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REQUIREMENTS FOR CONTRIBUTIONS

Articles in the field of agricultural economics, suitable for publication in the journal, will be welcomed.

Articles should have a maximum length of 10 folio pages (including tables, graphs, etc.) typed in double spacing. Contributions, in the language preferred by the writer, should be submitted in triplicate to the Editor, c/o Department of Agricultural Economics and Marketing, Private Bag X250, Pretoria, 0001, and should reach him at least one month prior to date of publication.

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OPENING ADDRESS

by

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I make no apologies for the fact that I intend to devote the major portion of my address to certain aspects of the sugar industry with which I am so intimately connected, and which, I believe, despite its importance to South Africa, is relatively unknown outside of Natal.

There are various reasons for this relatively unknown status. In the first place, the production of sugar cane has until recently been closely governed by climatic limitations and only in recent years has large scale production been undertaken in areas other than the Natal coastal belt. In the second place, the sugar industry may give an impression of being apart from other agricultural industries, because administratively, it falls not under agriculture, but the Department of Industries. Thirdly, in so far as possible, we in the sugar industry endeavour to solve our own problems. We believe that this is a better course than publically airing our difficulties and expecting someone else to solve them.

However, these are technicalities and in no way set the sugar industry apart from other agricultural groups.

In this light, what briefly are the facts regarding the development of the sugar industry and what is its current status? Sugar was first produced in Natal in the early eighteen fifties. For the first sixty years production was hampered by the vagaries of weather, disease, insect pests, lack of infrastructure and shortage of capital, and apart from a good infrastructure these problems still beset us today. In 1904, production was only 17 500 tons. But, with the formation of the Union in 1910, the sugar industry was provided with an assured market and apart from a few minor setbacks, has gone from strength to strength ever since.

Today, there are about 327 000 hectares under sugar cane. This represents an investment of over R490 million at current replacement values. About 17 million tons of cane are harvested annually of which 15% is grown under irrigation mainly at Pongola and Malelane in the Eastern Transvaal.

On the milling side, 19 mills produce approximately 1,9 million tons of sugar annually. The capital invested in these mills and in refining machinery and associated facilities is estimated to be about R220 million, again on a replacement value basis.

In addition to the sums invested in growing and milling, there is a further R50 million invested in ancilliary services such as the industry's own experiment station, the three bulk sugar silos, cane and sugar transport equipment and pre-packing machinery. The total capital invested in the sugar industry and associated services is therefore a formidable R750 million.

In terms of gross value of product the sugar industry ranks second only to the maize industry among field crops. Gross value of production in 1973/74 was R229 million, rising to R322 million in 1974/75 and estimated to amount to R358 million for the current season. Of the total sugar production, some 60% is consumed locally and 40% exported. It is this export performance which has resulted in sugar ranking equally with, and in certain seasons even outstripping maize and wool, as South Africa's major agricultural export.

So much for the bare statistics. I would now like to turn my attention to the structure and organisation of the industry and dwell briefly on certain aspects which I feel will be of interest to you in your professional capacities.

One factor which is almost unique to the sugar industry among agricultural industries is the extremely high degree of interdependence between primary producer and processor. On the one hand, there is the farmer who has made a heavy investment in a crop with a normal lifespan of some eight to ten years and whose only value is as a processed product. On the other hand there is the miller with an equally heavy investment in plant and machinery which has but one use, and that is the processing of the producer's product.

Under these circumstances it was only logical to evolve a system under which control of the industry is shared jointly between producer and processor. This partnership principle is given effect in joint control at all levels from the overall controlling body, the Council of the South African Sugar Association down, and embraces all aspects of industrial policy with regard to both production and marketing.

Once the circumstances which have led to the high degree of interdependence and the necessity for joint control are appreciated, it is possible to rationalise one aspect of sugar industry policy which has been the subject of some criticism from time to time, namely the quota system.

With an annual agricultural crop it is reasonable to allow the normal market forces of supply and demand and hence prices to dictate the pattern of production without recourse to any form of control. The farmer's investment decision is usually taken for the short term of a single season. The major agricultural products are furthermore not as immediately dependent on the existence of adequate processing facilities as is the case of sugar cane.

Consider however the position of the

producer of a crop which represents a medium term investment decision of some eight to ten years, and which has only one real source of value and that through immediate processing. On the other hand, there is the processor with a large long-term investment in what is essentially heavy engineering equipment. To justify his investment decision, he must be assured of a relatively stable throughput of raw material. A prime prerequisite for the successful functioning of such an industry is production stability and under these circumstances the sugar industry has opted for a system of control based on both area and production quotas.

