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# INSTITUTIONAL CHANGES IN WORLD AGRICULTURE

by

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The purpose of this background paper<sup>1</sup> is to review significant changes in the institutional and politico-economic structure of world agriculture of the 1970's, as it is determined by the current overall pattern of international economic relations. The writer of this paper is no specialist in agricultural economics nor have the issues of world agriculture so far been prominent in his sphere of interest. Neither will they be in the future<sup>2</sup>. The approach here is rather that of the interested and sympathetic outsider who looks at problems and changes from a relatively neutral position. Specific conclusions are left to be drawn by those in closer contact with policy makers and the agricultural sector itself.

The paper consists of three parts. In the first part an attempt is made to put traditional and new problems of world agriculture in perspective, in as far as they constitute the setting for institutional strains and adjustments. The second and main part will focus on five specific aspects of world agriculture which reveal such institutional adjustments and which make up the core of present policy issues. Finally, these changes and new forces will be assessed briefly in the third part, together with some thoughts on their relevance for South Africa.

## CHANGING PROBLEM SCENE

In most economies agriculture constitutes a problem area as far as the functioning of market or socialist economic systems and the implementation of economic policies are concerned. The underlying reasons are complex, though well known and analysed,<sup>3</sup> being in general related to the essential nature of food production, the instability of output, the disequilibrium of market prices, the apparent threat of economic disparity between the agricultural and other sectors, and the difficulty of implementing comprehensive structural adjustments in a fragmented and politically sensitive sector of the economy and society. The arsenal of policy instruments to meet these problems, be they symptoms or their underlying roots, is extremely wide, with the major dichotomy in the Western economies between *interventionist* or market distorting (i.e. market replacing) policies and *market orientated* policies. Market economists (esp. those with a strong neo-classical orientation) have in past years build up strong opposition to the increasingly more interventionist and regulated systems of agricultural policies, which are said to

be too costly, generally inefficient and heavily biased towards specific interest groups<sup>4</sup>. Yet, however persuasive and logically consistent such criticisms, their effect on actual policies has been limited, even in the context of the more conventional problems of national and international agriculture.

Such a perspective should not deny the fact that very comprehensive structural adjustments have taken place over the past decades in the agricultural sectors of most developed and a number of developing countries. Total production has increased at a rate well above population growth until the late 1960's, methods of production have been rationalised, instituting labour-saving techniques and leading to greater economies of scale. Attempts have also been made, though not always successful, to stabilise prices and agricultural incomes. At the same time it is quite clear that the interests of consumers have been delegated to a second place in most of these policies.

On the whole, conventional problems of agriculture have in the past been approached as national issues and tackled on a national basis. Multilateral co-operation has been limited, besides having been difficult as shown in attempts at commodity price stabilization. As a result of the national orientation of most policies they often have had a protectionist, beggar-thy-neighbour character.

During the past few years a new note of urgency has arisen in the sphere of national and international agriculture, which is currently having a radical impact on the perception of problems as well as policies. Assessments of these new problems are numerous and their conclusions vary between mild optimism and extreme gloom<sup>5</sup>. The symptoms are equally well known, viz. serious supply shortages and erratic fluctuations between extremely high and low price levels. These are the results of very complex underlying factors, including uncontrollable, external factors (e.g. droughts, rapid population growth, oil price escalation, changes in the structure of demand) and structural problems within agricultural sectors (e.g. land ownership, employment potential, technologies, etc.). Basic to these new problems is the increasing gap in the internal supply-demand relationship in food-deficit versus (potential) food-surplus countries, which is closely related to the internationalisation of the whole complex of agriculture policies.

The crisis-like situation of agriculture and, in particular, food supply during the past few years has led to comprehensive adjustments in the agriculture policies of most countries and on the international sphere. While actual adjustments depend on the specific circumstances in individual countries, it is possible to focus on some major aspects of adjustment.

