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TRADE AND GROWTH:
THE CASE OF THE SUDAN, 1956 - 1969

by

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for the degree of
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CERTIFICATE

I certify that FAROUK IBRAHIM ELMAGBOUL has spent no less than two academic years in full-time higher study toward the degree of Master of Letters in Arts and that he has fulfilled the requirements under Ordinance C, Resolution No. 9 of the University Court of St. Andrews. He is qualified to submit this dissertation for the degree of Master of Letters (Political Economy).

Supervisor

DECLARATION

This dissertation embodies the results of the higher study undertaken by me on the topic approved by the Senatus Academicus of the University of St. Andrews in accordance with the regulations governing the degree of Master of Letters in Arts.

I was admitted under the Resolution of the University Court (1967), No. 9, to read for the degree of M.Litt. from October, 1969, in terms of Ordinance C in Higher Study and Research 1970-71, pp. 1, 2(b)-7.

Candidate

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CHAPTER ONE

Chapter One

INTERNATIONAL TRADE & ECONOMIC GROWTH

'International specialisation is an essential foundation of our material civilisation. The case for it is firmly based on considerations of economic efficiency; and the world is not rich enough to despise efficiency. But why should we expect international trade to solve all problems of development, in any and all circumstances? Unfounded expectations may be due to the influence of a certain historical association.'

Ragnar Nurkse.

1. Where to begin.

It has long been argued that free trade provides the means for increased efficiency. Each country would employ its available resources in the production of commodities in which it is relatively more efficient. The more efficient allocation of resources would enable the trading country to increase its national income. It can then exchange its efficient production for commodities which cannot be produced domestically or whose production could only be achieved at the cost of diverting resources from more productive employment. Thus foreign trade enables a country to increase its national income and to optimise its consumption.

The above statement is nothing but a very simplified version of the beneficial aspects of trade so often repeated in our textbooks. We shall revert to it later in more detail, explaining its origin, its assumptions and its theoretical foundation. What is to be mentioned at this introductory stage is that the beneficial aspects of free trade have been challenged by many learned economists. These heretics argued that although foreign trade might have stimulated development in general in the past, it no longer does so in the context of present-day

conditions and realities. What stimulated the discussion between free traders and heretics is undoubtedly the emergence of many independent countries in Africa, Asia and Latin America dubbed jointly the 'third world', the 'poor nations', the 'emerging nations', the 'backward', 'underdeveloped', 'developing' or, more conveniently, the less developed countries (LDC's). This discussion arose as a result of the great interest shown by economists in the economics of development of these countries in the recent decades. This interest, of course, represents nothing but a renewal of the ancient concern of economists with the causes of the wealth of nations. It is mainly concerned with an attempt for a better assessment of the impact of trade on the development of the LDC's, the relevance of the orthodox trade theory to their special problems and the interpretation of trade and growth theories in a broad dynamic framework.

The central problem of the LDC's is whether the policy conclusions derived from the traditional trade theory are useful and relevant to their efforts of speeding up the process of development; it is mainly a problem of choice of proper criteria to allocate their meagre resources. The question, usually asked, is whether or not an export-led, outward-looking strategy would represent the optimum guide for resource allocation in these economies. Let us remember that foreign trade is very important in most of the LDC's; it constitutes a considerable proportion of the gross domestic product of the bulk of these countries. But their special problems are well manifested in the fact that a considerable number of these countries depend on one or few commodities for export, chiefly primary products, the demand for which in the world markets, it is alleged, is

both fluctuating and slackening. With their complete dependence on trade for securing the necessary resources to finance their purchases of capital goods urgently needed for further expansion of their productive capacities, as well as for the import of essential consumers' goods required, and in the absence of foreign aid and grants, the problems of the LDC's are indeed serious. That is why some economists argue that too much dependence on trade could be harmful to the economic growth of the LDC's and that an inward-looking policy for resource allocation seems more appropriate.

I shall attempt to present the various views expressed in the literature on the subject of the relationship between foreign trade and economic growth, with specific reference to the LDC's. I shall, first, outline in brief the basic assumptions and claims of the traditional theory of international trade. Then, I shall proceed to examine the views expressed as to its inapplicability to the special problems of the LDC's. The literature on the subject has, of course, reached enormous proportions and the discussion is still gaining momentum. I do not, therefore, profess to cover all that has been written or said; nor would I attempt such an impossible task. All that I have in mind is to project the main arguments on the subject with the specific purpose of providing a theoretical background for the proper evaluation of the subject theme of the study, namely the impact of trade on growth in the context of the Sudanese economy.

1.1. Glimpses of history.

The concern with international trade is not new. Until the end of the eighteenth century, the so-called mercantilist approach of trade was dominant.

Essentially, the mercantilists wanted to make the country in which they lived as strong as possible; national strength was equated with national economic wealth; and national economic wealth was, to them, nothing but the possession of the precious metals. In order to increase a country's wealth, it had to acquire as large as possible a stock of gold and silver by selling more goods abroad than are imported into the country, i.e. exports should exceed imports. Expressed differently, a country should have a favourable balance of trade. The following comment of Sir Frances Bacon, written in 1616, is typical of the mercantilist trend of thought:-

'This realm is much enriched, of late years, by the trade of merchandise which the English drive in foreign parts; and, if it be wisely managed, it must very much increase the wealth thereof; care being taken, that the exportation exceed in value the importation; for then the balance of trade must of necessity be returned in coin or bullion.'¹

It was not noted, however, that it was impossible that all countries could have favourable balances of trade; nor was it considered that money is primarily a means to an end, e.g. to command goods and to facilitate specialisation of production and hence increase efficiency. The Mercantilist belief in one-way trade has long been shattered and disappeared from sound economic reasoning. It was back in 1752 that David Hume, in his "Political Discourses", argued that the conscious pursuit of a favourable balance of trade was not only foolish, but was certain to fail. He found his explanation in the 'Quantity Theory of Money':

1. "The Works of Francis Bacon", edited by Basil Montagu, Vol. 2. (Philadelphia, 1852).

an increase of exports over imports would result in an inflow of gold into the country automatically leading to an increase in the domestic supply of money and consequently prices will rise; on the other hand, outflow of gold from the receiving country would result in a reduction of the money supply and prices would decrease. The raising of prices in the surplus country and the lowering of prices in the deficit country would tend to bring about a fall in the surplus country's exports and a rise in its imports - thus automatically correcting the original imbalance. This explanation was a 'searching challenge' to the mercantilists of the time.²

A few years later, in 1776, the "Wealth of Nations" was published by Adam Smith. With it was born a clear realisation of the benefits that could accrue from the 'division of labour' and the wider extension of this principle to the need for international specialisation. Or in Smith's words:-

'It is the maxim of every prudent master of a family, never to attempt to make at home what it will cost him more to make than to buy. The tailor does not attempt to make his own shoes, but buys them of the shoemaker. The shoemaker does not attempt to make his own clothes but employs a tailor...

'What is prudence in the conduct of every private family, can scarce be folly in that of a great nation. If a foreign country can supply us with a commodity cheaper than we ourselves can make it, better buy it of them with some part of the produce of our own industry, employed in a way in which we have some advantage...

'... By means of glasses, hotbeds, and hotwalls, very good grapes can be raised in Scotland, and very good wine too can be made of them at about thirty times the expense for which at least equally good can be brought from foreign countries. Would it be a reasonable law to prohibit the importation of all foreign wines, merely to encourage the making of claret and burgundy in Scotland?'

2. "International Economics", by Sidney J. Wells/ (George Allen and Unwin Ltd.) 1969.

Thus the case for free trade was formally born. Each country should specialise in what it can do best. But it was argued later that a country could not only trade beneficially in goods in which it has absolute advantage, as the 'Wealth of Nations' postulated, but also in those in which it has a relative advantage. This springs from the work of David Ricardo in his 'Principles of Political Economy', published in 1817, and in which the 'Comparative Costs Doctrine' was first expounded. We shall cut short our sojourn in economic history and rather concentrate more on this Ricardian Principle. This concentration is necessary because the whole modern theory of international trade is in fact moulded and based on this principle. Or in the words of G. Haberler, 'the family resemblance of the modern version or versions with their Ricardian prototype is unmistakable, just as a modern Cadillac or Rolls Royce belongs to the same family as the Model T Ford.'³ But what is the law of comparative costs?

1.2. Comparative Costs Doctrine.

The pure theory of international trade begins with Ricardo's principle of comparative costs. According to this principle, under free trade, each country will specialise in the production of those goods which it can produce relatively cheaply and import those goods for the production of which foreign countries possess a comparative advantage. Using his two-country (England and Portugal), two-commodity (cloth and wine) model, Ricardo indicated that although Portugal has an absolute advantage in the production of both commodities, trade could

3. "An Assessment of the Current Relevance of the Theory of Comparative Advantage to Agricultural Production and Trade" by G. Haberler, (The International Journal of Agrarian Affairs, Vol. LV, No. 3, May, 1964).

still take place and benefit both countries. 'In England a gallon of wine costs 120 and a yard of cloth 100 hours of work, while in Portugal the real costs (labour cost) of wine and cloth amounts to 80 and 90 hours of work respectively. Portugal thus has an absolute advantage over England in the production of either commodity, but a comparatively greater one in the production of wine since $80/120$ is less than $90/100$. Without trade the internal ratio of the prices of wine and cloth, as expressed in labour, would be proportional to their costs of production, that is, 120:100 in England and 80:90 (or 88.8:100) in Portugal. Thus, cloth is comparatively cheap in England and wine is comparatively cheap in Portugal. After trade is opened between the two countries, England will export cloth and import wine. Ignoring transport costs, an equilibrium price ("real exchange ratio" or "terms of trade") will result which will lie between the limits of 120:100 and 88.8:100. Let us assume, for example, that the equilibrium ratio of exchange is 100:100. If England now specialises in the production of cloth and transfers labour from agriculture to industry, it can produce 1.2 units of cloth for each unit of wine which it no longer produces. These units of cloth could now be exchanged for 1.2 units of imported wine from Portugal - with a resulting gain of .2 unit of wine for each unit of cloth exported; alternatively, the same quantity of goods produced before trade occurred could now be procured at lower total real costs'.⁴

4. "A Survey of International Trade Theory" by G. Haberler, (Special Papers in International Economics, No. 1, July 1961, published by Dept. of Economics, Princeton University).

It is to be noted that the labour theory of value is made to reign supreme in the Ricardian analysis. The factor labour is assumed to be the sole means of production and the comparative costs are expressed in terms of 'labour time costs'. The labour theory of value on which this analysis rested was subsequently rejected as invalid; goods are not produced by labour alone but by various combinations of all the factors of production, land, labour, and capital. To compare the labour content of two commodities gives an erroneous view of relative values. Variable proportions of factors in the production of different commodities make it impossible to use the labour theory of value, however qualified. An escape from this dilemma has been provided by Prof. Haberler in the theory of 'opportunity costs'.⁵ The cost of a commodity 'X' in the long-run is how much of commodity 'Y' has to be given up to get additional units of commodity 'X'. The question is simply how much of one commodity must be given up to get more of the other; in short, the opportunity cost of a commodity is the value of the factors used to produce it in their alternative employment.

The notion of opportunity costs is illustrated in international trade theory with the production possibility curves. Instead of saying that a week's labour will produce either 'x' gallons of wine or 'y' yards of cloth, one says that all factors of production can produce either 'x' gallons of wine or 'y' yards of cloth, or some intermediate combination of them. Trade takes place because

5. The Theory of International Trade with its Application to Commercial Policy by G. Haberler (William Hodge & Co. Ltd. 1936).

countries have different production possibility curves or different comparative costs. But why do the production possibility curves of various countries differ?

The answer to this question has been provided by the so-called Heckscher-Ohlin (H-O) principle in which the pattern of trade has been expressed in terms of factor endowments. According to this principle, a country will tend to have a comparative advantage in those products which use more intensively the country's more plentiful factors. It thus goes behind the comparative costs principle and shows the link between a country's economic structure and trade.⁶ Thus, a country acquires through imports commodities which would use up its relatively scarce factors of production if produced locally. Consequently, international trade enables a country to economise in the use of its scarce factors. On the other hand, the plentiful factors are now more extensively demanded in order to produce exportables. Thus the relative increase in the demand for plentiful factors and the relative decrease in the demand for scarce factors tend to raise the returns of the plentiful factors relatively to the scarce factors. Thus the H-O theory argues that trade tends to equalise the relative returns to land, labour and capital throughout the world.⁶ This factor equalisation on a world-wide scale was not required by the classical theory. However, the possibility

6. "RECENT DEVELOPMENTS IN THE THEORY OF INTERNATIONAL TRADE" by W. M. Corden, (Special Papers in International Economics No. 7, March 1965, Princeton University).

of the factor-equalisation has been provided by Prof. Samuelson⁷ when he states that, subject to certain assumptions, free trade would equalise factor prices completely. 'Samuelson himself noted the unreality of some of the assumptions required and the vast literature which followed made explicit a whole range of necessary assumptions, some of them by no means reasonable'.⁸

As Prof. Haberler points out:-

'Briefly stated, the assumptions under which free commodity trade equalises factor prices are as follows: 1) free competition in all markets; 2) absence of transport costs, hence equality of all commodity prices as between different countries or regions; 3) all commodities continue to be produced in both countries after free trade has begun, in other words, that specialisation is incomplete; 4) production functions in both countries are identical and homogenous in the first degree, that is, a given uniform percentage change in the quantity of all inputs results in an equal percentage variation in the resulting output; 5) in addition, the production function must be such that one commodity is always labour intensive and the other always capital intensive whatever the relative supply of factors and the ratio of factor prices; 6) the factors of production are qualitatively the same in all countries although they are available in different quantities; and 7) the number of factors is not greater than the number of commodities. In a two-commodity model, for example, there could be no equalisation of factor prices (except by chance) if there were three or more factors.'⁹

Given these limiting assumptions, Haberler concludes that the theory, 'though formally correct, rests on such restrictive and unrealistic assumptions that it can hardly be regarded as a valuable contribution to economic theory'.⁹

7. "International Trade and the Equalisation of Factor Prices", Economic Journal, (June 1948);
"International Factor-Price Equalisation Once Again", Economic Journal, (June 1949).

8. Haberler, op.cit. (ref. 4).

9. Haberler, ibid.

Although the H-O theory, unlike the classical theory, has been based on the unreal assumption of equal production functions between countries, the dominating development of the pure theory of international trade in recent years has been nothing but the 'elaboration and filling-out' of the H-O trade model.¹⁰ We shall not concern ourselves with the details of the discussions which extended or amended or argued about the H-O theory because this is not a survey of developments in the international trade theory; rather, we shall concentrate on the aspects relevant to the traditional trend of thought with respect to the special problems of the LDC's.

