Socio-economic priorities: Focus on food for the future

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Introduction

The dire Malthusian warnings of the 1950s and 1960s regarding food shortage have waned. A world population reaching 6,000 million by the year 2000, and possibly stabilizing at between 11–12,000 million in the year 2050, can now be viewed with some equanimity. Indeed, man's ability to go beyond the nuclear holocaust appears rightly more challenging and problematic. But in South Africa, while housing and education have rightly received enormous attention and too little action, the problem of providing sufficient food by the year 2000 has possibly not received enough attention in our dualistic society. The Focus Report brings this challenge into perspective by firstly forecasting a food expenditure growth of two and a half times in the next 20 years, against a growth of 100% in the last 20 years; secondly by focusing on black urban growth linked to socio-economic expectations and demands; thirdly, by questioning by implication whether South Africa can remain a net exporter of food and, if it became a potential net importer, whether or not food would be available from elsewhere in the world where a distribution, not volume, problem would remain. Finally, it is not being over-dramatic to remember that most, if not all, the world's great revolutions, of which Poland could be the next, have sprung directly or indirectly from a failure to adequately provide and distribute food.

I would like to pose certain questions and indicate some answers to this challenge under three headings — food supplies, consumer demand patterns, distribution and subsidy requirements.

Food supply

Focus rightly draws the distinction between primary production and industrial food production and indicates that overall they believe the capacity of both these aspects of food provision are satisfactory. I would agree with this conclusion. South Africa is a current exporter of food, mainly maize, fruit, vegetables and sugar and imports chiefly only rice, tea and coffee. The food production industry has made tremendous strides in the last four to five years. The advances in primary production have been less than promising. Two points should, however, be made: first, food can be divided basically into carbohydrate and protein supplies.

Balancing carbohydrates and proteins

Carbohydrate products in this country offer no real problems. Sugar and maize will easily meet the demands forecasted. A shortfall of wheat seems probable if the likely urban black demand for wheat increases and that for maize reduces, but most seem to agree that, tackled
now, the problem can be overcome.

The protein shortfall is more challenging. World-wide developing peoples, and it will be the same in South Africa, demand more protein, particularly in the form of meat, poultry and fish products as affluence increases. The poultry industry in this country has taken great strides forward in recent years and today, through genetic breeding, disease control and properly balanced feeds, 2 kg of feed will produce 1 kg of meat in seven to eight weeks. This compares with, for instance, beef where it takes 9 kg of feed to produce 1 kg of meat in a period of two years. Considerable opportunities, however, do appear to exist for improving this beef ratio, although the same high conversion levels are not likely to be reached.

To produce meat, poultry or fish, the required feed mix must be approximately 80% carbohydrate, for which maize is ideal, and approximately 20% protein. Vegetable oils are currently used, but it will probably be necessary to supplement the protein product with ideally soya. Soya production at approximately 38 000 tons (compare with sugar at 18.5 million tons) is extremely low. Considerable research and effort will be required in the next few years to produce this ideal vegetable protein. This objective looks less daunting if one remembers that originally South Africa was not an ideal country for growing maize, and in 1940 only 2 million thousand tons were grown as opposed to the 14 million thousand tons today.

Therefore, with the right application of technology (and there is a lot of technological inefficiency at the moment, particularly in primary agriculture), it should be possible to find additional proteins for intensive cattle and poultry rearing. With this achieved, South Africa could well remain a nett exporter of food.

Agricultural potential of Black territories

The second area which I would just like to touch upon is the tremendous potential of the Black independent territories and homelands within Southern Africa. These areas are broadly still operating on subsistence and below subsistence farming levels, perpetuating social and cultural conditions with regard to land tenure, cattle holding and the like, in preference to agricultural efficiency. If these areas were to be organized on a modern farming basis, their contribution to the agricultural product could be enormous. Let me illustrate:

Firstly, it is calculated that, while the agricultural potential of the Black independent territories and homelands represents 20% of the total potential of Southern Africa, the land area of the Black territories is only 15%, and their present actual contribution to the agricultural product is only 15%. Secondly, 68% of the total area of the Black territories has a rainfall of 500 mm or more per year, compared with 35% in the whole of Southern Africa. Finally, it is calculated that the Black territories could produce, with modern farming methods, enough maize to feed between 20 and 25 million people. If you look just beyond the borders of the Republic and the independent territories, then in Lesotho for example you have an ideal climate for beef production, one of the best in the world — yet Lesotho is currently a nett importer of beef.

Equally, Lesotho is at present producing approximately 10 000 tons of wheat per year, with a potential of at least 100 000 tons. Similarly, only less startling, figures could be produced in respect of Swaziland and Zimbabwe.

Consumer demand patterns

I would like to make three points under this heading:

The first is that in many ways there will be little change, if any at all. That relates to the fact that throughout the world people are very conservative about their food. One of the ironies of the past and present — and it is likely to be so in the future — is that food technology is almost entirely based on providing substitutes for existing traditional food, rather than new foods per se. Soya, for example, is processed and textured to become as much like meat as possible. Non-dairy products are made to taste like dairy products and so it goes on. The whole of food technology is directed towards making substitutes like the real thing. In the year 2000 we shall all be eating products which are very similar to what we eat today, although the constituents of those products might be 'less natural' than we would expect today.

South Africa has undoubtedly made, in the last three or four years, rapid strides in this area. It didn't make rapid strides earlier because we, unlike most countries in the world, could still afford and enjoy a real steak with real potato chips. Equally, by the year 2000 or beyond, we shall not all be eating pills — unless your definition of a pill is something approximately 0.5kg in weight, consisting of 100g of amino acid mixture, 100g of triglyceride, 400g of glucose laced with a few milligrams of micronutrients.