Some of these institutional adjustments constitute developments which may endanger the long-run stable evolution of world agriculture - in particular the increase in protectionism. Others are more promising but have not yet progressed too far, while certain developments can only be postulated as necessary in future, though unlikely at this stage. These distinctions reveal some normative presuppositions on the part of the writer - quite contrary to the introductory remarks - but this is readily admitted: the long-run goal is taken to be a stable *supply* (at the lowest possible cost to consumers) of the agricultural products as demanded, with the highest possible technical efficiency (which should not be confused with maximum capital intensity) - seen from an international perspective, but with due regard to legitimate interests of each community. Such a goal admits the need for interventionism but subjugates it to the qualification of international reconciliation and cost reducing efficiency.

### NEO-PROTECTIONISM

The first example of institutional change taking place during the past few years is in fact a retrogressive process in terms of the rational development envisaged by market economists and enlightened policy planners, viz. the increase in various forms of protectionism.

The reasons for such action are quite understandable. National policymakers are concerned about the distortion effect upon their national economies of world market disequilibria, in particular price fluctuations, supply shortages, speculative buying and selling, export controls and dumping. Thus, the rationale underlying such policies is to restrain the effect of the internationalisation of agricultural market disequilibria and to restrict the interdependence.

Neo-protectionism manifests itself through direct and indirect trade restrictions - both export and import focused - on a unilateral, bilateral and even multilateral basis. Typical examples are specific protectionist steps, flowing out of the Common Market agricultural policies and the US and Canadian as well as Australian export policies, with the safeguarding of local supplies as prime objectives. Similarly some of the Socialist countries only enter world markets in times of severe local shortages, when their large scale buying can distort international market equilibria and price levels. In a like manner some other countries have been engaged in speculative bulk buying of stocks of agricultural commodities when prices were rising, thus pushing them upwards even more.

Some of the protectionist policies are the

result of attempts made a few years ago to solve specific problems of overproduction in production-surplus countries like the US, Australia and Canada<sup>6</sup>. In general two sets of policies were implemented in order to reduce apparent surpluses: a reduction in direct and implicit production stimulating incentives, and positive incentives to reduce production (e.g. fallow subsidies). In as far as the earlier incentives (subsidies, tax incentives, market guarantees) had resulted in such surplus production, combined with an inefficient allocation of resources, policies aimed at reducing the incentives would seem to have been rational in the market economic sense. Further incentives to reduce output might also have been justified as interim measures to attain market equilibrium without undue price fluctuations. The overall rationale of such policies depends, however, on the correct assessment of long-run supply and demand trends seen in an international context and as revealed by international co-operation, negotiation and forward planning. This certainly was not the case in the product reduction efforts of the early 1970's even though one might argue that the severity of droughts and related problems in the ensuing years could not really have been anticipated.

The paradox about these steps is that during the period of scarcity the crop reduction policies gave rise to further protectionist policies (e.g. export control/embargo) then aimed at safeguarding local stocks from early depletion. Not unsurprisingly neo-classical market economist take this apparent dilemma as clear proof of the failure of market distortioning interventionism, based on unreliable forward planning. The writer would, however, like to question the apparently simple logic of such a conclusion, but will not elaborate at this stage.

The new wave of protectionism is an admission of the difficulty experienced with "open" agriculture in times of severe disequilibrium, and of the complexity of structural changes which would have to take place even without these new complications and the greater international interdependence. In fact, it can be argued that the protectionism is the logical result of insufficient adjustments and an insufficient willingness on the side of countries and interest groups to co-operate internationally. In addition severe short-run problems left almost no "second best" (alternative) solutions than some sort of protectionism. The latter point would suggest that steps to reduce such protectionism are crucially dependent on the solving of the short-term disequilibria.

### GREEN REVOLUTIONS

A substantial and continued increase in world output of agricultural products depends on a wide range of structural changes occurring in the pattern of production and techniques of production in marketing and distribution, and in the financing and use of agricultural products both in highly developed and less developed countries. In a

number of countries such comprehensive structural changes in various aspects of agriculture have occurred during the past few years, and the apparent "success", i.e. increasing output leading to (*inter alia*) a lower import demand and improved balance of payments, besides higher nutritional standards, has been linked to the concept of the "Green Revolution".