Our discussion so far has revealed what in fact determines the pattern of international trade. A country's pattern of trade is determined by the law of comparative costs; differences in comparative costs are determined by differing factor endowments. This is the theory in its positive interpretation (e.g. pattern-explaining).

But what are the gains from trade? The gains from trade are represented by the fact that a country, entering international trade, will be able to increase its output and function more efficiently if it re-allocates its given and fully employed resources in accordance with the comparative costs doctrine, thereby increasing its efficiency and obtaining, therefore, a higher income per capita. In other words, there is a gain in static efficiency as resources are being moved from less to more productive uses as well as there may be gains in dynamic efficiency because the expanding sector experiences economies of scale, e.g.

10. Corden, op.cit. (ref. 6).

output per unit of factor input is increased as a consequence of the expansion of total output. Moreover, the country's consumption is optimised as a result of trade as commodities become available which could not have been produced domestically and those home-produced commodities that were produced inefficiently will now be obtained more cheaply. This is the theory in its normative welfare interpretation (e.g. proposition that trade is beneficial and will increase welfare).

But, basically, what are the assumptions of the traditional trade theory?

These are explained by Viner¹¹ as follows:-

- 1) It is assumed that markets are free and competitive, so that market prices reflect at least approximately relative costs and the relative attractiveness of commodities at the margins of output and of purchase.
- 2) The whole analysis is based on long-term considerations. Possible short-run exceptions are abstracted from, or policy-concessions to them are deliberately rejected as involving barriers to attainment of the greater long-run benefits.
- 3) The classical free-trade argument takes for granted full employment (in the long-run at least) and postulates better-quality employment rather than more employment, as resulting from free trade.
- 4) The classical argument must be interpreted either as abstracting from the effect of free trade on the distribution of national income (as distinguished from the amount of income available for distribution) or as assuming that the distribution under free trade will be as good or as better than under protection.

11. International Trade and Economic Development by J. Viner, (Oxford 1963).

- 5) It was always an assumption that there was effective occupational mobility of the factors within the country in response to differences in real returns. Immobility of factors between countries is assumed to prevail.

To summarise, the traditional classical analysis focusses on long-term tendencies and equilibrium conditions. The modern version of the comparative cost doctrine is essentially a simplified form of static general equilibrium theory. The optimum pattern of production and trade for a country is determined from a comparison of the opportunity cost of producing a given commodity with the price at which the commodity can be imported or exported. In equilibrium, no commodity is produced which could be imported at lower cost, and exports are expanded until marginal revenue equals marginal cost. Under the assumptions of full employment and perfect competition, the opportunity cost of a commodity is equal to its market value. Market prices of factors and commodities can, therefore, be used to determine comparative advantage under competitive conditions. Long-term changes are not ignored but they are assumed to be reflected in current market prices. The different comparative costs are, of course, caused by differing factor endowments. Thus, in brief, the theory postulates that different initial endowments of factors of production give rise to difference in comparative costs, which in turn give rise to trade; trade gives rise to an optimum allocation of the existing fully employed resources, resulting in an increase in real incomes.

1.3 The Conflict,

But what is the conflict? What are the special conditions of the LDC's

that make them unable to reap the benefits of free trade that seem so convincing and which we have so much praised in the preceding section? Why do some economists reject the analysis of the traditional trade theory and what alternatives do they suggest? It is to the answer^{ing} of such questions that the rest of the chapter will be devoted. But, first, let us restate, at least in general terms, the two conflicting views on the beneficial impact of trade on the growth of the LDC's.

Generally, free traders hold that the LDC's can make a more effective use of their external opportunities by reducing or eliminating controls over international trade and by allowing the outside world market forces to transform their internal economic structure according to their potential comparative advantage. They maintain that the traditional theory of international trade is as valid today as it has always been, and that the LDC's would benefit most if they^{were to} follow its policy conclusions. Let the LDC's concentrate on producing what they can do best, in relative terms, and the market forces would signal any new profitable directions towards new lines of production. Defending the traditional approach, Haberler thus wrote:-

'The logic of the comparative-cost theory, if properly stated, is unassailable. Any rationally and efficiently organised economy, whether of the individualistic-market type or centrally-planned, would organise its international trade in accordance with the canons of comparative cost. In other words, the theory is correct on its own assumptions and those who reject it must do so on the ground that the assumptions are not sufficiently descriptive of the real world.

'... in the original Ricardian statement the model was greatly oversimplified, but the simplifications were progressively and drastically reduced by the work of many theorists of international trade during the almost 150 years since the appearance of Ricardo's "Principles".

'But no theory, however complicated and refined, can offer more than a simplified or idealised picture of the infinite complexities of the real world. Some deviations of the assumptions from the facts are unavoidable but the assumptions must not be widely unrealistic, if the theory is to have explanatory value'.¹²

But Haberler agrees that the 'ideal assumptions' of perfect competition and absence of external economies are never fully realised. 'There always exist monopolies, oligopolies and other types of imperfections of competition, wage rigidity, price inflexibility and the like as well as external economies and diseconomies.'¹² But he hastens to add that 'the mere reference to the large number and pervasiveness of those impurities does not invalidate the theory. This is true especially in view of the fact that international trade is likely to diminish or reduce some of the imperfections.'¹²

On the other hand, there are those who consider all the above mentioned as unrealistic. They hold that the comparative-cost doctrine is too 'static' for the 'dynamic' problems of promoting economic development and that the LDC's should proceed to pursue a policy of import-substitution and domestic industrialisation via protection. They argue that a policy based on the 'canons' of comparative advantage and the interplay of the market forces would not help in transforming the economic structures of the LDC's, considering the contemporary realities. On the contrary, such a policy might keep the LDC's trapped in a low-level equilibrium of development. Here, we are told, there is a definite conflict between trade theory and growth theory. While the former is 'static'

12. Haberler, op.cit. (ref.3).

and is concerned with the reallocation of 'given fully-employed' resources with the purpose of increasing efficiency, the latter is 'dynamic' and is concerned with the interactions over time among producers, consumers and investors in interrelated sectors of the economy. In growth theory, there is much emphasis on the sequence of expansion of production and factor use by sector rather than on the conditions of general equilibrium. Growth theory, it is argued, either ignores comparative advantage and the possibilities of trade or it considers mainly the dynamic aspects, such as the stimulus that an increase in exports provides to the development of related sectors or the function of import of new products and advanced technology.¹³ What does this view actually mean? It simply means that there is the possibility of an alternative pattern of resource allocation, different from that governed by the comparative cost doctrine, which might lead to an even greater outward shift in the production possibility curve of a LDC over time. In other words, although the resource allocation recommended by the traditional theory is optimum in terms of production efficiency in a single period, it is equally possible that another initial allocation would achieve a better efficiency in a multiperiod. Thus, following the dictates of the traditional theory in allocating resources might result in a misallocation, in terms of maximisation of output over time.

1.4 Static versus dynamic aspects

Haberler recognises that the theory of comparative-cost is, in fact, static

13. "Comparative Advantage and Development Policy", by Hollis B. Chenery (American Economic Review, March, 1961).

and that, on the other hand, the economies of most countries are changing and developing. But he argues that it is not true that 'a static theory, because it is static, is debarred from saying anything useful about a changing and developing economic world'. He reminds us that 'there is such a thing as comparative statics, that is, a method of dealing with a changing situation by means of static theory. How much can be done by means of comparative statics (as distinguished from a truly dynamic theory) depends on the type of problem on hand'. However, he contends that 'the problems of international division of labour and long-run development are such that the method of comparative statics can go a long way towards a satisfactory solution'.¹⁴

Gerald M. Meier reminds us that, although the dynamic aspects of trade were not central in classical and neo-classical thought, there was nevertheless some recognition, particularly in classical theory, of the dynamic and growth-transmitting aspects of trade above and beyond the static gains from international specialisation. He quotes extensively from John Stuart Mill's "Principles" to show that the classical school did distinguish between the 'direct economical advantage of foreign trade' and the 'indirect effects, which must be counted as benefits of a high order'.¹⁵ But what do we mean by these indirect effects? -

14. Haberler, "International Trade and Economic Development", National Bank of Egypt Fiftieth Anniversary Commemoration Lecture, (Cairo, 1959).

15. G. M. Meier; "The International Economics of Development", (Harper & Row, 1968).

and, more important, would their existence be sufficient to answer critics of the traditional trade theory? Perhaps, the best exposition of these 'neglected elements' in the classical theory has been provided by Myint.¹⁶ Prof. Myint distinguishes three different theories of international trade: the static comparative costs theory, the 'vent-for-surplus' theory and the dynamic 'productivity' theory. He maintains that the controversy concerning the applicability of classical trade theory to the LDC's has neglected the 'indirect' dynamic benefits these countries can derive from trade. In my view, the ideas of Myint on this issue could be summarised as follows:-

1. The theory of comparative costs, as a branch of the static theory of allocation of resources, is 'neutral' between foreign trade and domestic production.¹⁷ In order to maximise the 'direct' gains from trade, resources should be allocated impartially between the export sector and domestic sector according to the existing comparative advantage. But what is currently described in the literature as the 'free trade' approach is essentially an elaboration of the well known classical belief concerning the 'educative effect' of an open economy. The free traders would argue that the LDC's would reap advantages by keeping their economies open and receptive to new ideas, new wants, new techniques of production, and methods of organisation. Import controls would, therefore, not only result in direct losses of consumers' satisfaction, in static terms, but also entails the more important direct losses by isolating the

16. H. Myint: "The 'Classical Theory' of International Trade and the Underdeveloped Countries", The Economic Journal, (June, 1958).

17. H. Myint: "International Trade and the Developing Countries", reprinted in (International Economic Relations), proceedings of the third congress of the International Economic Association held at Montreal in 1968 & edited by Paul Samuelson, (Macmillan, 1969).

LDC's from the stimulating contact with the world economy. In his Principles, J. S. Mill showed his awareness of the special conditions in poor countries by observing that trade benefits the LDC's through 'the introduction of foreign arts, which raise the returns derivable from additional capital to a rate corresponding to the low strength of the desire of accumulation; and the importation of foreign capital which renders the increase of production no longer exclusively dependent on the thrift or providence of the inhabitants themselves, while it places before them a stimulating example, and by instilling new ideas and breaking the chain of habit, if not by improving the actual conditions of the population, tends to create in them new wants, increased ambition, and greater thought for the future.'¹⁸

2. Myint argues that the 'neglected elements'¹⁹ in the classical theory could be traced back to Adam Smith, particularly to the following key passage in the "Wealth of Nations":-

'Between whatever places foreign trade is carried on, they all of them derive two distinct benefits from it. It carries out that surplus part of the produce of their land and labour for which there is no demand among them, and brings back in return for it something else for which there is a demand. It gives a value to their superfluities, by exchanging them for something else, which may satisfy a part of their wants, and increase their enjoyments. By means of it, the narrowness of the home market does not hinder the division of labour in any particular branch of art or manufacture from being carried to the highest perfection. By opening a more extensive market for whatever part of the produce of their labour may exceed the home consumption, it encourages them to improve its productive powers, and to augment its annual produce to the utmost, and thereby to increase the real revenue and wealth of society.'

(Vol. 1, Cannan ed., p.413)

18. J. S. Mill: "Principles of Political Economy" (1848), Vol. 1, Book 1, Chap. XIII, Section 1.

19. Myint, op.cit. (ref.16).

Mying draws attention to the fact that there are two leading ideas embodied in the above quoted passage: firstly, international trade overcomes the narrowness of the market and provides an outlet for the surplus produce above domestic requirements; this develops in what may be called the 'vent-for-surplus' theory of international trade. Secondly, by widening the extent of the market, international trade also improves the division of labour and raises the general level of productivity within the country. This develops into what may be called the 'productivity' theory. But let us consider these dynamic elements more closely and see how they differ from the static version of the comparative-costs doctrine:-

a) The 'productivity' theory: this means that foreign trade by enabling a country to overcome the narrowness of its home market and by widening its scope for division of labour, will raise the productivity of its resources through the growth of specialised skills and the introduction of specialised techniques and capital equipment in the export sector. The gains from trade are 'dynamic' in the sense that they represent an outward shift in the production possibility curve of the country in the direction of export production. These gains are distinct from the direct static gains from trade obtained by moving along the same production possibility curve constructed on given resources and the given techniques of the trading country. Moreover, specialisation conceived in the comparative-costs theory is a re-allocation of resources and is a completely 'reversible' process. The Adam Smith process of specialisation involves 'adapting and reshaping the productive structure of a country to meet the export

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demand and is, therefore, not easily reversible'.²⁰ This means that a country specialising for export is more 'vulnerable' to changes in the terms of trade than is allowed for in the comparative-costs theory. Myint argues that the benefits from the increased productivity in the export sector will spread to the rest of the economy in varying degrees, resulting in an export-led economic growth. He reminds us that the export-led theory gains an added significance from the fact that many LDC's are, in fact, very small countries. But can we not achieve the same results of overcoming the narrowness of the home market in a LDC via a protected import-substitution strategy aimed at the single or a regional market? Myint seems unconvinced. He draws a distinction between overcoming the smallness of the domestic market through the expansion of exports and reaping the economies of scale benefits from creating a regional economic group among smaller LDC's with wider protected markets for industrialisation. In the former case, 'the size of the market available to a country's export industry is a share of the international market which can be increased only by that industry's own capacity to lower costs and improve its competitive power.' Thus a country's ability to improve efficiency and reduce costs in its export production is a prior condition for taking advantage of the scope of the economies of large scale production offered by international trade. While in the latter case, 'the creation of a large sheltered home market, either within

20. H. Myint, *Ibid.* (Haberler suggested that the distinction between productivity and vent-for-surplus theories is not convincing; the vent-for-surplus 'if it is not part and parcel of the productive theory seems to me simply an extreme case of differences in comparative cost - a country exporting things for which it has no use. This case does not call, it seems to me, for special theory. But Myint is, of course, quite right that if this extreme situation exists (in modern parlance it might be described as disguised unemployment in export industries) it makes trade appear doubly productive and desirable', see Haberler, *op.cit.* (ref.14).

a country or within a group, is a prior condition for taking advantage of the economies of large scale production offered by the technological indivisibilities of modern industry'. He wonders whether the enlargement of a home market is sufficient, therefore, to ensure the industry's capacity to lower its costs.²¹ We shall come again to the subject of industrialisation later in this chapter, but let us continue to summarise the views of Myint.

b) The 'vent-for-surplus' theory: Myint tells us that there is a considerable amount of historical evidence to show that the export expansion of peasant products, particularly from the South-east Asian and African countries, has taken place, not so much through the reallocation of the given fully employed resources from the domestic to the export sector, but rather through the spread of the exchange economy drawing the hitherto underutilised land and labour of the subsistence sector into export production. Thus the function of international trade in such countries was not so much to reallocate resources, but to provide a market outlet for the surplus productive capacity of the subsistence sector which might have remained under-utilised in the absence of international trade. The most important feature of this theory is that export expansion can take place without any noticeable change in the techniques of peasant production and without necessarily reducing production for home consumption.