The second major change in the consumer demand pattern will lie with the black urban population. There will, as this population group becomes more affluent, be a much higher demand for meat, and there are already very definite trends within the urban black population group, of changes in their eating habits: higher protein, greater variety, greater acceptance of new products achieved through food technology, greater use of fresh fruit and vegetables. This is already happening in our black universities where, for instance, what one could call 'developed country' or 'Western style' food is being provided.

In an interesting survey that was carried out in 1977 in Soweto, for example, it was found that, whereas 10 years earlier 81% of all Sowetans had eaten maize at each meal, only 62% did so in 1977. Only 6% ate eggs in 1967 at any meal, but by 1977 23% did so, including over 50% for breakfast. The other great change among the black consumers will be triggered by the impact of electrification in Soweto, followed by other townships. This will give the Blacks the opportunity to buy a fridge, a freezer and electric cooker, and thus become a consumer of manufactured foods, frozen vegetables. They will also be able to considerably expand their diet to try new and more sophisticated food and recipes.

Finally, the other major change will be that more and more food will be eaten out of the home in fast food restaurants. If you look at the United States today, of the 21 meals a person can eat at home in a week, up to 10 are eaten outside the home. In South Africa I suspect the figure is nearer to two meals. This is a trend that is still developing in the States, and in the next 20 years South Africa will catch up rapidly with this trend.

Fast foods have wrongly been referred to as 'junk food'. In fact they are nutritionally very sound compared with much of the food that is eaten at home. Fast food offers convenience and good value for money to most sectors of the population. Some indication of development of this market can be seen again in Soweto with the recent highly successful opening of the Finger Licking Chicken chain.
Distribution
This, I think, is in many ways the key to the food consumption challenges which face South Africa.

I would like to quote from Professor Hawthorn of the University of Glasgow. He said in a lecture which he gave in September 1980: ‘I always have too much on my plate, I habitually overeat, I have never known real hunger — the same must go for almost everyone in this audience. How can we understand the needs and attitudes of the one in four of our fellow human beings who know what real hunger means by bitter experience? It is even more difficult to understand the one in sixteen of our fellows who are permanently semi-starved. There is something obscene in this unnecessary deprivation. It is not in itself a problem of food science, its roots are political, economic, geographical and educational.’

I think in many ways this says it all about distribution. In effect there is plenty of food in the world, but it is not getting to the right place at the right time. There are developed nations where the physical size of man alone bears witness to his being well fed, if not overfed. But there is waste at all levels of food production.

There is waste at farm level, particularly in this country associated with problems of field heat. There is waste at the green grocer and supermarket level where refrigeration storage is inadequate. There is waste in transportation. There is waste in the home, the hotel and the restaurant. In South Africa we need to educate people, especially in the Black territories, as to when they should plant crops, when they should harvest crops, when they should water crops. After all, the frozen food companies throughout the world now tell their contract farmers exactly when an item should be planted and harvested, etc. The same must happen in our Black territories. We must also look very closely at transport and consider whether the current restrictions on food transportation by the railways are necessary or appropriate.

Subsidies
Compared with many other economies, subsidies and control do not play such a major role in the Republic of South Africa, but although that role is diminishing as a percentage of total food consumption value, it is nevertheless significant.

It is a role that, I believe, and many producers believe, has contributed to technological inefficiencies and outdatedness particularly within the area of primary production. If South Africa is to meet its challenge to produce food more effectively, it has to use throughout the industry the very best and most modern information and techniques. This necessarily means change. It means larger farms, it means more capital intensive farms, and to some extent the subsidy and controls needed to soften the blow of the competition necessary to bring about change, and rapid change.

I would suggest that subsidy does have a role in helping to support changes in agriculture. Changes, for instance, from maize to wheat or from sugar to soya. Possibly for short-term specific objectives, subsidies can help, but as a long-term element within primary agricultural production the role must be questioned.

Conclusion
In conclusion, therefore, I believe we should be optimistic about the challenge offered. If we meet that challenge successfully, Southern Africa could and should remain one of the world’s exporters of food. However, food and food production, like much else in our modern world, is linked inextricably to energy. The changes and advances which I have outlined can only be achieved if the additional energy requirements can also be met. When looking toward the USA’s type of technological advance, one must also remember that the advances there are dependent on the United States consuming 33% of the world’s total energy for a population representing 6% of the world population.

References

Some insights into British-South African trade relations

Sir John Leahy
British Ambassador to South Africa, 6 Hill Street, Arcadia, Pretoria 0002.

Speech delivered at the South African Association of Business Management lunch in Johannesburg on June 23, 1981.

Traditionally, ambassadors have not had much to do with business; but times have changed a bit. In Britain our diplomatic service has become very much involved with business, that is with the promotion of British exports. Among the many functions that we perform we give a very high priority to commercial work of this kind. In South Africa we do this principally in Johannesburg, where we have a large commercial staff in the Consulat-General, and in Cape Town, and to some extent in Durban.

Many of those engaged in this work are local residents who know the South African market and have a good range of contacts. Continuity is very important in this kind of work.

What exactly do they do? Their prime function is to identify and assess South African demand for particular products and to bring these to the attention of potential British suppliers. I suppose it could be said that as much as anything they are engaged in a form of market research. Most emphatically they are not involved in the business of trying to sell particular products. They are not equipped to do that. That is the job of the businessmen themselves. We may try to lead them to the water, but we cannot make them drink.

In fact, British exports to South Africa continue at a very high level. Last year we sold to you goods worth R1 740 million, an increase of 39% on 1979. The net trade balance in our favour was R350 million. I might also add in passing that despite one or two instances of the sale or reduction of British company assets in South Africa, direct British investment in this country still accounts for about half of all direct foreign investment in this country.

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