This concept has been researched widely and discussed at different levels of sophistication, with participants differing rather widely in their conclusions<sup>7</sup>. In the context of this paper the concept of the "Green Revolution" is not used in the narrow sense of the introduction of high-yielding varieties of crops, certain new or isolated successes on a regional or product level. While it is, in fact, these specific successes (and failures) which make up the whole picture, the point to be emphasised is that at present and in the foreseeable future such comprehensive changes will (have to) take place in virtually every developing and semi-developed country, and even in some of the highly developed countries. It is the conviction (certainly not only held by this writer) that both the need for a rapid expansion of agricultural output - especially food products, in the light of population and income increases - and the inherent *potential* for such a rapid expansion of output and utilisation - are underlying such a broad based "Green Revolution" with the word "Revolution" having a meaning closely analogous to that in the "Industrial Revolution" of the 19th and early 20th century - which is also still in process in the LDC's.

The changes inherent in this process are complex and multi-dimensional. While the actual developments take place in the microsphere of the individual agricultural enterprise - its method and scale of production, resource utilisation, including labour, its finance and investment, marketing, storing, risk taking and general management - the changes necessitate action in the communal, regional, national and even international sphere. They are, furthermore, not only limited to agriculture but also relate to industry, trade, financial institutions and government finance. Besides, the changes are closely interwoven with the social and political structure, including aspects like land-ownership, feudalism and political pressure groups.

In as far as concurrent changes are necessarily on virtually all levels in order to prevent specific bottle-necks arising, the real problem is the well-known "vicious circle" of interlocking bottle-necks. In fact, this may explain the very mixed results achieved in recent efforts at rapid changes of the agricultural structure in LDC's. What is more even in those cases where dramatic improvements occurred in the level of output and the relative income of the agricultural sector, new and complex issues have arisen, closely related to the distribution of the fruits of the "Green Revolution". Thus, there is a tendency towards larger and fewer agricultural units, reaping most of these benefits, with the employment potential of

agriculture reduced and the possibility of the rise of a rural proletariat.

Institutional changes of a very wide range take place during this process, or at least they are in need of taking place. These include land reforms, changes in the provision for and channelling of agricultural finance, an expansion of the industry-agriculture links, the institution of new marketing and distribution channels, both on a regional and national level, new trade patterns (of agricultural products as well as inputs like fuel, fertiliser, equipment, etc.) and organisational changes in the management and ownership of agricultural enterprises (i.e. the rise of the large scale oligopolistic or state enterprises). While many of these changes are at present taking place in LDC's, it is probably true to say that we are only at the beginning of a dramatic process which will continue for at least another decade.

While these changes primarily effect the individual farming unit, the local area and the region, as well as national economies, they also have important implications for the international economy and, in particular, the whole pattern of world agriculture. The following aspects are significant:

- The transformation of food importing countries to food exporting countries.
- The introduction of new crops in specific LDC's.
- Rapidly increasing demand for fuel and capital goods, both of which experienced high rates of price escalation during recent years.

In as far as surplus stocks of agricultural products arising in individual countries are usually exported - even if it is at a loss - and sudden shortfalls are compensated by imports, experimentation with the "Green Revolution" gives rise to instabilities in world agriculture. Here we meet the dilemma of international co-operation again: while the "Green Revolution" is primarily a national transformation, its success depends quite heavily on the success of supportive action on the international front. This, however, is dependant on a change in the present protectionist policies and positive steps of international co-operation. In fact, there is the danger that success in attempts to rapidly increase agricultural output, will lead to new types of surpluses arising, giving rise to further protectionism.