21. Myint, op.cit.(ref.17).

Pursuant to this line of discussion, Myint argues that, taking into consideration the present circumstances of most LDC's, the traditional trade theory, in both its direct and indirect effects, would be best suited to their problems because:-

1. Many LDC's still have a substantial proportion of their resources in the subsistence sector and a considerable number of them in Africa, Southeast Asia and Latin America do not as yet suffer from heavy population pressure on their available land. Thus, there is a prima facie case, 'to be verified by detailed factual studies', for believing that there still remains a considerable scope for export expansion making use of the underutilised resources of the subsistence sector in these countries.
2. In so far as this is true, the more promising line of development for these countries is to encourage the growth of the exchange economy by improving transport and communication and marketing facilities for the peasant producers and by permitting free imports of cheap manufactured consumers' goods which are required as 'incentive goods' to encourage the peasant production of export crops.²²

Thus it is argued that, in addition to the static gains from trade resulting from the more efficient resource use, there are indirect dynamic gains that tend to push the production possibility curve upwards and outwards. Trade increases the capacity for development, and if this is so, the larger the volume of trade the greater should be the potential for development.

22. ~~ibid.~~ Ibid. (ref.17).

One tends to agree with Myint's interpretation that the assumption of 'given fully employed resources' of the comparative-cost theory does not apply to the bulk of the LDC's, particularly those in Africa, and that the 'vent' theory might be more appropriate to explain their early pattern of development. One would also not disagree with the suggestion that the resources of many LDC's, including our own case of study, are not as yet fully utilised and that, therefore, there could be a lot of scope for a 'vent' even in the present context. But to devote this surplus capacity wholly for export production cannot go unchallenged. The question one tends to ask is not whether the surplus productive capacity can be utilised in the production of exportables, but rather, in addition, whether these exportables, when and if produced, can be exported at a reasonable return. In other words, would the world market absorb this additional production for exports? The answer to such a question is not an easy one, in general terms, because it all depends; it depends on the type of exportable, the demand for it in the overseas markets, and its return compared with the return of alternative uses for the country to utilise its surplus productive capacity. But, nevertheless, it is a very important question indeed because, in addition to the supply aspects, the demand aspects have also to be taken into consideration. It is not enough to advise the LDC's to produce and produce, according to their relative price ratios, without taking into account what exactly would happen to such production. This is the real challenge because the comparative cost of most LDC's lies in fact within the lines of primary production and reliance on such a line of production, it is often alleged, carries serious

risks. Proponents of the view that reliance on the export production of primary products does not take a LDC far in the path of growth put their case simply; the growth of demand for these products in the world market is not keeping pace with the growth of supply. But why is this so? Has not the export of primary production stimulated development in the last century in a number of the then underdeveloped regions, including even the United States? Has there been a change in the pattern of trade and development? The late Prof. Ragnar Nurske told us: yes, there has been a change. But what is this change?

1.5 Patterns of Trade and Development

In his Wicksell lectures, delivered a few weeks before his death, Prof. Nurske presented us with a brilliant exposition of the patterns of trade and development as outlined by the process of growth in the last century contrasted with what is happening nowadays. The main argument of the lectures is that, while foreign trade was, in the words of Sir Dennis Robertson, an 'engine of growth', it does not operate sufficiently powerfully nowadays to allow primary producing countries to make full use of their expanding resources without a special effort to develop their domestic markets. But why was trade an engine of growth in the nineteenth century? This was because Nurske argues:-²³

1. Trade was a means of bringing about an optimum allocation of resources. This is in accordance with the static traditional trade theory which, as mentioned before, postulates improved allocation of existing resources. In other words, this is nothing but the static direct benefits of trade. But the

23. R. Nurske: "Patterns of Trade and Development", (Blackwell's, 1962), (Wicksell lectures of 1959).

traditional trade theory, we are reminded, 'static as it is, is none the less fundamental; and it was in fact a highly relevant theory at a time when economies were opened up to one another by improvements in transport, reductions in tariffs and by other means.'²⁴

2. More important, trade was an 'engine of growth transmission': trade was a means by which growth was transmitted from the centers of economic expansion through a steadily rising demand for imports of primary products. 'The industrial revolution happened to originate on a small island, Great Britain, with a limited range of natural resources, at a time when synthetic materials were yet unknown'.²⁵ Consequently, economic expansion was transmitted to the then LDC's by a steep and steady increase in Britain's demand for primary commodities which those LDC's were well suited to produce. This rising demand for primary products had two main effects:-

- a) It provided an expanded source of employment in the primary producing countries of the time or the so-called 'regions of recent settlement'. 'Local factors of production overseas, whose growth may in part have been induced by trade, were thus largely absorbed by the expansion of profitable primary production for export.'²⁶
- b) The increase in demand in the center for raw materials has also provided created incentives for capital and labour to move from the center to the 'outlying areas', thus accelerating the process of growth-transmission from the former to the latter.

24. R. Nurkse, Ibid.

25. R. Nurkse, Ibid.

26. R. Nurkse, Ibid.

The process is most easily manifested by the interaction of British development in the nineteenth century with that of the new countries in the world's temperate latitudes: it was from these countries that the increment in British imports was greatest and to these countries that the flow of British capital was largely confined. It was no doubt under the impression of contemporary experience, Nurkse tells us, that Alfred Marshall declared in his "Principles of Economics" that the 'causes which determine the economic progress of nations belong to the study of international trade'.²⁷ Nurkse further adds that:-

'In the second half of the twentieth century this may seem to us a curious statement. It can be understood only in the light of historical conditions. It embodies the particular experience of Britain's economic relations with the new countries overseas. Economic progress in these areas was due not only to international specialisation alone but also to the fact that rapid growth which was taking place in the center was transmitted to the outlying new countries through a vigorous increase in demand for primary products. This was perhaps the most spectacular feature of the nineteenth century.'²⁸

Thus the contentions of the previous section have now been vindicated by lessons from history: trade had both direct benefits as well as indirect dynamic effects. It is always good to learn from history but we have to concern ourselves with the present and the future. In the present context, Nurkse suggests, the last-century pattern of trade as an engine of growth no longer operates to transform the economic structures of the LDC's. This is so because the focal center of economic growth at present, namely the North Atlantic Area and the

27. ~~Nurkse~~, Ibid.

28. ~~Nurkse~~, Ibid.

Soviet Union (in terms of real income per head), is advancing vigorously all the time, but that it is not transmitting its own rate of growth to the rest of the world through a proportional increase in its demand for primary products as Great Britain did in the last century. This is so because:-

1. The composition of industrial production in the advanced economies is shifting away from 'light' industries (where the raw material content of finished output is high) to 'heavy' industries such as engineering and chemicals (where the raw material content of finished output is low).
2. The rising share of services in the total output of advanced industrial countries, e.g. structural change to the tertiary sector, tends to cause their raw material demand to lag behind the rise in their national product.
3. The income elasticity of consumer demand for many agricultural commodities tends to be low.
4. Agricultural protectionism in the advanced countries has adversely affected imports of primary products from the LDC's. However, Nurkse warns that this point should not be exaggerated: this affects imports from the temperate areas more than imports from the LDC's tropics. 'Besides, there is plenty of protectionism hampering also the trade in manufactures. What we have to explain is a comparative lag in exports of primary producing countries.'²⁹
5. Substantial economies have been achieved in industrial uses of natural materials; technical progress has brought economies in the consumption of raw materials to the detriment of the primary producing LDC's.

29. ~~Nurkse~~, Ibid.

6. The leading industrial centers have tended more and more to displace natural raw materials by synthetic and other man-made substitutes produced from a few basic elements of mostly local origin. This is due to the growth of the chemical industry in the twentieth century, again to the detriment of the LDC's.

These forces have combined to give rise to a lag between the growth of output in the industrial countries and their demand and imports of raw materials from the LDC's. Thus the LDC's are faced with ~~a~~ sluggish export markets while their production potential and labour supply have continued to expand comparatively rapidly. In addition to this sluggish demand for their exports, LDC's are not enjoying a wave of private capital movement because such a capital depended always to a large extent on the growth of external demand for the export staples of such countries; or alternatively, on a rising domestic demand. Neither exists in the present LDC's; we have already mentioned the problems facing their exports; on the home front, no strong inducements could be found for private capital in a thinly settled or backward economy. That is why we find private investment is still important in oil-producing LDC's for which the external demand is high, in conformity with the nineteenth-century pattern of investment.

But what is to be done? Nurkse warns that 'in a world in which (outside the Soviet Union) over nine-tenths of the manufacturing and over four-fifths of the total productive activity are concentrated in the advanced countries, the ideas of symmetry, reciprocity and mutual dependence which we associate with the traditional theory of international trade are of rather questionable relevance

to trade relations between the center and the periphery. Despite the population masses and the vast physical areas of the underdeveloped countries, we must try to realise their pitiable smallness in aggregate economic terms, by comparison with the great industrial economies. In such a world the distinction between dominant and dependent economies is a vital one in any dynamic view of international economic relations. It does not contradict the idea of mutual dependence that lies at the basis of trade theory pure and simple. It belongs to a different order of discourse: to the international economics of growth'.³⁰ The disparities in growth between the two groups put the LDC's in a dilemma: in seeking employment for their additional resources, they cannot be guided merely by their comparative advantage in the existing export sector, since their 'incremental' comparative advantage in this sector may be low. They have to find other activities for which the demand is or can be made less sluggish. Although advance is still possible along the traditional line of export of primary products, yet it seems to offer relatively limited opportunities to the majority of the LDC's; the more realistic alternative seems to be, according to Nurkse, industrialisation.

But we have to distinguish between two types of industrialisation: firstly, industrialisation which aims at producing manufactured goods for export to the industrial countries; but this is not likely to be very successful in the modern world due to the comparative advantage which the industrialised countries

30. ~~Nurkse~~, Ibid.

enjoy in most manufactured products on the one part, and to the protectionist policies often pursued in those countries with regard to the simple manufactures in which the LDC's can possibly compete. Secondly, there is the possibility of industrialisation for the home market in the LDC itself. This, according to Nurkse, is the ideal solution. But here we have one hurdle to overcome, e.g. the smallness of the size of the market and low purchasing power in the LDC's. These countries, it is argued, live in a 'vicious circle of poverty'. This implies a 'circular constellation of forces tending to act and react upon one another in such a way as to keep a poor country in a state of poverty'.³¹

Thus 'on the supply side, there is the small capacity to save, resulting from the low level of real income. The low real income is a reflection of low productivity, which in turn is due largely to the lack of capital. The lack of capital is a result of the small capacity to save, and so the circle is complete. On the demand side, the inducement to invest may be low because of the small buying power of the people, which is due to their small real income, which again is due to low productivity. The low level of productivity, however, is a result of the small amount of capital used in production, which in turn may be caused at least partly by the small inducement to invest'.³²

The only way to overcome this hurdle and to pursue a policy of industrialization for the domestic market is through a 'frontal attack', a wave of capital

31. R. Nurkse: "Problems of Capital Formation in Underdeveloped Countries", (Blackwell's, 1953).

32. ~~R. Nurkse~~, Ibid.

investments in a number of different industries, the output of which is diversified in accordance with the domestic income elasticities of demand, so that they can support each other, in the sense that the people engaged in each industry, now working with more real capital per head and with greater efficiency in terms of output per man-hour, will provide an enlarged market for the products of the other industries. In other words, industries will be each other's customers. Along with industrialisation, an equal expansion in agriculture should also proceed. This is the idea of 'Balanced Growth' as distinct from the idea of 'Growth through Trade'.³³

We shall revert to the arguments for industrialisation as a more appropriate strategy for development in the LDC's, compared with an export-led policy based on primary production, in a later section of this chapter. Nurkse's views are but one version out of a chain of such arguments; but the intention here was just to present a brief summary of the arguments of Nurkse in explaining the differing patterns of growth and trade. It would, therefore, be appropriate to close the section with the quotation that appears at the beginning of this chapter and which neatly projects what, in fact, we have here tried to explain:-

'International specialisation is an essential foundation of our material civilisation. The case for it is firmly based on considerations of economic efficiency; and the world is not rich enough to despise efficiency. But why should we expect international trade to solve all problems of development, in any and all circumstances? Unfounded expectations may be due to the influence of a certain historical association.'³⁴

33. ~~R. Nurkse~~; Ibid.

34. R. Nurkse, op.cit. (ref. 23).

1.6 The terms of trade,

Another argument, which appears so often in the literature and which reaches the same conclusion of the need for the LDC's to pursue a policy of industrialisation for the domestic market, is based on the alleged secular tendency for the terms of trade to move against the primary producing LDC's. This argument is associated with the names of Raul Prebisch and Hans Singer; in fact, it is known in the literature as the Prebisch-Singer thesis. It is to a brief summary of the main assumptions and policy conclusions of this thesis that we shall devote this section.