Under this system each grower is allocated a specific area of land for planting to cane and he thereafter establishes a production quota on this land by actual performance. The system is not as rigid as is often imagined however, for about half of the past 25 years new quotas have been available on application, subject naturally to the existence of adequate processing facilities within economic transport distances. The allocation of the area quota merely serves to enable maximum production to be controlled within the relatively short term. In so far as the production quotas, established on the basis of actual production on the allocated land are concerned, it has been necessary in only three of the past twenty five years to limit production and during the remaining years there has been no restriction on production whatsoever. With vertical productivity increasing at an average rate of 1,8% per annum, the production quotas are continually increasing by actual physical performance.

Under these circumstances we in the sugar industry believe that the industry is not the closed shop that it is sometimes alleged to be, but that controlled production is necessary for the preservation of stability. In fact we firmly believe that the control system adopted, acts to protect not only the existing members of the industry, both on the production and the processing side, but also prospective new entrants and in the longer term the general consumer who is so often required to bear the economic consequences of initial injudicious planning.

I have specifically dwelt at some length on what I believe are two of the over-riding factors which have contributed to the success of the South African sugar industry, namely the partnership between producer and processor and the provision for controlling production. I believe that the implications of these factors are of considerable interest to the members of your profession.

Firstly, the partnership principle extends to the determination of the prices received by both grower and miller. For many years now the basis for payment has been a division of available proceeds between the two sections rather than the outright determination of a fixed price. The actual method adopted for dividing proceeds and hence determining prices has varied through the years since its introduction. The current method is based on a fromula which is reviewed periodically and in terms of which proceeds are divided between the sections on the basis of estimated production costs, determined relative to a specific base year and adjusted for input price levels and volume of production, plus a requisite return on capital. In terms of the formula the cost requirements of the sections are first met and the remaining proceeds divided in accordance with the respective profit entitlements of the sections. Obviously as a controlled industry, the final arbiter is the Minister of Economic Affairs.

The use of a formula of this type has resulted in an acute cost consciousness developing within the industry. I believe it would be fair to state that no other agricultural industry is South Africa is as well served in this field as is the sugar industry through the South African Cane Growers' Association which has assumed the responsibility for all aspects of agricultural costing. I doubt whether any other agricultural industry has available detailed costs for a continuous period of 40 years.

As is only to be expected, the existence of an organisation equipped in this way has led to diversification into other avenues and today our agricultural economics section is equipped to handle most contingencies ranging from the provision of information for industrial planning, to individual farm management advisory work. The most recent development in this field is the introduction of a computerised farm record system designed with the dual aim of providing up-to-date cost information for industrial use and farm management advice.

Returning again to the aspect of production control as it exists in the sugar industry, it must be appreciated that one of the consequences of this is the necessity for centralised planning. This is particularly so in respect of future development and this task is undertaken by the planning and development committee. The obvious starting point for this committee's activities is the matching of projections of future production and sales.

The analysis of long-term production trends has revealed that productivity in terms of tons of sugar per hectare per annum has increased by about 1,8% per annum compound. However, at present, as a result of two main factors, namely the cheapness of sugar in South Africa relative to other sweeteners, and higher Black wages, domestic sugar consumption is increasing at more than 7% per annum. The industry is therefore faced with two alternatives - to run down export markets, or to expand production. The former alternative is not acceptable either to the industry or to the country, as in 1974 sugar was the Republic's third most important foreign exchange earner after gold and diamonds. In order to maintain or increase sugar's contribution to the balance of payments which in 1974 amounted to R231 million, it will be necessary to expand present annual production of about 1,9 million tons to 2,5 million tons of sugar by 1985.

This estimated additional requirement of 600 000 tons of sugar by 1985 is of course liable to error. One of the main problems is making an accurate forecast of the local market offtake. The 20 year period 1955 to 1975 saw domestic sales rise by 4,7% compound per annum. However, sales in the past two years increased by 7,9% and 7,4% respectively, which is well above the long-term growth rate. It is estimated that domestic requirements during the current season will be 1 126 000 tons.

Now, if we project offtake at the 20 year compound growth rate of 4,7% using the current season as a base, then in 1985 the local market will require 1,7 million tons of sugar. However, if the same calculation is done but using a compound growth rate of 7% then about 2,1 million tons, or 400 000 more tons will be required by 1985. This is a difference in the output from between two and three new sugar mills at a cost of R50 million each. What do we plan for, 1,7 million tons in 1985 or 2,1 million tons?

The most vital factor in the planning progress is the prediction of the rate of increase of domestic sugar sales. This is a prime function of product price and as a price controlled industry, the answer does not rest in our hands but in the hands of the Government.