It is impossible to assess any further the process and possible impact of such a world wide "Green Revolution", since in-depth analysis is necessary in each case. The drastic escalation of the price for fuel and related products has shown how closely modern agriculture is related to other economic changes, and how suddenly impressive improvements can be reversed as a result of the combined impact of climatic factors and world market changes.

In this respect institutional changes like the special credit facilities of the IMF and new bodies created under the aegis of the FAO only constitute a beginning.

## COMMODITY STABILIZATION: RENEWED EFFORTS

The history of commodity price stabilization schemes is scattered and, on the whole, the results have been disappointing. While some of the schemes - whether of the bufferstock, fixed price or other types - have been fairly successful for some years, as seen by producers or buyers, most of them were disbanded in the longer run, because the aims could not be met. For the theoretical economist this is not surprising, since these schemes usually only tackled some of the symptoms of price fluctuation (and the underlying surplus/deficit) but could not meet the basic problem of production and demand instabilities. Besides, the schemes usually lacked both the reliability of longer run planning and the willing co-operation of all relevant groups.

The recent oil price hike, linked to the seemingly effective oil producer cartel, and certain other moves by primary producer countries gave rise to hopes concerning a new phase of effective producer cartels in a wide range of agricultural (and mining) products, which would guarantee stable (upward moving) prices, thus leading to long-term improvements in the terms of trade of primary producers<sup>9</sup>. UNCTAD III and the World Food Conference gave considerable attention to possibilities in this regard, and the actual trend of agricultural prices during 1973/74 presented promising trends in such a direction. Under the control of UNCTAD a commodities committee was formed, which proposed a multipronged approach to commodity price stabilization, based on multilateral agreements, World Bank and government backed finance, buffer stocks and determined steps to encourage product diversification and even export quotas amongst producers. Originally a fund of \$11 000 million was proposed, which should have stabilised 18 commodities on the basis of intervention prices and buffer stocks<sup>10</sup>.

More recent trends in world production and world market prices of agricultural commodities have reasserted pessimism about the success of such schemes,<sup>11</sup> even though producer cartels are still quite possible in specific cases where producers are few and well organised and demand elasticities happen to be low<sup>12</sup>. Yet, the extent to which some world market prices have decreased puts some doubt on the possible success of such stabilization schemes - depending on the choice of a "normal" intervention level for price stabilization.

Nevertheless, it was recently announced that a stockpile fund of \$3 000 million has eventually been instituted by the UNCTAD commodities committee, concentrating initially on five products, three of which are agricultural commodities (coffee, rubber and tea) with the possible expansion to sugar, cotton, cocoa, jute and hard fibres. The fund would primarily assist existing commodity organisations, only intervening directly where no such organisation exists. The advantage of the new fund is the diversification of the capital (one third

equity and the rest loans, coming from exporters, importers, oil producers and (*inter alia*) the World Bank) and the fact that more than merely funding is offered (i.e. direct market intervention if necessary)<sup>13</sup>. The whole scheme is clearly an example of multilateral (or international) action introduced to supplement the efforts of groups of countries where the latter's schemes proved unsuccessful.

In as far as the intention of participating countries to really diversify their production in cases of long run surpluses is genuine, this attempt might signal a breakthrough in the field of commodity price stabilization. The multilateral nature of the scheme improves the financial backing and reduces the risk; at the same time it increases the political factor in the scheme. Parallel to the introduction of this scheme various other governments (*inter alia* France, the UK and the USA) have proposed alternative schemes, most of them containing some elements of stockpiling, commodity agreements, multilateral financing (World Bank/IMF) and minimum earnings guarantees for primary producers.

The search for workable solutions is thus still on. Some elements are crystallising out as necessary under any type of scheme, and it is also clear that efforts in the direction of commodity price stabilization are only part of a necessary broader based strategy into which the "Green Revolution" as well as famine assistance and diversification attempts, as well international financial aid programmes have to be integrated.