But, first, what do we exactly mean by the terms of trade? The terms of trade expresses an exchange relationship - the terms upon which exports from a country exchange against its imports. An improvement in the terms of trade promotes a country's development by increasing its purchasing power on international markets; with a given amount of exports, the country can now import more, and this provides a greater capacity for development. On the other hand, a deterioration in the terms of trade is said to reduce the country's purchasing power on the international markets and thus decreases the capacity for development as more resources are now needed to be absorbed in exports to gain the same amount of imports. This is the general interpretation of the terms of trade; but, we have to take note of the fact that several different concepts of this notion can be distinguished in the literature. It would be appropriate, therefore, to outline them before proceeding to discuss the Prebisch-Singer thesis. These could be distinguished as follows:-

1. Barter (commodity) terms of trade: The Commodity or Barter terms of trade (B) are expressed as $(B = P_x/P_m)$, where P_x and P_m are price index numbers of exports and imports respectively. A rise in B indicates that a larger volume of imports could be received, on the basis of price relations only, in exchange for a given volume of exports. Taussig distinguishes between 'B', which he calls the net barter terms of trade, and 'G', the gross barter terms of trade. G measures the rate of exchange between the whole of a country's physical imports as compared with the whole of its exports, and is expressed as $(G = Q_m/Q_x)$, where Q_m and Q_x are the volume index numbers for imports and exports respectively. A rise in 'G' represents a favourable change in the sense that more imports are received for a given volume of exports than in the base year.³⁵ This 'G' concept has been criticised, for although it takes account of quantities of goods moving from one country to another, these may include unilateral transfers; we cannot distinguish between the various types of unilateral transaction lumped together in the index.³⁶ As Haberler has mentioned, it is then more meaningful to consider the significance of various unilateral transactions directly, instead of incorporating them in the terms of trade index.³⁷ However, the terms of trade usually measured and discussed in the literature refer to the 'B' type, or net barter terms of trade.
2. Income terms of trade: Since it is of particular importance to a LDC to take changes in its volume of exports into account, another index for the measurement of the terms of trade has been suggested. This is the income terms of trade (I) which is expressed as $(I = B \cdot Q_x)$, where Q_x is the export volume index. A rise in 'I'

35. G. M. Meier: op.cit. (ref. 15).

36. Sidney J. Wells, op.cit. (ref. 2).

37. G. Haberler, op.cit. (ref. 5).

indicates that the country can obtain a larger volume of imports from the sale of its exports; its capacity to import, based on exports, has increased. It is significant that, according to the direction and magnitude of the changes in P_x and Q_x , the changes in 'I' and 'B' may be in opposite directions. If, for example, with unchanged import prices, export prices fall, but export quantities have increased by a greater percentage than the decrease in export prices, the income terms of trade 'I' will have improved despite a deterioration in the commodity terms of trade 'B'.³⁸

3. Factorial terms of trade: Changes in productivity are also of significant importance in considering development. This is incorporated by the factorial terms of trade. Here, we have also to distinguish between two versions: firstly, the single-factorial terms of trade, (S) , is correct 'B' for changes in productivity in the export sector and may be expressed as $(S = B \cdot Z_x)$, where Z_x is an export productivity index. A rise in 'S' is a favourable movement in the sense that a greater quantity of imports can be obtained per unit of factor-input used in the production of exportables. If a country's export industries become more efficient, its factorial terms of trade might improve, even though it could suffer from a deterioration in its barter terms of trade 'B'. Secondly, if account is taken not only of the productivity changes in the country whose terms of trade we are concerned with, but also of the productivity changes in other trading partners supplying its imports, the double-factorial terms of trade (D) is used which is expressed as $(D = B \cdot Z_x/Z_m)$, where Z_m is the country's

38. G. M. Meier, op.cit. (ref. 15).

imports productivity index. A rise in 'D' would mean that one unit of home factors embodied in exports now exchange for more units of the foreign factors embodied in imports. 'In practice, an index of the double-factoral terms of trade is almost impossible to calculate since it involves measuring and comparing productivity changes in the export industries of a large number of countries. Moreover even if it were possible to produce, such an index would be of less value as a guide to ~~the~~ policy making than the single-factoral index. After all, the citizens of a country are interested in the total volume of goods they can obtain from a given real effort, not in the relative efficiency or otherwise of other countries. ... In no country do the official statistics provide a measure of changes in even the single factoral terms of trade.'³⁹

4. Real cost and utility terms of trade: Proceeding more directly to the level of welfare, Viner defines in utility terms the total amount of gain from trade as the excess of the total utility accruing from imports over the total sacrifice of utility involved in the surrender of exports.⁴⁰ To consider the amount of disutility involved in the production of exports, we may correct the single-factoral terms of trade index by multiplying 'S' by the reciprocal of an index of the amount of disutility per unit of productive resources used in producing exports. The resultant index would be the 'real cost terms of trade index'. If this rises as a result of a change in the methods of producing exports, or a change in the factor proportions used in exports, this would indicate that the amount of imports obtained per unit of real cost was greater. On the side of demand, we may want to allow for changes in the

39. S. J. Wells, op.cit. (ref. 2), 'though in 1954 Prof. Devons made some estimates of changes in the U.K. single factoral terms of trade between 1948 and 1953'.

40. Viner's view is from his "Studies in the Theory of International Trade", - mentioned in Meier, op.cit. (ref. 15).

relative desirability of the imports and the domestic commodities whose home consumption is foregone because of the use of resources in export production. It is then necessary to incorporate into the real cost terms of trade an index of the relative average utility per unit of imports and of foregone domestic commodities. The resultant index is the 'utility terms of trade' which is equal to the real cost terms of trade multiplied by an index of the relative utility of imports and foregone commodities. The difficulty with the use of such indices is that of calculating the disutility involved in export production, or the relative average utility of various commodities. The welfare significance of changes in the terms of trade must, therefore, be considered only indirectly⁴¹

After this introductory summary of the various concepts of the terms of trade that appear in the literature, we proceed now to examine the argument that the terms of trade of the LDC's show a secular unfavourable trend. The debate on the terms of trade of the LDC's has actually begun with the report of the First Session of the Sub-commission on Economic Development of the United Nations Economic and Employment Commission.⁴² The report states that, on the basis of inferences from the United Kingdom's commodity terms of trade, 'from the latter part of the 19th century to the eve of the second world war ... there was a secular downward trend in the prices of primary goods relative to the prices of manufactured goods. On an average, a given quantity of primary exports would pay, at the end of this period, for only 60% of the quantity of manufactured goods

41. Meier, *op.cit.*

42. B. Higgins: "Economic Development", (Constable & Co. Ltd., 1968)

which it could buy at the beginning of the period.⁴³ The debate has been greatly stimulated by the writings of Hans Singer⁴⁴ and Raul Prebisch. The views of both writers are similar: that the distribution of the gains from trade has been unfavourable to the primary producing LDC's and that any improvement in their productivity would be swallowed by the industrialised countries. However, Prebisch is definitely the senior partner in the so-called Prebisch-Singer thesis; and it is, therefore, to his various views that we shall devote this section. In addition, we shall discuss the wave of opposition to this thesis registered by the so-called free traders.

Prebisch, as earlier mentioned, advances the thesis that in the long-run, the terms of trade of primary commodities relative to the manufactured goods tend to decline; consequently, since the LDC's are mainly exporters of primary products and importers of manufactured goods, it is alleged, that their terms of trade tend to be chronically depressed. The origin of this phenomenon (i.e. deterioration in the terms of trade), it is suggested, is to be found in the relatively slow rate at which world demand for primary commodities grows in comparison with that for industrial products. The reason for this slow rate of growth of primary exports is caused by the development of synthetic substitutes for natural raw materials, a diminishing raw material content in manufactures,

43. United Nations, Dept. of Economic Affairs: "Relative Prices of Exports and Imports of Underdeveloped Countries", (1949).

44. Hans Singer: "The Distribution of Gains between Investing and Borrowing Countries", American Economic Review, (May, 1950).

a low income-elasticity of demand for primary products and the influence of technical progress in the agriculture of the developed countries in increasing supplies. These structural factors are aggravated by the policies of price supports, restrictions of market access, subsidised export of agricultural surpluses and heavy taxation of imports substitutable for domestic products pursued by the developed industrialised countries.⁴⁵ Most of these points were mentioned before in ~~the~~ Nurkse's treatment, but let us proceed to discover the trend of thought expounded by Prebisch.

Prebisch argues that this disparity in growth between the exports of the 'center' (advanced country) and that of the 'periphery' (LDC) need not necessarily bring about any decline in primary prices so long as production adjusts itself continually and easily to the tempo of demand. But for this to be possible, three conditions, which are not observed in practice, would have to be satisfied:-⁴⁶

- a) The redundant proportion of the increment in the economically active population in primary activities would have to be displaced, so that the production could expand at a rate not exceeding the rate of growth of demand. Other things being equal, the more productivity in primary activities was stepped up, the more displacement would have to be intensified.
- b) The manpower thus displaced would have to be employed in industry and other labour-absorbing activities.

45. Raul Prebisch: "Towards a New Trade Policy for Development", Report by the Secretary General of UNCTAD, (United Nations, 1964).

46. Raul Prebisch: "Towards a Dynamic Development Policy for Latin America", E/CN. 12/680/Rev. 1, (United Nations, 1963).

- c) The manpower in question would have to be absorbed quickly and completely enough for the real wages of workers in primary activities to rise and advantage to be taken for the increment in the productivity of the latter.

But these conditions are not fulfilled in the LDC's. 'To put the idea in a nutshell, deterioration is caused by the lack of dynamism in development, which hinders or precludes absorption of the surplus manpower resulting from the sluggish growth of demand and higher productivity in primary activities. The same factor is instrumental in preventing the wages of workers in primary activities from rising on a par with the increase in productivity and to the extent that they fail to do so, primary production loses all or part of the benefits of its technical progress.'⁴⁷ Thus it is argued that the LDC's fail to retain the benefits of the increase in their productivity because, firstly, of the slow rate of growth of demand for their exports; and secondly, of the lack of dynamism in their economies which hinders the absorption of the surplus redundant labour displaced by technical expansion. But what is the situation in the industrialised countries? Why do they retain their gains and absorb those of the LDC's as well? The difference between the two groups, Prebisch argues, is as follows:-

1. The developed countries essentially export industrial goods which usually have a very high income elasticity of demand; moreover, as soon as demand for certain products shows signs of becoming saturated with the passage of time, new products or new types of products appear which act as a continual stimulus to industrial demand.

47. ~~R.~~ Prebisch, Ibid.

Consequently, labour is displaced from one industry to another, but industrial activity as a whole absorbs an increasing proportion of the increment in the economically active population. On the other hand, in the primary exporting LDC's, the reverse takes place: demand for existing products is relatively slow in expanding and new products or new varieties of products do not appear except in rare instances.

2. In the industrial centers, the bulk of the economically active population is employed in the 'labour-absorbing' activities, while only a small proportion of this population is still employed in the 'labour-expelling' primary production. In contrast, in the LDC's, most of the economically active population is in fact employed in the 'labour-expelling' primary production. The consequence of this is that the pressure exerted by the technologically displaced workers on the level of wages in the labour-absorbing activities is relatively weak in the industrial centers and relatively heavy in the peripheral countries. That could explain the reason why trade unions in great centers are able to keep the wages rising on a par with the increase in the productivity; while in the periphery, the masses of displaced workers make a similar successful attempt by the trade unions there ~~as~~ impossible. This means that in the centers, an increase in productivity would be expressed in terms of higher wages and profits (and ultimately higher prices for the consumers and users of industrial products in the LDC's); while, on the other hand, an increase in productivity in the peripheral countries would mean lower prices of primary products (due to slow rate of growth of demand and lack of dynamic structure to absorb displaced labour) and, therefore, cheaper imports of primary production by the industrial centers from the peripheral countries. This is the idea that productivity gains are transferred by the LDC's to the developed

countries due to their high dependence on the production of primary commodities in accordance with their comparative advantage. Here the problem is not 'the relative difference in productivity increments in the primary export activities of the peripheral countries as compared with industrial activities in the great centers that are responsible for the trend of the terms of trade. Generally speaking, it is rather the differences between productivity in the centers on the one hand, and in the peripheral countries, on the other, that have not been absorbed by the respective increases in wage rates.'⁴⁸

Thus, it is argued, in the long run, the LDC's are destined to face continuous deterioration in their terms of trade if they continue along the lines of primary production.

But is there any chance that this situation will change? Are primary producers so condemned as Adam Smith long ago commented in his Wealth of Nations that 'the industry which is carried on in towns is, everywhere in Europe, more advantageous than that which is carried on in the country, without entering into any very nice computations, we may satisfy ourselves by one very simple and obvious observation. In every country of Europe, we find, at least, a hundred people who have acquired great fortunes from small beginnings by trade and manufactures, the industry which properly belongs to towns, for one who has

48. Prebisch, Towards a Dynamic Development Policy for Latin America.

done so by that which properly belongs to the country, the raising of rude produce by the improvement and cultivation of the land. Industry, therefore, must be better rewarded, the wages of labour and the profits of stock must evidently be greater in the one situation than in the other.' Prebisch tells us that there is little chance of a change. Everything available suggests that this inherent incapacity of the peripheral regions to retain the benefits of their technical progress will persist for a long time yet. But why? Prebisch advises us to look at the situation of primary production in the industrial centres: in these countries, a rapid rate of technical progress, coupled with the preparedness of the producers to adopt new innovations readily, resulted in a continuous rightward shift in the supply curve of primary agricultural production. The increase in output, when coupled with a demand curve that is inelastic both with respect to price and income, resulted in a reduction in the market prices, meaning ultimately a reduction in the incomes of primary producers. The logical conclusion would be that producers should move to other non-primary activities and this seems, in theory, not an impossible problem because only a small proportion of the economically active population is engaged in primary production in those countries. But the fact is that movement of labour from primary activities has not been sufficient in the industrial centres to counteract the excess of supply over demand, possibly due to the known low supply price of primary producers, which is the minimum price

which will suffice to make their services available. To defend their primary producers, governments in the industrial centres have, therefore, resorted to various measures of support prices, export subsidies or direct protection, to the detriment of the exports of the periphery. As a direct hit at his critics, Prebisch comments that 'no one has attempted to deny the existence of this trend, or to belittle its importance on the grounds that have been adduced in connection with the corresponding deterioration in the peripheral regions, namely, the statistics do not reflect the improvement in the quality of industrial products, or that the ratio cannot be accurately calculated on the basis of price indices. Perhaps this is because the reasons for the decline have become obvious.'⁴⁹

But what to do with this problem? How can the LDC's defend their productivity gains? Prebisch suggests that industrialisation is the best remedy. Industrialisation, he argues, is 'an inescapable part of the process of change accompanying a gradual improvement in per capita income'.⁵⁰ In other words, to correct this unfavourable secular trend in their terms of trade, the LDC's have to pursue policies of import substitution which, according to Prebisch, are 'the only way to correct the effects on peripheral growth of disparities in foreign trade elasticities'.⁵¹ But suppose import substitution means higher costs of goods compared with prices of importables.

49. Prebisch, Towards a Dynamic Development Policy in Latin America.

50. Prebisch, "Commercial Policy in the Underdeveloped Countries," American Economic Review (May 1959).

51. Ibid.

This is not important, we are told, because 'it is not really a question of comparing industrial costs with import prices but of comparing increment of income obtained in the expansion of industry with that which could have been obtained in export activities had the same productive resources been employed there'.^{51a} In addition, market forces, if left alone and free as postulated by the traditional trade theory, would not help: protection must accompany the process of industrialisation.

In his report to the UNCTAD-1, Prebisch expands the solutions for this persistent 'external imbalance' of the LDC's.⁵² Import substitution alone is not enough because as more of it is applied new demands for imported capital and consumers' goods are generated. To solve the problem of the development of the LDC's, a prospective 'trade gap' has to be bridged. This 'trade gap' represents the difference between the growth of imports (and of debt service payments) required to implement the development decade target of five per cent annual growth rate launched at the time, on the one hand, and the projected export proceeds of these countries, on the other. The remedies suggested to bridge this 'trade gap' included direct action to raise commodity prices by extending domestic support prices in developed countries to cover imports from the LDC's and by international agreements to maintain high and stable commodity prices; any

51a. Ibid.