Since 1971 and during a period when the average rate of inflation has been some 10% per annum, the domestic price of sugar has twice been decreased. This has been done because of the favourable prices received from the export market. However, while the sugar industry is proud to have been in a position to make a positive contribution to combating inflation, the dangerous position has now been reached where during the current season it is estimated that the export market is subsidising the domestic market to the tune of some R70 million. This represents the difference between the estimated cost of production and the domestic market price. It does not take much imagination to picture the consequences of a serious fall in export market prices or a reduction in export surplus as a result of a severe drought. Granted, the industry has built up a sizeable stabilisation fund, but the protection provided by this fund is limited in the face of a R70 million annual deficit in local market proceeds.

If the authorities continue to follow a policy of holding down the domestic price of sugar for as long as possible and then being forced to increase it massively, then it is inevitable that the past pattern of sales will be repeated. This pattern consists of high growth phases such as we are experiencing at present, interrupted from time to time by periods of stagnant sales or even declines when the domestic price is increased substantially.

Those dedicated public servants who are attempting to do their best to look after the interests of the consumer, would actually be doing the consumer a favour if in an inflationary climate, such as at present, they, from time to time, raised the price by small amounts. In this way, the sales pattern would be smoothed out to a compound growth rate of between 4 and 5% per annum. Consequently, long-term planning would be much easier for not only the sugar industry, but also its customers, particularly manufacturers who consume large quantities of sugar. Unfortunately, we have not yet succeeded in persuading the authorities to adopt this approach.

However, setting aside the problems of forecasting consumption, it is clear that there is a need for continuous development of sugar production. From where then is this to come? A fairly substantial proportion will be provided by vertical expansion of cane production from existing areas and the improvement of milling efficiencies, but in addition it will be necessary to provide for expansion into new areas.

Here the industry is confronted with two alternatives. Firstly, to develop into completely new White-owned farming areas where irrigation is a prerequisite for cane production and where completely new processing facilities will require to be provided, or secondly to encourage the development of the only remaining areas suitable for cane under natural rainfall conditions which largely fall within KwaZulu. These latter areas possess the added advantage of being situated within reasonable proximity to existing mills which would in most instances merely require enlargement to cope with the additional supplies of cane. However, there does appear to be evidence to suggest that economies of scale in sugar milling are not unlimited and the full development of the potential KwaZulu cane areas will ultimately require the erection of new processing facilities.

Investigations regarding completely new White areas are currently in progress, whilst in respect of the KwaZulu area, steps have already been taken to encourage increased production where ever this appears economically possible.

In 1973 the sugar industry established the small growers' financial aid fund with an initial capital of R5 million. Basically, the fund was designed to assist small Bantu, Indian and Coloured growers by providing them with access to credit facilities, something which few of them possess.

To date, progress has been slow. This however was to be expected, as we were starting from scratch and all cases for assistance needed careful examination. In addition, the administrative structure had to be established. One of the prime objectives of the fund is to enable Bantu males to become full time viable farmers but this objective has a limitation placed on it by the inadequacy of the cane price relative to the small plots which are available. There are of course, other problems, mainly caused by the pastoral background of the Zulu people. These problems are being tackled through the appointment by KwaZulu of 50 Zulu extension officers and the establishment by the sugar industry of three farmers' centres in KwaZulu.

These centres which will be opened soon, will be donated to KwaZulu and will be used mainly to provide courses in cane husbandry and general agricultural techniques for Zulu farmers and will also be used to run courses and demonstrations in home economics for the wives and families of these farmers.

Approval has been granted in principle for a second phase of the financial aid fund, under which a further amount of up to R5 million will be used to finance block development schemes in KwaZulu. It is hoped that ultimately a total of 18 000 hectares will be cleared, contoured, planted and then subdivided for settlement of Zulu farmers.

There is, however, a further obstacle to the expansion of the industry which requires urgent attention. This concerns the financial incentive offered for such expansion. In terms of the present price determination millers receive a return of 14% on depreciated book values of assets and growers 7% on conservative replacement values. Under current circumstances these rates of return are inadequate to stimulate expansion.

It has been estimated that at present in respect of sugar milling a return of 14% on depreciated book values is equivalent to a return of about 6% on the investment in a new mill. This is patently inadequate to encourage new investment in processing facilities. Similarly, on the agricultural side, and particularly if new development is to come from irrigated areas it will be necessary, if Government is desirous of stimulating growth, to provide more realistic margins. This matter is currently being fully investigated by the Board of Trade and Industries as part of the normal periodic revision of the price formula. We can only hope that the authorities will recognise the need for adequate incentives if they wish to see a continuation of the sound growth pattern of the past.