## WORLD FOOD AID

The need for world food aid arises primarily out of the following three situations:

- Sudden production decreases in some areas as a result of crop failures, floods, etc.
- Short-run lack of import purchasing power in poor countries, especially if they are committed to heavy investment programmes aimed at diversification of their economies (this relates to food imports as well as fuel, fertilizer, etc.).
- Population growth exceeding the existing food production (and importing) potential.

These three situations indicate quite clearly that the need for world food aid is merely a symptom for several complex problems, which are intimately tied up with the general problems of LDC's and the world wide system of development aid. Progress in this field has been complicated by the difference in the national and international perspective on such problems. Traditional food surplus producers like Canada and the USA, which in the past furnished food aid as a result of their own market problems, tried to solve their national problems by reducing surpluses, with the result that world shortages increased. On the other hand accelerating population growth in many LDC's as well as the oil price increase and problems related to the "Green Revolution" all increased the need and required size of food aid programmes.

The whole issue has been considered at length at the November 1974 World Food Conference and in the months preceding and following this conference<sup>14</sup>. Since the issue of food aid is so intimately related to the production potential inside LDC's (and steps taken to increase this potential), as well as the willingness by the developed countries to finance the aid, opinions differed widely and it is not at all clear whether the resolutions taken will all result in effective action. Basically, it has been decided to establish nationally held surplus stocks of cereals (i.e. not only inside the USA), as well as certain emergency food aid programmes (including a "global information and early warning system"), and to assist the FAO initiated international fertilizer supply scheme as well as other programmes focusing on production increases.

The 1974 World Food Conference and general assessments of the need and scope for world food aid may have been unduly influenced by the particular food supply situation of 1972-74. While various experts tried to indicate that the dimension of food aid required was still growing and that serious global shortages were to be expected, recent trends in some commodity prices and some forecasts of crops have changed the picture somewhat. The big unknown factor remains the supply elasticity in LDC's, seen in the light of the potential for "Green Revolutions".

## REGIONAL CO-OPERATION

It has been emphasised repeatedly in this paper that national approaches towards the problems of agriculture in individual countries are no more sufficient. Since a worldwide approach is usually quite difficult both organisationally and politically, the question arises whether regional efforts bear some promises of success. In this respect the Common Market itself and its association with African states stand out as a particular example.

In perspective regional attempts to solve problems of world agriculture seem to be relatively unsuccessful. As far as the Common Market countries are concerned, its *common agricultural policy* (CAP) has been widely criticised as being expensive to consumers, protectionist vis-à-vis third countries and ineffective in its attempt to accelerate necessary structural adjustments<sup>15</sup>. As far as food aid is concerned it also played no significant role during recent years, since the policy focuses on internal supply-demand equilibrium and not on maximum output within a world of potential food shortages<sup>16</sup>.

In general free trade and common market zones are based far more on industrial free trade policies than on agricultural co-operation - at least in the initial phases.

In as far as provision is made for sizeable redistribution of funds within such regional associations (e.g. through regional development funds) some stimulation of agricultural production

is possible, i.e. as it relates to assistance in the solving of structural problems.

Another major reason for the insignificance of regional approaches to world agricultural problems is the fact that the USA and Canada are by far the most important suppliers of surplus grains (including wheat, feed grains and rice), while they are not directly integrated into any regional grouping. Even at the receiving end the most important countries - India, China and other Socialist countries (irregularly) and Africa (most recently) - are not direct partners within regional groupings including surplus producers.

The issues are further complicated since the Arab countries recently emerged as financial surplus countries, with, however, no production surpluses. Thus, while they have no selfinterest in parting with surplus stocks, they control much of the purchasing power necessary to finance the stocks required by other food deficit countries.

The relative pessimistic view expressed here about the scope for a regional approach to world agricultural problems should be modified with respect to some regions with only moderate surpluses and shortages amongst the constituent countries. Latin America and Southern Africa as well as parts of Indo-China would be examples, as is the Common Market internally. However, in as far as success in such regional attempts is again dependent on some countries being willing to part with surplus funds, the chances would seem to be limited for Latin America and Indo-China, in the absence of direct financial assistance from (e.g.) Arab states and the US. The situation of Southern Africa will be referred to later.