52. Prebisch, op. cit., (ref. 45).

residual deterioration in the terms of trade of the LDC's to be met by compensatory finance from developed countries, over and above regular aid transfer; developed industrial countries are to grant tariff preferences to manufactured goods imported from the LDC's; regional industrialisation among LDC's to be encouraged by preferential arrangements between them; a permanent international trade institution to be established under the auspices of the United Nations to deal with the problems of trade and development on all fronts and to coordinate the work of related bodies; action to reduce the burden on the LDC's of debt-servicing; investigation of the feasibility of reducing freight charges borne by the LDC's and of increased participation by these countries in shipping and insurance and a call for increased trade between the LDC's and the centrally-planned countries. In short, the solutions included both more trade and more aid.

But, of course, the contention that primary producing LDC's are but 'price-takers' in contrast to the industrial centres that are 'price-makers'⁵³ and that the former face a secular deterioration in the terms of trade has not gone unchallenged. A number of leading economists have rejected the Prebisch-Singer thesis as contrary to both fact and theory. We shall concern ourselves in the rest of this section to outline these opposing views before proceeding to discuss other theories of the impact of trade on the growth of the LDC's.

53. N. Kaldor, "Stabilising the Terms of Trade of Underdeveloped Countries" (Economic Bulletin for Latin America, VIII, No. 1, March 1963).

Basically, the opposing views can be summarised in the following set of arguments:-⁵⁴

1. A number of writers question the contention that the alleged secular tendencies in the terms of trade of the LDC's did actually occur; they argue that the whole thesis has in fact been based on the inverse of the United Kingdom's long-run terms of trade which does not provide a sufficiently strong statistical foundation for any adequate generalisation about the terms of trade of the LDC's. This is so because:

- (a) the British import-price index is a 'mixed bag', concealing the heterogeneous price movements within and among the broad categories of foodstuffs, raw materials and minerals. An aggregation of primary products cannot be representative of the wide variety of the primary products exported by the LDC's. As Haberler said, 'It would be a very strange coincidence indeed if, in the long run, the commodity terms of trade, let alone the factoral terms of trade, moved parallel for coffee countries, mining countries, petroleum exporters and exporters of wheat, wool and fats.'
- (b) it is not correct to identify all exporters of primary products as LDC's because there are developed countries such as Australia and Denmark that are also net exporters of primary products. Moreover some of the LDC's are also importers of primary products.

54. References consulted for these views are (i) Meier, International Economics of Development; (ii) Haberler, "Terms of Trade and Economic /.....

- (c) the U.K. terms of trade cannot without verification be taken as representative of the terms of trade of all the industrial centres. On the contrary, it has been shown by Kindleberger that the terms of trade for other industrial centres behaved quite differently.⁵⁵ Moreover, Morgan's analysis of the data for seven countries indicates no uniform pattern.
- (d) the U.K. index does not allow for quality changes and makes very insufficient allowance for new products. In so far as improvements in quality and the introduction of new products have undoubtedly been more pronounced for industrial products than for primary products, a simple inversion of the U.K. terms of trade would thus overstate any unfavourable movement for countries exporting primary products to the U.K. and importing industrial products from the British market. Furthermore, there was no allowance for the fact that transportation costs were falling during the long period examined, making it invalid to infer from the British data what the terms of trade were for the LDC's trading with the U.K. This is so because in the British index import prices are taken as CIF at British ports, while export prices are FOB, thus excluding transportation costs in the case of British exports. This means that

Development," in H. Ellis (ed.), Economic Development of Latin America (N.Y. 1961); (iii) M.J. Flanders, "Prebisch on Protectionism: an Evaluation," Economic Journal (June 1964); (iv) T. Morgan, "The long-run terms of trade between agriculture and manufacturing," Economic Development and Cultural Change (October 1959); (v) B. Higgins, Economic Development.

55. C.P. Kindleberger, The Terms of Trade: a European Case Study (N.Y. 1956).

the transportation costs reduction decreases the price of the U.K. imports but is not reflected in the price paid by the U.K. to the LDC's. Thus if recorded terms of trade were corrected accordingly, the alleged improvement in the British terms of trade would appear substantially less. It is argued, therefore, that relative prices do not properly reflect the gains from trade of the peripheral countries.

2. The validity of the appeal to monopolistic elements in the industrial centres depends on the existence of monopoly not only in factor markets but also in product markets, so that the increasing productivity can be distributed in the form of rising money wages and profits. It is argued that it is very doubtful whether trade unions and firms actually possessed and exercised sufficient monopoly powers. Even if they did, the existence of such monopoly elements would at most explain movements in the absolute domestic price level and not changes in the relative world prices of manufactures and primary products. World price levels depend on world conditions of supply and demand, and a country with a relatively high domestic price level may simply find itself priced out of international markets unless it makes some adjustment in its domestic price or exchange rate. Haberler reminds us that there is much more competition between exporters of manufactured goods than is assumed in the Prebisch thesis.

3. The appeal to Engel's law to explain the slow rate of growth of demand of primary exports is not convincing. Engel's law states

that the percentage of expenditure on food is a decreasing function of income. It applies, therefore, to food but not to raw materials. Moreover, it is argued that even if the percentage of expenditure on primary imports might be ^a decreasing function of income, the absolute demand for the import of such products may still be greater as development proceeds in the supplying country. In addition, shifts of the long-term supply elasticities within industrial countries may be such as to prevent the domestic output of primary importables from keeping up with demand, so that the import requirements may rise relatively to income growth in the industrial centres. Moreover, even if an income elasticity of demand of less than unity is accepted as reasonable for primary products, what is significant for a specific primary producing country is not the over-all elasticity but rather the expansion in demand for its own specific exports.

4. The entire argument has been restricted to only one concept of the terms of trade, namely the commodity terms of trade. It is argued that changes in the income terms of trade or the single-factoral terms of trade might also be significant. It is possible that either of the two indices improves at the same time that the commodity terms of trade of a country deteriorate. Since the export volume of the LDC's has grown so considerably, and productivity in export production has in many cases increased, the income terms and single-factoral terms might have improved for these countries. Even if, statistically, the commodity terms of trade are the easiest to compute, this does not

mean that changes in export volume and productivity should be ignored. The most favourable situation would, of course, be an improvement in the three measurements of the terms of trade; but the ruling conditions may frequently be incompatible with such simultaneous improvements. Nevertheless, when assessed within this wider analysis, a change in the commodity terms of trade may not imply loss or gain and may prove to be of small moment for a LDC in comparison with the more fundamental changes that have occurred at the same time. We have, therefore, to consider various aspects of the changes and to understand the causes and implications before assessing their welfare gains or losses.

Thus the above criticism suggests that the alleged secular deterioration in the terms of trade of the LDC's does not rest on sound statistical or theoretical foundations. The only terms of trade argument accepted by trade theory is the optimum tariff argument: this rests on the condition that if a country has monopoly or monopsony power in world markets, it can influence its terms of trade by exploiting its position and trading on better terms through the imposition of export taxes or import tariffs. The problem would then be to calculate the optimum tariff which yields the best gains. But for the LDC's the practical relevance of this argument is, of course, only slight; few, if any, of these countries can exercise such monopoly or monopsony powers to bring about an international transfer of real income through improvement of their terms of trade. This is especially

difficult in view of alternative sources of supply for primary products on the part of the importing countries, the capacity of the industrial centres to develop synthetics as substitutes for the 'rude produce', and the relatively small size of any one of the LDCs' domestic market for a particular import. A tariff, it is suggested, is most effective in improving the tariff-imposing country's terms of trade when the foreign offer curve is inelastic, but the foreign offer curve that confronts any single LDC will normally be elastic, with less imports being demanded and less exports supplied as the price rises. The greater this elasticity is, the more will the volume of trade decrease as a result of a tariff.

1.7. Trade: a Super-engine of growth

The notion that economic development of the LDC's is being hindered by an alleged 'foreign exchange gap', to which we referred in the previous section, has been further extended by Professor S.B. Linder.⁵⁶ Linder rejects the applicability of the conventional trade analysis to the conditions of the LDC's, or at least to some of them. The main points of his analysis can be summarised as follows:-

1. There are certain types of goods essential to industrial investment and which most LDC's cannot produce for themselves. Their

56. Staffan Burenstam Linder, Trade and Trade Policy for Development (Praeger, London 1967).

comparative disadvantages in producing such capital goods may be said to be near infinity. These investment goods are needed for the expansion of the productive capacity and have to be imported. We may refer to them as 'expansion imports'.

2. In addition to the above needs for new fixed capital formation, the LDC's require replacements and maintenance imports which are essential to the continued operation of existing plants. There may be certain other raw materials or intermediate goods which are also necessary and impossible to produce locally for some considerable time. We may refer to these as 'operational imports'.

3. Both types of imports, the one for expansion and the other for full capacity operation of existing plant, are in fact 'required imports' for the attainment of a desired rate of growth which is presumed to be within the administrative, technical and saving capacity of the developing economy. These required imports or the 'Import Minimum' can be expressed as $M_R = M_1 + M_2$, where M_R is the required Import Minimum, M_1 is the expansion imports and M_2 is the operational imports. Without M_2 , the economy cannot operate at a sufficiently high level of national output to translate planned savings into actual savings. Without M_1 , the savings cannot be turned into the investment needed for growth of capacity. If there is an attempt to increase investment then with a given import capacity (exports plus autonomous capital inflow), M_1 will increase, reducing foreign exchange available for M_2 . This will result in lowered capacity utilisation, less national output and frustrated saving.

4. On the other hand, foreign exchange receipts cannot be increased. The Prebisch view of stagnant or slow-growing demand for the primary exports of the LDC's is accepted. What about exports of manufactured goods? Linder argues that the absolute level of productivity in manufactured exportables may be so low that the value added in the production of exports may be negative; that is to say, the cost of imported inputs may exceed the foreign exchange receipts from their sale. Depreciation of the exchange rate will, in this case, give no assistance to manufactured exports. The reasons for the low absolute level of productivity are based on Linder's theory of 'representative demand'.⁵⁷ This theory states that a country becomes relatively more efficient at producing the kinds of manufactures for which there is a large internal market. The domestic demand stimulates inventors and entrepreneurs into acquiring the best techniques and organisation for satisfying this demand. The production function for these particular goods will involve lower opportunity costs for them than for goods which are not typically in great demand in that economy. This means that a country can produce efficiently (and will, therefore, be able to compete and export) those manufactured goods which have a buoyant home market. It also means that countries to which exports of such manufactured goods are directed should have similar patterns of demand with the exporting country. The patterns

57. S.B. Linder, An Essay on Trade and Transformation (John Wiley & Sons, 1961).

of demand are mainly determined by the level of per capita income. Thus, contrary to the H-O theory which postulates that trade takes place between countries because of the different factor endowments, Linder argues that trade in manufactures is explained by similarity in demand patterns. That might explain why trade takes place between, say, the E.E.C. and the U.K., where factor endowments do not differ substantially. Now, because patterns of demand in the LDC's and the industrial developed countries are different due to differences in their levels of per capita income, it then follows that the production functions within the LDC's for the production of the types of manufactured goods demanded in the developed countries will be relatively inefficient. Being inefficient they cannot compete in the markets of the developed countries. Thus the LDC's are faced with an export dilemma: the demand for primary exports, in which they have a comparative advantage, is not growing sufficiently; and severe limits on possibilities of export of manufactured goods to the industrial centres are set by a low absolute level of productivity and the need for imported inputs for the manufacture of goods which are acceptable to consumers in rich countries. The LDC's, it is argued, face an 'Export Maximum'.

5. Linder concludes that those LDC's which have set out upon the path of industrial development inevitably find themselves 'constrained' by an 'export maximum' which is less than the 'import minimum' required for an 'acceptable growth' combined with full utilisation of existing industrial capacity. The orthodox answers to a balance of

payment deficit will not work: depreciation of the exchange rate will not expand demand for primary exports because price elasticities of demand are generally less than unity; nor will it enable increased exports of the types of manufactured goods that may be able to sell in developed countries because devaluation raises the cost of the imported inputs essential to expanding such exports. Depreciation, therefore, will only correct the balance of payments gap by reducing required imports and thus cutting back a more than proportional amount of expansion-directed investment or by reducing utilisation of existing manufacturing capacity. Thus, if the pursuit of orthodox adjustment measures cannot ensure simultaneous domestic and external equilibrium, then one of the basic assumptions of comparative cost theory is invalidated. It would no longer be that necessarily free trade would maximise national economic welfare for the allocational improvements effected by freer trade could be outweighed by the losses caused by reductions in the employment of productive factors.⁵⁸

6. A further implication of the 'foreign exchange gap' is that any capital inflow or increase in exports form not merely a supplement to domestic saving and investment in the LDC's but have a 'leverage' effect on income and domestic capital formation. These enable a country, which would otherwise be constrained by lack of required imports, to put factors of production to work which would have been idle and to realise planned savings which would otherwise have been frustrated.

58. Linder, Trade and Trade Policy for Development.

'Through this leverage effect, trade can be characterised as a super-engine of growth rather than as a mere engine of growth.'⁵⁹

7. To achieve this leverage effect, the conventional theory with regard to trade between the 'developing economies' vis-à-vis the advanced countries should be reformulated. Protective policies should be pursued: restriction of imports of luxury goods to save foreign exchange; encouraging import substitution whenever this complies with a certain efficiency criterion, that is, whenever this gives a net saving in foreign exchange (when the value of the imports replaced during the life of the investment exceeds the imports, both capital and current inputs, required for the project) and such projects should be ranked according to the degree to which they save foreign exchange; in addition, developed centres should allow unrestricted entry of possible exports of manufactures from developing countries and should provide more foreign aid to bridge the foreign exchange gap. On the other hand, a policy of free trade is recommended for exchange of goods between the developing countries themselves and customs unions or other preferential arrangements should be established among them to increase efficiency of production and expand the markets for manufactures.⁶⁰

8. The above analysis is restricted to only a special group of the LDC's. Linder excludes a considerable number of the LDC's from

59. Ibid.

60. Ibid.

his theory on the grounds that they are backward, depend entirely on primary exports, have large subsistence sectors and little or no industry. Countries which are included in the analysis and where there is at least a prima facie case for the existence of foreign exchange gaps are those which have a 'developing manufacturing sector' of reasonable size which is attempting to export to the developed rich centres and whose foreign exchange receipts are not buoyant. Such a condition should exclude many LDC's including most of Africa. India, Pakistan and Brazil are put forward as examples of developing economies with foreign exchange gaps. Most African countries, for example, are exempted because it is assumed that lack of absorption capacity including ability to generate domestic savings seems a much more important problem for them at the present time.⁶¹

As mentioned, the Linder theory deals with a certain group of the LDC's and does not cover the conditions of all these countries. Our case of study is definitely excluded from the analysis. But, nevertheless, his views are indeed stimulating and deserve attention. However, it is to be noted that this alleged gap has been criticised on the ground that it implies a relatively fixed relationship between capital goods imported and total imports, between imported capital goods and domestic investment, and between investment and increments of national output. It has been suggested that in fact changes in

61. Ibid.

the first two ratios have been significantly related to rates of growth of fixed capital formation in the LDC's. Countries with a high rate of growth of fixed capital formation have tended to increase the proportion of capital goods to total imports and to decrease the proportion of imports to domestic investment. Far from showing stability, the incremental gross capital-output ratios have shown a great deal of fluctuation in the LDC's. Gap estimates predicted on the stability of these three relationships stand upon very shaky foundations indeed.⁶²

1.8. A circular cumulative causation

We move now to the views of Gunnar Myrdal, another writer who rejects the applicability of the conventional trade theory to the special problems of development in the LDC's.⁶³ Myrdal focuses attention on the existing economic disparities that dominate the international scene. The world is divided into two distinct groups: on the one hand, we have very few rich countries that are enjoying very high levels of real income per capita and which are, on the whole, firmly settled in a pattern of continuing economic growth; these Myrdal refers to as the 'upper class of nations'. On the other hand

62. A.I. MacBean, "Foreign Trade Aspects of Development Planning" in I.G. Stewart (ed.), Economic Development and Structural Change (Edinburgh U.P. 1969).