A vital and volatile element in our planning for the future is obviously the behaviour of the export market. What do we see as the future trend in prices in a market which saw a rise from $143 per ton to R650 per ton in the short space of ten months between January and November 1974, and a subsequent decline to the present level of around R200? Bear in mind that at its peak the world price of sugar was approximately R1,00 per kg compared with a South African domestic price of only 14 cents per kg.

It is my view that the origins of what can only be described as a price explosion in 1974 can be traced back to events of 10 years earlier.

In 1963 the then record world price of $105 per ton stimulated vast investment in new sugar production. However, as a result of the high world price, consumption did not advance at the same rate. The consequent build up in world stocks depressed prices to grossly uneconomic levels and this was instrumental in enabling an international sugar agreement to be negotiated in 1968. This agreement did much to improve export prices. However, it also prevented expansion of world sugar production, although of course it is debatable whether or not much new expansion would have taken place anyway with the experience of the depressed price conditions of the middle sixties fresh in mind. Consumption on the other hand continued to advance with a consequent decline in world stocks. In late 1971 prices began to rise as a result of crop failures in the major sugar producing countries, namely Cuba and Russia. Gradually, but with increasing effect, the combination of the lack of expansion and growing consumption which had led to the reduced stocks, resulted in higher and still higher prices. At the same time the failure to re-negotiate an international sugar agreement and the termination of the US sugar act withdrew two regulating influences from the world sugar market. Finally, the most volatile ingredient of all was added to the mixture. This was the speculator. The result was a price rise of unprecedented proportions.

Having looked at the causes of the price explosion, we now find sufficient time has elapsed for us to be experiencing the effects. Perhaps the most noticeable of these is reduced world consumption. This, although unwelcome, was unfortunately inevitable. Hopefully, it will be of a temporary nature. It is interesting to note that the decline in world consumption has not only occurred in developing countries which have suffered from an inability to pay for their sugar imports, but in developed countries also, consumption has declined and in some cases declined dramatically. In the United States and Japan particularly, the demand for sugar has been shown to be extremely elastic at high prices. It is estimated that in countries such as the USA, Canada and Japan where sugar prices were relatively low and thus rose sharply, that for each 100% price increment, real sugar consumption fell by approximately 10%. Substitution on a large scale has taken place especially in America where corn syrup has taken over a significant portion of the market traditionally supplied by sugar. Some commentators estimate that corn syrup has replaced about half a million tons of normal sugar consumption in the United States alone and the most recent forecasts are that by 1985 they will have increased their share of the sweetener market to well over 30%.

Interest in artificial sweeteners has also been stimulated. However, it is difficult to quantify their importance at this stage. In the longer term it does appear that artificial sweeteners will play a significant role in the sweetener market, particularly as regards industrial usage.

In the light of the reaction to the high prices of a decade ago, what appear to be the results of the recent high world prices?

The evidence is contradictory. On the one hand reports have been made of considerable beet expansions, particularly in Europe. On the other, reports of major new milling projects are relatively few and far between. Most of the expansion which is taking place is of a marginal nature. With the exception of Brazil, most major exporters appear to have reacted to the recent high prices with caution. There would thus appear to be some evidence to suggest that following the recent very high prices, we will not suffer the worst effects of surpluses and consequential low prices for a prolonged period.

I believe that in due course we must develop new areas and erect new mills. Our industry cannot stand still. We must go forward. The alternative is stagnation and eventual decay. However, I must stress that an essential factor in the development process must be the acceptance by Government of a realistic policy in respect of the domestic price of sugar and the returns to the industry. Furthermore, I would be happier if expansion could be undertaken under the protection of an effective international sugar agreement.

I would like finally, at the risk of being accused of sermonising, to make a general remark about what appears to be a fairly common attitude towards agriculture. Although drawn from many walks of professional life, we here today possess one common interest, namely the continuation of an economically sound agricultural system. It has long been accepted that under a free market system, agriculture is among the first sectors of the economy to suffer and the last to recover from the effects of depression. In South Africa, we in agriculture tend largely to operate under controlled market conditions. There appears to be a trend developing under this system to expect the primary producer to make the first sacrifices under any adverse economic conditions.

We subscribe to control and firmly believe that we should play an equal role in the fight against inflation. However, we must strive to ensure that the burden is borne equally by all sections of the economy. To burden agriculture with a disproportionate share is only to invite subsequent shortages and ultimate disproportionate price increases.

We in the sugar industry have always regarded it as our prime duty to provide adequate supplies of reasonably priced sugar to our domestic market. In return for this we have expected, fought for, and generally received our due reward. I believe that irrespective of external conditions, the obligations and expectations of agriculture, functioning in a controlled environment, should be no less than this.