## ASSESSMENT OF THE CHANGING SITUATION IN WORLD AGRICULTURE

Against the background of the few specific issues touched upon here it seems possible to draw some conclusions as to the challenges of modern world agriculture:

**1. Agriculture, traditionally the most isolated sector within economies, is very urgently in need of comprehensive international co-operation:**

About the national orientation of the agricultural policies in most economies there can be little doubt. In fact, new stresses and strains of the past few years have even increased the degree of protectionism and isolation. At the same time a short *and* long-term solution to most of the issues of world agriculture depends crucially on the willingness of countries to adjust their production policies, share surpluses, prevent price distorting speculation or dumping, and assist each other in the steps required for the implementation of necessary structural changes.

This need for international co-operation and joint action transcends the scope of regional associations or groupings and is, in that sense, really international, including even the East-West and the North-South blocs. Lack of such co-operation can, as has been evident in the past few years, cause extreme disequilibrium in the



international price pattern and the supply position in particular countries, resulting in widespread human suffering.

It is easy to postulate that effective co-operation will not come about (easily), and, in particular, the 1974 World Food Conference, notwithstanding all the rhetoric, offers sufficient scope for pessimism. At the same time the very dimension of the longer run problems may in fact force the world community of nations to co-operate.

**2. Agriculture, a sector which is known to be very difficult to plan and control effectively, is in need of widespread controls and concerted forward planning:**

Market economists are in agreement about the difficulty to plan future output in agriculture, and to stabilise prices and incomes. At the same time longer run stabilisation of agriculture in a world of rapidly expanding populations, with the imminent danger of major crop failures and other disasters, necessitates forward planning and controls on a national as well as regional and international level. While this will certainly be difficult, it does not imply that such steps necessarily have to replace the market mechanism or profit making private enterprise wherever it still exists. The challenge for both Western and Socialist, as well as Third-World agriculture is to strengthen the supply elasticity of agricultural production, and this may be possible through a strengthening and expansion of market production, even though not all the aspects of private enterprise are accepted (e.g. large scale speculation).

It should be remembered that in talking about the need for planning and interventionist policies we are referring to such diverse issues as the implementation of the "Green Revolution" and the necessary diversification policies, as well as the funding of aid and price stabilisation (buffer stock) programmes.

**3. Agriculture, the sector which on a national level is probably politically the most sensitive, is in need of far-reaching adjustments on a national and international level, which are politically extremely demanding:**

The inadequacy of present agricultural policies in most countries is normally explained by reference to the special role which agricultural interests play in the political structure of such countries. More radical - or more market orientated - adjustments, e.g. in the direction of a rationalisation of smaller farming units, the reduction in the labour force, increases in labour productivity and the acceptance of cheaper foreign supplies, are regarded as difficult or even impossible due to political repercussions. The strength of such farming interests is shown most dramatically in the case of the Common Market, where farming plays a relatively negligible role in the national economies, yet negotiations concerning the CAP completely overshadow all other activities of the Commission<sup>17</sup>.

However difficult the implementation of rational agricultural policies may be on the national

level, international co-operation may be even more difficult. What is required is after all a limitation of national autonomy in the field of agricultural production (in particular through export and import controls) and a direct sharing of financial resources in the food aid and price stabilisation schemes, as well as through other assistance programmes.