63. Gunnar Myrdal, Economic Theory and Underdeveloped Regions (Methuen & Co. Ltd., 1957).

we have the majority group of nations that are trapped in a vicious circle of poverty, with real income per capita only a tiny fraction of what it is in the upper class of nations and where economies are progressing only too slowly, and these are called the 'lower class of nations'. Our attention is directed not only to the actual existence of these international economic inequalities, but also to the fact that these inequalities are growing. How do we explain these economic inequalities that have almost become a permanent feature of our world for some time and why are they widening rather than narrowing?

At the outset, Myrdal points out that 'a study, however intensive, of the theory of international trade cannot provide much of an explanation in causal terms of how the facts of international economic inequalities have come into existence, and why there is a tendency for the inequalities to grow'.⁶⁴ He claims that this is because the theory of international trade and indeed, economic theory generally, was never worked out to serve the purpose of explaining the reality of economic under-development and development. The limitation of these theories lies basically in their unrealistic assumptions. Myrdal concentrates on two such basic assumptions: firstly, the stable equilibrium assumption is very unrealistic; this notion implies that every disturbance provokes a reaction within the system, directed towards restoring a new state of equilibrium, and that action and

64. Ibid.

reaction will meet in one and the same time-space. Myrdal contends that there is no such tendency towards automatic self-stabilisation in the social system. The system by itself is not moving towards any sort of balance of forces, but on the contrary is constantly moving away from such a situation. 'In the normal case, a change does not call forth countervailing changes but, instead, supporting changes which move the system in the same direction as the first change.'⁶⁵ Thus there is a circular causation in the social system which tends to become cumulative and often gather speed at an accelerating rate. Secondly, another unrealistic assumption is the notion that there are certain elements of social reality which can be characterised as the 'economic factors', and that a theoretical analysis can be rationally restricted to the interactions of these factors; but it is precisely in the realm of that large part of social reality which is left outside the economic analysis by the abstraction from the 'non-economic factors' that the equilibrium theory falls to the ground. Those non-economic factors, Myrdal argues, cannot be taken as given and static because when they react, they normally do so in a disequilibrating way. The 'non-economic' factors have much to do with what the classical writers referred to as 'qualities' of the productive factors and, consequently, the 'effectiveness' of production in various lines; it is precisely in these spheres that a main part of the theoretical explanation has to be sought of why countries have fared

65. Ibid.

so unequally in their development and why international trade has not been active as an equalising force. But keeping these important variables outside the analysis means abstaining from seeking the theoretical explanation demanded by establishing the inter-relationships with such factors. Moreover, the failure of the trade theory to deal with problems of development is well manifested by the fact that although this theory is moving in a direction of stressing more and more the idea that trade initiates a tendency towards a gradual equalisation of factor prices and incomes as between countries, international economic inequalities have been growing and recently also become of more pressing practical concern in international politics.

Myrdal suggests that the idea of the circular causation of a cumulative process contains the approach to a more realistic analysis of the social change and may represent a 'vision for the general theory of under-development and development which we are all yearning for'.⁶⁶ This theory, based on the assumption that a change in the system calls forth supporting changes rather than countervailing forces, contains two concepts: firstly, the 'backwash effects' by which is meant the movement of the factors of production away from the static or slowly expanding areas to the growing centres of economic activity; in other words, factors of production tend to be attracted to the expanding centres to the detriment of the stagnant or slow-growing areas. Secondly, against the 'backwash effects' there are also certain centri-

1. Ibid.

fugal 'spread effects' of expansionary momentum from the centres of economic expansion to the other stagnant regions; 'it is natural that the whole region around a nodal center of expansion should gain from the increasing agricultural products and be stimulated to technical advance all along the line.'⁶⁷

But how can we apply this theory to the international situation? Myrdal argues that the forces of migration, capital movement and trade have all been biased against the LDC's. International trade has strong backwash effects on these economies: in fact the main positive effect of international trade has been to promote the production of raw materials in the LDC's and such production, employing mostly unskilled labour, has come to constitute the bulk of their exports. These exports often meet inelastic demand in the world markets and excessive price fluctuations. When, furthermore, population is rapidly rising while the larger part of it lives at a near subsistence level, which means there is no scarcity of unskilled labour, any technological improvement in their exports tends to transfer the advantage from the cheapening of production to the importing developed countries. Thus, here, we see complete agreement with the Prebisch trend of thought. In addition, against these backwash effects, the spread effects in the LDC's are very weak, relatively much weaker than they are in the developed countries. The weak spread effects on the LDC's are nothing but a result of the weak spread effects even within

67. Ibid.

these economies as a consequence of the existence of 'dual' sectors in the LDC's. Thus the backwash effects would dominate the scene; and consequently, if international trade is not regulated, it will be the medium through which economic progress in the developed countries will have backwash effects in the LDC's. In other words, if the forces of the market are left alone, they will work to the detriment of the LDC's and to further increasing the international economic inequalities. The way to solve this dilemma, Myrdal argues, is to interfere with the market forces so as to support the spread effects and to lessen the backwash effects. This could be done via economic planning and protection. Application of the comparative costs principle is to be discarded with a view to speeding up industrialisation in the LDC's.

The fact that Myrdal's attack on the conventional trade analysis has been based on the 'factor-price equalisation theorem' has been criticised in the literature. It has been suggested that proponents of the classical theory have never claimed that international trade will actually equalise real wages or real per capita income levels among the trading countries. The only contention implied in the theory is simply that the real income of each country will be higher with trade than without trade. We have earlier referred to the limited assumptions upon which the suggestion of factor-price equalisation has been based. Moreover, Meier tells us,⁶⁸ we should distinguish

68. International Economics of Development.

between factor-price equalisation as inferred from the static model and the inequalities in factor prices which have actually resulted from the historical operation of dynamic forces and changes in the world economy. Only by confusing the static and dynamic problems can it be argued that international trade, instead of equalising factor prices, has increased the differences; this is because in the dynamic setting trade has been but one of many variables affecting factor price; it is, therefore, illegitimate to single out trade from other dynamic changes as having been the cause of increased inequalities. In addition, Meier proceeds to stress that the failure to have even a tendency towards factor-price equality, let alone full equality, does not mean that measures which bring the economy closer to a fulfilment of the assumptions underlying the theorem might not be effective in diminishing the inequalities, or that trade might not contribute to a poor country's development. 'Only by misinterpreting the factor-price equalisation theorem, and ignoring all other dynamic benefits of trade, can the absence of equal factor price be construed as indicating that trade makes no contribution to development.'⁶⁹

So far, we have discussed some of the arguments, critical of the conventional trade approach, that call for protective policies to support a programme of industrialisation. We have also discussed what the bearers of the free trade torch have to say to such criticism. More of the arguments expressed in the literature calling for

69. Ibid.

industrialisation via protection will be examined in the next section. But, in the meantime, it is to be noted that all the arguments, so far discussed, single out the heavy dependence of the LDC's on production and export of primary commodities as the main villain. This is so because, it has been contended, of the slow-growing demand for these commodities in the world markets. In addition, it is suggested that their prices do fluctuate much more than those of manufactured goods. These fluctuations, it is argued, cause marked variations and swings in the incomes of individual producers in the LDC's and also in these countries' export receipts. Thus the economies of such countries are more vulnerable than those of the industrial countries, and therefore a widening of the base of such economies via industrialisation is likely to make for greater internal and external stability. Linked with this vulnerability approach is the argument associated with the deterioration in the terms of trade which we have already discussed, and where it is argued that by creating demand for industrial products, protection will diversify the economies of these countries, helping to rescue them from the consequences detailed earlier.

Before proceeding to the next section, it might be appropriate to mention that the assumption of the exceptional instability of export earnings and vulnerability of the economies of the LDC's has been challenged by some recent studies. For examples, MacBean⁷⁰ has

70. A.I. MacBean, Export Instability and Economic Development (George Allen & Unwin, 1966).

subjected this phenomenon to an econometric investigation and found that the empirical evidence does not support this widely-held assumption. He argues that the LDC's are not significantly more subject to instability of export earnings than the developed countries, basing his findings on measuring an instability index in sixty-three countries (of which forty-five are LDC's and eighteen developed countries). His calculations reveal that, in the period 1946-58, the mean instability index for the group of the LDC's examined was 23.1 while that for the developed group was 17.6, a difference of 31 per cent. He concludes that although the findings suggest a tendency for the LDC's to have less stable export earnings, 'it also suggests that this is a fairly weak tendency, that the differences are not large, and that there is a considerable overlap in experience of instability between rich and poor countries.'⁷¹ But, it is added, this does not mean that some of the LDC's have not experienced such severe instabilities. On the contrary, some individual countries of the group of the LDC's examined did experience a high degree of instability, much higher than the mean index for the whole group; but the causes of this severe instability, it is argued, must be analysed in terms of specific factors relevant to the individual country and its particular export products. Furthermore, MacBean finds that variations in export quantities have been an important source of export instability, which implies that efforts of price stabilisation might increase rather than

71. Ibid.

decrease the instability of such countries. In short, he argues that export instability in the LDC's tends to differ little from that of the developed countries. In a recent study, Erb and Campo⁷² examined the instability in the same sixty-three countries studied by MacBean but for a different period (e.g. 1954-66 instead of 1946-58) and found that the export instability of both developed and the LDCs' was markedly lower in the first period than in the second (e.g. index for the LDC's was 13.4 on the average and for the developed group 6.2). But, it is to be noted, although the export instability for the LDC's was larger than that of the developed group in both periods examined, it was much more in 1954-66 where the average export instability for the LDC's was over twice as high as the average instability for the developed countries. They point out that 'the differences between the two periods are, at any rate, large enough to point unequivocally to the need of exercising great caution in extending any findings on export instability ... to other time periods, or in generalising them to the whole of development experience. However, the evidence of twenty years (1946-66) solidly supports at least one of the facets of the export instability argument: less developed countries have indeed been characterised by significantly greater instability of exports than the developed countries have been, although the margin of difference has itself fluctuated considerably ... from one historical

72. Guy F. Erb and Salvatore Schiavo-Campo, "Export Instability, Level of Development, and Economic Size of Less Developed Countries," Bulletin of the Oxford University Institute for Economics and Statistics, Vol. 31, No. 4 (November 1969).

period to the next.⁷³

1.9. Industrialisation

Let us now proceed to discuss more arguments for industrialisation via protection, beginning with the oldest, the infant-industry argument. This argument was contemplated as early as 1790 by Alexander Hamilton in the U.S.A. in his Report on Manufactures. His ideas were later developed by the German Friedrich List in his National System of Political Economy. List was in principle a free trader. He realised the advantages of the international division of labour. He rejects without hesitation tariffs to preserve certain sections of the economy from the growth of foreign competition, and especially tariffs upon raw materials and foodstuffs.⁷⁴ But the manufacturing productive power, List tells us, is governed by other laws:-

'The school fails to perceive that under a system of perfectly free competition with more advanced manufacturing nations, a nation which is less advanced than these, although well fitted for manufacturing, can never attain to a perfectly developed manufacturing power of its own ... without protective duties.

'The reason for this is the same as that why a child or a boy in wrestling with a strong man can scarcely be victorious or even offer steady resistance. The manufactures which constitute the commercial and industrial supremacy (of England) have a thousand advantages over the newly-born or half-grown manufactories of other nations. The former, for instance, can obtain skilled and experienced workmen in the greatest number

73. Ibid.

74. Haberler, Theory of International Trade.

and at the cheapest wages, the best technical men and foremen, the most perfect and the cheapest machinery, the greatest benefit in buying and selling advantageously; further, the cheapest means of transport, as respects raw materials and also in respect of transporting goods when sold, more extended credit for the manufactories with banks and money institutions at the lowest rates of interest, greater commercial experience, better tools, buildings, arrangements, connections, such as can only be acquired and established in the course of generations ...'

List stresses the advantages in culture and character which industrial occupations bring to a nation. 'In a country devoted to mere raw agriculture, dullness of mind, awkwardness of body, obstinate adherence to old notions, customs, methods, and processes, want of culture, of prosperity, and of liberty, prevail.' These conditions are completely changed when a country is industrialised: 'Manufactories and manufactures are the mothers and children of municipal liberty, of intelligence, of the arts and sciences, of internal and external commerce, of navigation and improvements in transport, of civilisation and political power.' Thus, List recommends a protective tariff to enable a country to start industrialisation, though this protection should only be temporary and restricted to the 'nursing period' of the industries concerned. He further warns that 'measures of protection are justifiable only ... in case of nations which through an extensive and compact territory, large population, possession of natural resources, far advanced agriculture, a high degree of civilisation and political development, are qualified to maintain an equal rank with the principal agricultural manufacturing commercial nations. It may in general be assumed that where any technical industry cannot be established by

means of an original protection of 40 to 60 per cent and cannot continue to maintain itself under a continued protection of 20 to 30 per cent the fundamental conditions of manufacturing power are lacking.'

