transvaal, in the same size group, 11 per cent of producers accounted for 30 per cent of the output. Large-scale producers averaged higher prices in the pool areas than the small-scale producers, but there was hardly any difference in the prices of large-scale and small-scale producers in the Transvaal.

Quotas increase the capital cost for new entrants to an industry and operate to the capital advantage of producers who have the good fortune to be within the enclosed market. It is generally considered that a pool system is a fairer method of apportioning the market amongst producers.

4. Subsidies

Table 3 gives an outline of subsidies that have recently been paid to the farming industry in South Africa. A distinction may be made between input subsidies and what is known as 'price stabilization' subsidies. Subsidies that are paid for unusual disasters, such as floods and droughts that affect farming would be justified from the social point of view. The subsidization of factors of production, however, represents an interesting problem. Nieuwoudt (7) has pointed out that social prosperity can be raised if a factor, the value of which is not realised by farmers, is subsidized. An excellent example is fertilizer. On the other hand, prosperity can be reduced by a subsidy if the farmer already realises the value of the production factor, and uses it at more or less the optimum level. Factor subsidies are mainly paid in respect of fertilizers. But there is also an interest subsidy paid on bonds, and rebates are given on customs and excise on input items such as fuel and tractors and implements. Policy should work towards reducing such subsidies over time.

The Commission of Enquiry into Agriculture in its Third Report has recommended that subsidies be paid for farm accounting. It has pointed out that farmers tend to be so unbusinesslike in management, that support for the keeping of books would only have beneficial effect on the farming industry.

TABLE 3
STATE FINANCIAL AID TO THE AGRICULTURAL INDUSTRY
IN SOUTH AFRICA
(Average, 1967/68 to 1969/70)

	<i>Nature of aid</i>	<i>Value</i>	
		(R 1 000)	%
Drought	3 614	7,7

Flood damage	160	0,3
Utilization of resources: Conservation and Irrigation	7 214	15,2
Cost of factors of production: Fertilizers, interest, customs and excise	32 986	69,7
Assistance to industries: <i>Ad hoc</i> mainly for import and export losses	3 299	7,0
Improvement of herds and flocks: Milk recording, beef performance testing	37	0,1
Total	47 311	100,0
Price stabilization: Butter, bread, maize, grain, sorghum	51 093	—
Grand Total	98 404	—
Net farming income	517 951	—
Percentage: Excluding price stabilization	9,1	—
Including price stabilization	19,0	—

Source: Commission of Enquiry into Agriculture (1)

Price stabilization subsidies are paid on butter, bread, maize, and grain sorghum. In the 1969/70 financial year, the butter subsidy approximated R5m., the bread subsidy R22m. and the maize subsidy R28m.

Bread and maize constitute the staple foods of the poorer sections of the community in South Africa, and subsidies would appear to be justified from the point of view of keeping down the cost of living. But protective foods and protein are consumed in such small quantities by these people that one may well question whether it wouldn't be advisable to give subsidies on products such as milk, meat, and possibly fresh fruit, and vegetables, although, in the cases of fruits and vegetables subsidies would be most difficult to administer.

The bread subsidy increased from 1948 to 1970 from R4m. to R22m. and the maize subsidy from R6m. to R28m. These subsidies have had the effect of keeping down the consumer prices and at the same time giving extra benefit to farmers. It may be suspected that political appeasement of masses of consumers and the producers in two powerful branches of agriculture in South Africa have been considerations in paying these subsidies.

5. Sectional representations

All proposals for changing prices of agricultural products are channelled through the Marketing Council, which deals with the Boards individually. Certain Boards such as, for example, the Maize Board, may be looked upon as a strong pressure group in that they represent far more producers than in the case of some of the minor boards. And one cannot escape the suspicion that political considerations may enter into price determination.

The Marketing Council in its submissions to the Commission of Enquiry into Agriculture has pointed out that in dealing with the boards individually, it finds difficulty in framing a policy which deals broadly with the whole agricultural situation. For this reason, the Commission of Enquiry has suggested that serious consideration would be given to the establishment of an Agricultural Marketing Authority on the same lines as in Rhodesia.

6. The Marketing Boards

Although the costs of administering the marketing boards constitute a very small percentage of the total costs of production and marketing, there is the view that these organizations are unwieldy. Centralized administration does not make for efficient decision-making at the local trader level, and the Boards in

certain circumstances may possess greater powers than they really need for the purposes of efficient marketing.

The producer majorities on the Boards are really difficult to justify when it is remembered that the trade channels and consumers also have a vital interest in the marketing and in the prices of the products. One could doubt that a Board could take a completely independent view in its marketing.

It is salutary to read the view of Scholz (8) the present manager of the Maize Board, to quote: "In all the length of the marketing chain, a marketing state of mind should exist — producer majorities on the Boards should bear in mind that their own survival is closely interwoven with that of the consumer. By being consumer oriented, producers by no means jeopardize their bargaining power, and they definitely safeguard their future."

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