It would seem that the institutional framework necessary for such a world-wide "co-operative" agriculture is only in its very early stage of development. The recent disturbance of world markets, the threat of extreme shortages and famines and the singular dependence on countries like the US and a few others, may have shocked us and, hopefully, awakened the world from a tradition of inwardlooking, protectionist agricultural policies. The first reactions of even increasing protection may be unimportant, given the general realisation of the need for a different approach. The coincidence (and the interrelationship) of the energy and food crises may enhance the chance for new strategies in both areas. The 1974 World Food Conference and first institutional steps taken by UN agencies, especially UNCTAD and the FAO, and the reaction of particular governments (e.g. the US) give reason for mild optimism, though not much more<sup>18</sup>. As a general economist, rather than an agricultural economist, the writer is inclined to draw more parallels between the challenges faced by world agriculture and those faced by world energy, the world financial system, world employment and (perhaps not yet) world industry: in each case national policies are insufficient within an increasingly interdependent world. Yet, co-operation is extremely difficult, notwithstanding such needs. Radical adjustments almost seem dependent on some threshold being surpassed in the severity of the problems, when the situation is regarded as almost hopeless, though the seeds of change are already bearing some fruit. What is more, the areas in need of radical change on a world-wide scale, are not unrelated. In all of them the world-wide distribution and redistribution of resources is at stake, and the acceptance of such redistribution is the basic issue. Institutional adjustments cannot obviate such redistribution; they can only constitute the practical ways in which, and channels through which such redistribution can take place.

## RELEVANCE FOR SOUTH AFRICA

It is not the intention of this paper to discuss at any length specific problems and policies of South African agriculture. The aim of this final section merely is to show the relevance of the world-wide issues outlined above for South Africa, in as far as Southern Africa and the rest of the world is concerned. A few brief points may be sufficient:

1. South Africa's internal agricultural policies<sup>19</sup> display more or less the same characteristics of widespread protectionism and market

intervention as those of other Western countries. Actual policies are also heavily influenced by political forces and not always based on criteria of economic rationality.

2. In as far as we are in the process of trying to improve the agricultural performance of the homelands we face problems very similar to those discussed under the concept of the "Green Revolution" in other countries<sup>20</sup>. The aim is comprehensive structural change, including land reform, technological innovation, socio-political changes and modernisation of (*inter alia*) marketing, finance, transport and management. It is quite clear that progress in these fields needs action from inside as well as outside particular homelands.
3. With respect to the financing of such structural changes and the supply of food in case of shortages, substantial financial assistance is required from the modern sector of South Africa or from outside sources. Furthermore "national" production patterns between the homelands and the rest of South Africa as well as adjoining states, have to be co-ordinated and planned<sup>21</sup>. While this may not yet be an urgent issue, in the light of the overwhelming role played by the Republic's modern agriculture, real success (or even drastic failure) in homeland agriculture - and that of Mozambique, Angola, Zambia and Zimbabwe - would very soon require co-ordination and co-operation in order to forestall tension or conflict. This relates in particular to staple foods like maize, but also to other commodities.
4. Due to its balanced economic structure, with agriculture constituting only about 10 per cent of the GNP, South Africa is less sensitive to fluctuations in world agricultural prices. With the exception of a few products, like maize, wool and citrus as well as deciduous fruits, we are also not so very sensitive to surpluses on world markets. Nevertheless we also have an interest in stable prices and long-run equilibrium between the supply and demand for major commodities.
5. As a result of international animosity towards South Africa with regard to its race policies, we play no role or only a very insignificant role in the international bodies discussing these wider issues and planning new policies. Under more normal conditions we would be a significant participant, since we are a substantial net exporter of agricultural commodities, the dimension of which is certainly significant as far as our subcontinent is concerned. Assuming that our international position should and actually will normalise, we are well advised to closely follow these developments.
6. In conclusion it would seem that for South Africa the real challenge in the agricultural field lies on this subcontinent, starting with Southern Africa and expanding further

northwards. Our preoccupation with traditional agricultural export products and export markets would seem to be in need of reconsideration. Perhaps Britain's entry into the EEC and fiercer competition from other exporters of such products will force us to reconsider our overall production and marketing strategies. Recent shortages in some of our basic food products add to this need for reconsideration, as will the progress in homeland agriculture as and when this materialises. In the latter respect we should remember that our neighbouring countries (as well as the homelands) look upon South Africa much the same way as other large LDC's look upon the US: demanding various types of assistance, even though this is resented by us. On the other hand a progressive regional food and agricultural aid programme may be our best political strategy for our reconciliation with the subcontinent.