But perhaps the best expression of the classical argument for nursing the infant industries has been provided by J.S. Mill in his Principles (1848):-

'The only case in which, on mere principles of political economy, protecting duties can be defensible, is when they are imposed temporarily (especially in a young and rising nation), in hopes of naturalising a foreign industry, in itself perfectly suitable to the circumstances of the country. The superiority of one country over another in a branch of production often arises only from having begun it sooner. There may be no inherent advantage on one part, or disadvantage on the other, but only a present superiority of acquired skill and experience. A country which has this skill and experience yet to acquire, may in other respects, be better adapted to the production than those which were earlier in the field: and besides, it is a remark of Mr. Rae, that nothing has a greater tendency to promote improvements in any branch of production than its trial under a new set of conditions. But it cannot be expected that individuals should, at their own risk, or rather to their certain loss, introduce a new manufacture, and bear the burden of carrying it on until the producers have been educated up to the level of those with whom the processes are traditional. A protecting duty, continued for a reasonable time, might sometimes be the least inconvenient mode in which the nation can tax itself for the support of such an experiment. But it is essential that the protection should be confined to cases in which there is good ground of assurance that the industry which it fosters will after a time be able to dispense with it; nor should the domestic producers be allowed to expect that it will be continued to them beyond the time necessary for a fair trial of what they are capable of accomplishing.'

In short, the basis of the infant industry argument is that a country might have a potential comparative advantage in the development of a certain industry; but simply because of an earlier start the industry has been developed in another country to a point where it

would be impossible for a newly established industry to compete with it. In this situation, a temporary tariff might be necessary to allow the establishment of the industry in question and to give it time to expand and realise its potential cost advantage. In other words, protection would assist the industry to reap economies of scale and to have time to train its potentially superior labour force (learning by doing).

The theoretical validity of the infant industry argument has even been accepted by free traders. But, having conceded its validity, they would insist that the protection must be carefully justified by reference to the facts of a particular case, that it is generally very difficult to identify in advance the industry in which a country has a potential advantage, that once selected the industry so protected must be competitive over time and that, therefore, its protection should only be temporary. Further, they argue that the present cost of protection must not exceed the size of the future expected gains. In addition, they warn that there is the danger that protection once granted becomes very difficult to remove. Even with these restrictive conditions, modern free traders argue that, even if there is a genuine case for protecting an industry, this is a case for encouraging it by a subsidy and not by a protective tariff; that is to say, a domestic distortion should be cured by applying a subsidy at the source of distortion, that is within the domestic economy, because to cure it by a tariff is not only to adopt an indirect and

less theoretically reliable remedy but it is also to introduce a new unnecessary distortion in foreign trade causing additional losses to the consumers.⁷⁵

In the present development literature on the LDC's, a number of arguments for protection have been advanced, extending the infant industry argument to the 'infant manufacturing sector' argument or even to the 'infant economy argument'. This is because manufacturing industries, it is alleged, 'provide the growing points for increased technical knowledge, urban education, and the dynamism and resilience that goes with urban civilisation, as well as the direct Marshallian external economies. No doubt under different circumstances commerce, farming, and plantation agriculture have proved capable of being such growing points, but manufacturing industry is unmatched in our present age.'⁷⁶ Myint argues⁷⁷ that the modern versions for protection to assist industrialisation of the LDC's could be summarised under two headings: those dealing with cost aspects and others dealing with demand aspects.

75. For example: H.G. Johnson, "Tariffs and Economic Development: Some Theoretical Issues," Journal of Development Studies, Vol. 1, /15. No. 1 (October 1964); Myint, op. cit. (ref. 17); Meier, op. cit. (ref.

76. Hans Singer, International Development: Growth and Change (McGraw-Hill, 1964).

77. H. Myint, "Infant Industry Arguments for Assistance to Industries in the Setting of Dynamic Trade Theory" in R. Harrod and D.C. Hague (eds.), International Trade Theory in a Developing World (Macmillan, 1963).

On the cost side, we have a revival of the older 'Manoilescu' type of argument for protection. It is to be mentioned that the main thesis of Mihail Manoilescu was that since marginal productivity of labour is low in agriculture, compared with other branches of the economy, a transfer of labour from agriculture to these branches would raise the marginal productivity in agriculture and hence the average productivity in the economy as a whole. This view is not fully accepted of course.⁷⁸ However, the modern extensions of the argument have been stimulated by the widespread adoption in the literature of the concept of 'disguised unemployment'. The modern argument accepts the basis of the static optimum analysis but maintains that social and private costs will diverge significantly over large areas of the LDC's due to various market imperfections and structural rigidities, particularly those affecting the allocation of labour between rural and urban sectors.⁷⁹ The starting-point of the modern argument is the assumption of the existence of 'disguised unemployment'; but, first, what

78. M. Manoilescu, Theory of Protection and International Trade (1931). Viner (International Trade and Economic Development) questions the assumption that dependence on agriculture causes poverty and the development of industry causes prosperity and that some of the rich countries are mainly agricultural economies. He argues that the 'misallocation of resources as between agriculture and manufactures is probably rarely a major cause of poverty ... The real problem in poor countries is not agriculture as such, or the absence of manufactures as such, but poverty and backwardness, poor agriculture, or poor agriculture and poor manufacturing. The remedy is to remove the basic causes of the poverty and backwardness'. He insists that for many countries the most promising field for rapid economic development is in agriculture rather than industry. He does not deny that a country once developed there will be a steady increase of the proportion of labour employed in non-agricultural activities; but the rise in employment in non-agricultural sectors is a consequence, not a cause, of the improvements in the economy.

79. Myint, op. cit. (ref. 77).

do we mean by this concept? It has been contended that in the LDC's, and particularly in Asia, excessive overpopulation in the agricultural sector often leads to excessive underemployment of the labour resources of these economies to the extent that if some of the labour force is withdrawn, the volume of total output would not be reduced even if existing techniques and available capital remain unchanged; total output might even increase. In technical terms, the concept of disguised unemployment implies generally a situation where the marginal productivity of labour could be negligible, zero or even negative. In addition, this surplus labour is maintained by the agricultural population at a subsistence level approximately equal to the average product of labour in the sector, which is more than its own marginal product. This surplus labour, however, cannot be attracted to industry at this subsistence level although this already exceeds its marginal product in agriculture. To overcome inertia and immobility, a considerable premium would have to be added to this subsistence wage before the rural surplus labour could become available to the urban industrial sector. Thus, the private transfer wage of rural surplus labour to industrial employment far exceeds its true social opportunity cost which is determined by its marginal product in agriculture which is equal to zero. In short, labour is systematically over-valued for the urban industrial sector and this should be corrected by protecting the manufacturing industry.

Based on the assumption of the zero marginal product of labour, Professor Lewis has given a clear formulation of the argument for

protection to correct such imperfections. Thus, in his celebrated article, so much quoted in the development literature, he puts the case as follows:-⁸⁰

'We assume that the two countries can produce the same things, and trade with each other. A is the country where labour is scarce, B the country where unlimited labour is available in the subsistence (food) sector. Using the classical framework for the law of comparative costs we write that one day's labour

in A produces 3 food or 3 cotton manufactures;
in B " 2 " " 1 " " .

This, of course, gives the wrong answer to the question 'who should specialise in which', since we have written the average instead of the marginal products. We can assume that these coincide in A, and also in cotton manufactures in B. Then we should write, in marginal terms,

in A produces 3 food or 3 cotton manufactures;
in B " 0 " " 1 " " .

B should specialise in cotton manufacture and import food. In practice, however, wages will be 2 food in B and between 3 food and 6 food in A, at which levels it will be "cheaper" for B to export food and import cotton.'

Lewis proceeds to tell us that this divergence between the actual and what it ought to be is the most serious difference which the existence of surplus labour makes to the neo-classical theory of international trade. 'It has caught out many economists, who have wrongly advised underdeveloped countries on the basis of current money costs, instead of lifting the veil to see what lies beneath. It has also caught out many countries which have allowed (or been forced to allow) their industries to be destroyed by cheap foreign imports, with the sole effect of increasing the size of the labour surplus, when the national income would have been increased if the domestic industries had instead

80. W. Arthur Lewis, Economic Development with Unlimited Supplies of Labour (The Manchester School, May 1954).

been protected against imports. The fault is not that of the Law of Comparative Costs, which remains valid if written in real marginal terms, but of those who have forgotten that money costs are entirely misleading in economies where there is surplus labour at the ruling wage.⁸¹ Thus, to correct this difference between private money costs and true social marginal costs, country B should protect its textile industry.

It is also possible to formulate the argument on the basis of an empirically observed gap between agriculture and industrial wages which may or may not be due to rural overpopulation. Hagen suggests that 'on the empirically observed fact that in any economy in which per capita income is rising secularly, the output of manufacturing and mining grows secularly relative to agriculture ... As a result of this secular trend, except in the unreal case of perfect geographical and occupational mobility of labour, wages in manufacturing industry must be higher than in agriculture.'⁸² Thus, it is argued, there are large differentials in factor returns in different sectors due to imperfect factor markets and, therefore, real incomes can be increased if factors are redistributed. The consequence of a structural disequilibrium in the factor market is an inefficient allocation of factors between industry and agriculture. If the distortion in factor allocation is removed by protecting the importable manufacturing industry

81. Ibid.

82. E.E. Hagen, "An Economic Justification of Protectionism," Quarterly Journal of Economics (November 1958).

that has to pay the higher factor price, real income might then be raised relatively to the free trade situation. Given that the marginal product of labour is higher in the industrial sector than in the agricultural sector, but that industrial wages exceed agricultural wages for labour of equal quality, it is argued that industry should be protected to overcome the excessive wage differential and bring private costs into line with social costs. 'As a result of this wage disparity, manufacturing industry having a real comparative advantage will be undersold by imports when foreign exchanges are in equilibrium. Protection which permits such industries to exist will increase real income in the economy.'⁸³ Commenting on this version, Meier suggests that 'there is merit in this argument — provided that the increase in the aggregate cost to buyers of the protected product is less than the increase in income to the factors which shift to the protected industry. The wage differential must also be due to non-economic causes that make the industrial wage rate exceed the agricultural wage rate by a margin larger than can be attributed to the disutility or higher economic costs incurred by labour in the industrial sector. Although the entire wage differential cannot be so explained, some of the differential may be due to trade union activity, social legislation, or political and humanitarian considerations on the part of employers. These may cause a genuine distortion, with the industrial wage rate being above the alternative opportunity cost of labour in agriculture.

83. Ibid.

Even though such a genuine distortion supports government intervention, we should however recognise, as Hagen does, that the "first-best" policy would combine free trade with a subsidy per unit of labour used in industry, equal to the difference between the higher unit labour cost in industry and the lower labour cost in agriculture.'⁸⁴

To evaluate the concept of 'disguised unemployment', let us remember, firstly, that the concept does not apply to a wide range of the LDC's, particularly countries in Africa and Latin America.⁸⁵ Nor does it apply to wage-earners in plantation-type agriculture. Secondly, the validity of the zero marginal productivity of rural labour in some of the LDC's still awaits convincing theoretical and empirical evidence: the discussion of the validity of this concept has been started long ago by Rosenstein-Rodan⁸⁶ and aroused particular interest in the 1950s when a wave of publications, pro and con, flooded the economic literature. It was given a strong impetus when a United Nations report⁸⁷ concluded that 'it seems safe to assume that for many regions of India

84. Meier, op. cit. (ref. 15).

85. For example Lewis: 'We are not arguing, let it be repeated, that this assumption should be made for all areas of the world ... It is not true either of some of the countries usually now lumped together as underdeveloped; for example there is an acute shortage of male labour in some parts of Africa and of Latin America. On the other hand, it is obviously the relevant assumption for the economies of Egypt, of India, or of Jamaica' (op. cit. (ref. 80)).

86. Rosenstein-Rodan, "Problems of Industrialisation of Eastern and South-eastern Europe," Economic Journal (1943).

87. United Nations, Measures for the Economic Development of Underdeveloped Countries (1951).

and Pakistan, and for certain parts of the Philippines and Indonesia, the surplus rural population cannot be less than the pre-war average for the Eastern European region.' A comprehensive survey of the arguments in the literature on the concept of disguised unemployment is, of course, beyond our terms of reference. But, briefly, the controversy seems to have centred on how to reconcile the concept of zero marginal productivity of labour with the accepted theory and how to reach an agreed method by which this assumed surplus is to be measured. On the theoretical side, it has, for example, been attributed to 'family employment in peasant communities'.⁸⁸ Another study explains the phenomenon through an interaction between labour productivity and wage rates: since output per man increases due to improved nutrition when wage rate increases, landlords find it profitable to hire all available labour to prevent wage rates being bid down, poor nutrition and the resulting small output per man. Although net revenue would be higher if only a portion of the labour force were utilised, wages would fall, causing productivity to decline.⁸⁹ A third study distinguishes between labour and labourer: it is not that too much labour is being spent in the production process, but that too many labourers are spending it; thus, disguised unemployment normally takes the form of a smaller number of working hours per head per year, e.g. each of three brothers shepherding the sheep every third

88. Nurkse, op. cit. (ref. 31).

89. H. Leibenstein, "The Theory of Underemployment in Backward Countries," Journal of Political Economy (1957).

day.⁹⁰

An alternative explanation for the existence of disguised unemployment is linked to a factor-proportion problem due to fixed technical coefficients: there is some minimum ratio of capital to labour, but many LDC's have less capital than is required to utilise their whole labour force and, consequently, a portion of the available labour supply is unused.⁹¹ Lewis simply tells us that

'... in overpopulated countries the code of ethical behaviour so shapes itself that it becomes good form for each person to offer as much employment as he can. The line between employees and dependents is very thinly drawn. Social prestige requires people to have servants, and the grand seigneur may have to keep a whole army of retainers who are really little more than a burden upon his purse. This is found not only in domestic service, but in every sector of employment. Most businesses in underdeveloped countries employ a large number of "messengers", whose contribution is almost negligible ... and even in the severest slump the agricultural or commercial employer is expected to keep his labour force somehow or other—it would be immoral to turn them out, for how would they eat, in countries where the only form of unemployment assistance is the charity of relatives.'⁹²

On theoretical grounds, the concept has been severely criticised by Viner, Haberler and others. Viner, for example, finds it 'impossible to conceive' of a farm on which some addition to the crop might not be secured by using additional labour in 'more careful selection and planting of the seed', or 'more intensive cultivation of the crop'.⁹³

90. A.K. Sen, Choice of Techniques (Blackwell's, 1960).

91. R.S. Eckaus, "The Factor-proportions Problem in Underdeveloped Areas," American Economic Review (September 1955).

92. Lewis, op. cit., (ref. 80).

93. J. Viner, "Some Reflections on the Concept of 'Disguised Unemployment'," in G. M. Meier, Leading Issues in Economic Development (O.U.P., 1970).

Haberler comments that the claims of the proponents of the concept are tremendously exaggerated and that the explanations given to support its validity are not convincing.⁹⁴ Warriner suggests that the emphasis on overpopulation as disguised unemployment is most unfortunate because it concentrates on pure guesswork and directs attention from the ascertainable facts, e.g. the fall in output per head resulting from pressure of population on the means of subsistence as well as the destruction of soil fertility.⁹⁵

On the empirical side, a number of conflicting studies have been presented in the literature. While some of these studies attempted to confirm the existence of surplus labour in some of the LDC's,⁹⁶ others, especially Oshima's⁹⁷ and Schultz's,⁹⁸ dismissed the idea as unrealistic. Schultz maintains that he knows of no evidence for any poor country anywhere that would suggest that a transfer of even some small fraction, say, of five per cent of the existing labour force out of agriculture, with other things equal, could be made without reducing production.⁹⁹ Even Nurkse, who supported the notion, makes

94. G. Haberler, "Critical Observations on Some Current Notions in the Theory of Economic Development," L'Industria (1957), reprinted in G.M. Meier, Leading Issues in Economic Development (O.U.P., 1970).