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2. The writer is Director of the Bureau of Socio-Scientific Research at the University of the Western Cape.
3. Cf. e.g. U. Papi and C. Nunn. *Economic problems of Agriculture in industrial societies*: Proceedings of a conference held by the International Economic Association, 1969, Macmillan; and T.W. Schultz. *Economic crisis in world agriculture*, 1965, Ann Arbor.
4. See e.g. D. Gale Johnson. *World agriculture in disarray*, 1973, Macmillan
5. Mention can be made here of a series of very readable articles in *Challenge: The magazine of economic affairs*, in the issues March/April 1974, Sept/Oct. 1974 and Nov/Dec. 1974.
6. Cf. E.P. Reubens. "The food shortage is not inevitable", *Challenge*, March/April 1974.
7. See e.g. T.K. Poleman and D.K. Freebairn (eds). *Food, population and employment: the impact of the green revolution*, 1973, Praeger.
8. In an article on "How to feed the Third World" (*Economist* March 22, 1975, p. 73) a characteristic remark is: "But growing more food is a less effective answer than saving the food that is already grown."
9. Cf. C.F. Bergsten. "The new era in world commodity markets", *Challenge*, Sept./Oct. 1974; and R.F. Mikesell. "More Third World cartels ahead?", *Challenge*, Nov./Dec. 1974.
10. See *The Economist*, July 5, 1975, p. 124.
11. Cf. Report on "Whatever happened to the commodity boom?", *Economist Business Brief*, June 14, 1975.
12. How rapidly the prospects of such cartels can change was shown in the case of coffee, where reports during 1974 said that "the leading coffee producers, through a series of interlocking marketing companies and

stockpile-financing arrangements, have seized control of world coffee prices" (Challenge, Sept./Oct. 1974, p. 35), while The Economist of March 29, 1975 reported that "An attempt by the four largest coffee exporters, Brazil, Colombia, Angola and the Ivory Coast, to rig the world coffee market by withholding production came to a slightly sticky, if predictable, end in Rio de Janeiro last week".

13. The Economist, July 5, 1975, p. 124.
14. For a concise summary of the statements and main solutions see Keesing's Contemporary Archives, Dec. 1, 1974, Cols. 26829 - 26834.
15. See (*inter alia*) A. Cairncross (et. al.). *Economic policy for the European Community: The way forward*, ch. 4, "Reform of the Common Agricultural Policy", pp. 91-112.
16. In fact, by mid-1975, when the UN World Food Council met for the first time, the EEC was the only major donor who had not raised its commitment of food aid into line with the targets set by the 1974 Food Conference (i.e. from 1,3 to 2,5 million tons).
17. "The CAP absorbs 70 per cent of the time of the Council of Ministers and 90 per cent of the Community's budget." A. Cairncross (et. al.), *op. cit.*, p. 103.
18. The other side of the coin of such greater awareness of the need for world-wide assistance was recently shown in a report allegedly prepared by the CIA where it was concluded "that world grain shortages, which are likely to increase in the near future, 'could give the US a measure of power it had never had before - possibly an economic and political dominance greater than that of the immediate post-World War 2 years.'" (Cape Argus, March 19, 1975).
19. For a recent, very brief statement see Financial Mail, March 21, 1975, p. 1007
20. Frankly speaking it is amazing how little has been written on the long-term agricultural potential of the homelands and its relation to non-homeland agriculture. This relates to the potential for an Asian-type Green Revolution as postulated (*inter alia*) by Merle Lipton, and the actual competition between producers of the homelands and the modern sector (the common area) for the major local agricultural markets.
21. Long-term forecasts of South Africa's agricultural production show wide divergencies between different studies. See e.g. the studies by Blakeslee L.L. (*et. al.*) and O'Connell J.P. as summarised in Bulletin 4.2 of the Unit for Futures Research (University of Stellenbosch), Febr. 1975.