95. D. Warriner, "Land Reform and Economic Development," National Bank of Egypt Fiftieth Anniversary Commemoration Lectures (Cairo 1955).

96. C. Eicher and L. Witt, Agriculture in Economic Development (McGraw-Hill, 1964).

97. H. Oshima, "Underemployment in Backward Economies: An Empirical Comment," Journal of Political Economy, Vol. 66 (June 1958).

98. T.W. Schultz, Transforming Traditional Agriculture (Yale U.P., 1964).

99. T.W. Schultz, "The Role of Government in Promoting Economic Development," in L. White (ed.), The State of the Social Sciences (Chicago Press 1956).

the qualification that 'we need not and probably cannot exclude better organisation. If surplus labour is withdrawn from the land, the remaining people will not go on working in quite the same way. We may have to allow for changes in the manner and organisation of work, including possibly a consolidation of scattered strips and plots of land,' and that it is after doing so that this 'disguised saving potential' could be used for capital formation.¹⁰⁰ However, the problem of accepting the empirical studies so far made to support the notion of a zero marginal productivity of labour seems to be centred on the lack of consensus on the methods to be employed for the measurement of this alleged surplus. Several elements of confusion have been suggested: firstly, there has been a lack of clarity in specifying the unit of labour being employed for measurement purposes; in most circumstances in developed countries a labour supply curve may be expressed in terms of either workers or man-hours since there is a fixed transformation between the two in the standard work-week. This is not the case in peasant economies. Secondly, the measure of man-hour may not be totally homogeneous with regard to labour in peasant economies: an under-nourished, chronically ill worker will produce considerably less than will a healthy, well-fed one even when all circumstances are the same. Thirdly, the type and pattern of agriculture also enter into the measurement of the surplus labour, e.g. the optimum factor combination (labour to land to capital) varies with the

100. Nurkse, op. cit. (ref. 31).

size of the farm units, with the type of crops grown, with the soil and climate and with other local conditions. These variations must be taken into account when judging the labour surplus on the basis of standard factoral proportions. Fourthly, the need for labour in agriculture over the course of the average crop year may not coincide with its availability. There may exist a surplus and also a deficit (at the peak season) of labour on the same farm in the same year.¹⁰¹

However, even if we allow for the existence of the so-called disguised unemployment, or simply low productivity, it has been suggested that the proper remedy to deal with this domestic distortion in agriculture is through subsidies rather than tariff protection.¹⁰²

In addition to the above arguments, there are other views in the literature that are mainly concerned with the demand aspects of the question and the need to enlarge the domestic markets in the LDC's. 'Many of these arguments are amorphous and are concerned only indirectly or implicitly with protection. But they exert a pervasive influence on current protectionist thinking in relation to the underdeveloped countries.'¹⁰³ Thus, whereas the old infant industry argument maintains that the industry's present costs are too high and that it needs a period of 'nursing' before its potential advantage is

101. W.C. Robinson, "Types of Disguised Rural Unemployment and Some Policy Implications," Oxford Economic Papers (November 1969).

102. Meier, op. cit. (ref. 15).

103. Myint, op. cit. (ref. 77).

realised, the new versions claim that protection is needed in the first place to create demand to match the new supply of the industry because the effective demand for its products is too low to allow it to function in an efficient manner. Myrdal has put the point in general terms as follows:-

'One of the difficulties of industrial development in underdeveloped countries and one of the great hindrances to give real momentum to a development policy is that internal demand must be built up simultaneously with supply. The unlikelihood or, anyhow, the exasperating slowness of any self-engendered process of "natural growth" offers a main explanation of why sustained stagnation becomes a sort of natural equilibrium and why policy interventions are called for. Indeed the entire idea of a policy of economic development is to break away from the low level equilibrium. Now import restrictions afford a means of by-passing altogether the process of "natural growth" and creating at once the necessary demand for a particular domestic industry. They create a sizeable internal demand for a specific commodity, without the necessity of waiting for the slow and difficult growth of the entire economy.'¹⁰⁴

As stated, this argument is restricted simply to the idea of promoting the demand for industrial products via a policy of import substitution. If this idea is extended to the 'Balanced Growth' doctrine, which was previously defined, it would have somewhat equivocal implications for the protectionist argument. The infant industry argument is thus extended to the 'infant manufacturing' argument. But does the 'Balanced Growth' doctrine, as discussed by R. Nurkse, really mean a call for an overall protective umbrella? Specifically, Nurkse mentions that the doctrine does not constitute a case for autarchy because the scale of comparative advantage is subject to change due to the fact

104. G. Myrdal, An International Economy (Harper & Row, 1956).

that the size of the market is not fixed; it is bound to expand with development. 'When, for example, a country that consumes annually a certain number of shoes ... all of which it imports, decides now to set up a domestic shoe industry producing just that number a year, it seems natural to conclude that it is making itself self-sufficient in shoes. But if the new industry is part of an overall process of growth, the market for shoes in that country may increase ten-fold, so that its shoe imports are increased instead of cut down to nothing.'¹⁰⁵ He singles out the example of Canada, where the textile manufacture was one of the first industries to develop with the aid of tariff protection from 1879 on, yet Canada 'today is one of the world's biggest importers of textile manufactures'.¹⁰⁶ Nurkse stresses that as productivity increases and the domestic market expands, while the composition of imports and exports is naturally bound to change, the total value of external trade is more likely to grow than to shrink.¹⁰⁷ The doctrine thus calls for only a balanced pattern of investment in a number of different industries, including agriculture, so that people working with more capital and better techniques become each other's best customers. It does not emphasise import-substitution and there is nothing in the doctrine itself to favour general protection for industries as contrasted with other policies designed to promote

105. Nurkse, op. cit. (ref. 31).

106. Ibid.

107. Ibid.

extensive investment. Indeed, Nurkse tells us that 'while it is not denied that import restrictions can help a policy of domestic balanced investment, it should be used very sparingly because of its tendency to encourage costly and inefficient production of import-substitutes ... Import restrictions imposed in spite of such unfavourable effects can be justified only on the grounds of future benefits, which is the infant industry argument for protection.'¹⁰⁸ He adds that tariff protection alone is ineffective as a means of promoting economic growth because protection overlooks the problem of capital supply; this is the task of creation, of finding the sources, open and concealed, available for accumulation and of devising the ways and means of moulding them into productive forms. Infant creation must take precedence over infant protection. Further, he tells us that the case for output expansion for the home market is clear only on the condition that the amount of resources is increasing at a sufficient rate, through population growth, capital accumulation and the speed of knowledge — so that domestic output can expand without neglecting export production and giving up the benefits achieved through international specialisation.¹⁰⁹

An alternative strategy for the economic development of the LDC's based on industrialisation, and often mentioned in the literature, is the so-called Unbalanced Growth doctrine.¹¹⁰ Here, economic

108. Ibid.

109. Ibid.

110. Albert O. Hirschman, The Strategy of Economic Development (Yale U.P., 1958).

development is not conceived as a once-for-all shift from a low-equilibrium level to a balanced-growth equilibrium coming to a stop at a plateau of a higher level of income. It is rather conceived as a continuous process, generated and sustained by a chain of disequilibria; thus, the aim of economic development, it is argued, should be to pursue a policy that prolongs and keeps alive this disequilibrium process by a series of autonomous investments injected into strategic places in the economic structure which lead to the maximum amount of imbalances inducing thereby further investment. An autonomous investment can induce further investment through pressure of excess demand on the industries which are suppliers. It can also induce investment through the pressure of excess supply on the industries which are its customers. Consequently, the ideal case is that we should start with an autonomous investment in an industry capable of generating induced investment in both directions, on its suppliers and customers. However, if this type of investment is not available, we should start by generating the pressure of excess demand which is to be regarded as a more powerful and reliable force. Applying this approach to international trade, Hirschman points out that the typical light consumers' industries of the LDC's are what may be described as the 'finishing touches' industries, importing not only machinery but also materials which are semi-processed or frequently very nearly completely processed. Thus the domestic net value added consists merely of the wages of the workers engaged in giving the 'finishing touches' to the imported materials so that a large proportion of the

expansion in the demand for the product of these industries leaks out in the form of further imports of materials and machinery abroad. In many LDC's, the normal process of economic development consists of industrialisation working its way from the finishing touches to the domestic production of 'intermediate' and finally to that of basic industrial materials. But this process of industrialisation via successive bits of domestic value added may be too slow to pay off for the LDC's; these countries, it is contended, would better try to obtain a larger share of the value added by 'jumping' a few stages backwards from the 'finishing touches' stage to some 'intermediate' stage which may also open out a wider network of 'forward' and 'backward' linkage effects, that is, effects on using and supplying industries.¹¹¹

But what has this doctrine of 'unbalanced growth' to do with our argument? Does it imply an open licence for protection to boost the so-called inducement of investment? Not exactly. Imports have, in fact, a special place in the doctrine of 'unbalanced growth': 'But imports still provide the safest, most incontrovertible proof that the market is there. Moreover, they condition the consumer to the product, breaking down his initial resistance. Imports thus reconnoitre and map out the country's demand; they reduce uncertainty and reduce selling costs at the same time, thereby bringing perceptibly closer the point at which domestic production can be economically started.'¹¹²

111. Ibid.

112. Ibid.

Thus we start from a situation where there is already some autonomous growth of income and exports; and the interest of Hirschman in protection seems only to apply if it enlarges the size of the market for a particular import, thereby inducing further investment in the setting up of an import-substitute industry. Let us explain this point further in terms of Hirschman's input-output model with fixed coefficients which is 'dis-aggregated' for imports so that the total direct and indirect imports at a given income level are clearly shown as $M_1, M_2 \dots M_k$. As income automatically expands, the M's will expand so that sooner or later the domestic market for one of the imports, say M_1 , crosses its threshold T_1 , which is determined by the minimum economic size of the domestic production for it and so along this line. Now under ideal conditions, as soon as the demand for a particular import crosses the threshold of its domestic production, it will cease to be imported, as private entrepreneurs will now find it worth their while to set up the import-substitute industry. But in the realistic conditions of the LDC's, this induced investment mechanism is not likely to work smoothly. Further, at any given moment of time, we may not find any import which has actually crossed the threshold but only those which are approaching it and are expected to cross it in the future. In a slow-moving economy, Hirschman is willing to consider protection to help those industries which are on or near the threshold, provided protection is given to one at a time. ¹¹³

113. Ibid.

Linked with the argument for industrial protection is the suggestion that the establishment of an industry will yield external economies, thereby giving rise to a divergence between social and private returns. This divergence, it is argued, is of special concern to the LDC's in connection with the problem of allocating savings among alternative investment opportunities. The market evaluation of comparative advantage may not conform to the investment criteria of social profitability and consequently governmental support of the industry that yields external economies may then be advocated to correct the market mechanism. But before proceeding further, it might be appropriate to define what exactly we mean by external economies. 'Definitions of external economies are few and unsatisfactory. It is agreed that they mean services (and dis-services) rendered free (without compensation) by one producer to another. But there is no agreement on the nature and form of these services or for the reasons of their being free.'¹¹⁴ Scitovsky goes on to explore the possibility of giving the term a more concrete definition that will help in the understanding of the impact of external economies in the process of economic development. Our writer distinguishes between two concepts of external economies, one in the context of equilibrium theory analysis and the other in the context of the theory of industrialisation in the LDC's. In equilibrium theory, direct interdependence

114. Tibor Scitovsky, "Two Concepts of External Economies," Journal of Political Economy (April 1954).

among producers in the economy, in the sense that it is not operating via the market mechanism, is the cause for the conflict between private profit and social benefit; this direct interdependence means that external economies exist whenever the output of a firm (X_1) depends not only on the factors of production ($L_1, C_1 \dots$) utilised by the firm but also on the output (X_2) and factor utilisation ($L_2, C_2 \dots$) of another firm or group of firms. In symbols, we can say that $X_1 = F(L_1, C_1 \dots X_2, L_2, C_2 \dots)$ where the existence of external economies is indicated by the presence of variables to the right of the semi-colon. Since F is a production function, the external economies so defined are a peculiarity of the production function and for this reason, therefore, it is convenient to call them 'TECHNOLOGICAL EXTERNAL ECONOMIES'. These are the only external economies that can arise due to direct interdependence among producers and within the framework of the general equilibrium theory. On the other hand, in the theory of industrialisation, external economies are present whenever the profits of one producer are affected by the actions of other producers; this function is expressed as $P_1 = G(X_1, L_1, C_1 \dots X_2, L_2, C_2 \dots)$, which shows that the profits (P_1) of the firm depend not only on its own output and factor utilisation but also on the output and factor inputs of other firms. The external economies exist whenever the variables to the right of the semicolon are present. This definition of external economies obviously includes the direct or non-market interdependence among producers but it is much broader, in the sense that it includes,

in addition, interdependence among producers through the market mechanism. This is what, Scitovsky argues, can be called 'PECUNIARY EXTERNAL ECONOMIES'. Because these external economies reflect interdependence through the market mechanism, they have no place undoubtedly in equilibrium theory. Thus investment in an industry leads to an expansion of its capacity and may lower the prices of its products and raise the prices of the factors used by it; the lowering of the product prices benefits the users and the raising of factor prices benefits the suppliers of the factors; when these benefits accrue to firms, in the form of profits, they are pecuniary external economies. According to the theory of industrialisation, these benefits, being genuine benefits, should be explicitly taken into account when investment decisions are made, i.e. total benefits expected should include not only profits but the sum of profits yielded and the pecuniary external economies created by the investment.

Because the LDC's are mainly concerned with investment decisions and allocation of limited resources, this concept is assumed to be of the utmost importance because, it is argued, pecuniary external economies abound in such economies. We are back to the controversy that we have already discussed of the conflict between static and dynamic concepts. In this case the technological external economies represent the static version while the pecuniary external economies are within the dynamic approach. Thus market prices ruling at the time are bad indicators of 'potential profits' and the LDC's have to industrialise through protection so as to reap these dynamic external

economies which might result in achieving the hidden potential advantages.

The argument of external economies, as related to the LDC's, could be broadened to support general protection for industry by claiming that the profitability of any single industry is a function of the total number and diversity of industries in the economy. More generally, interindustry external economies may stem from the complementarity of industries on the side of costs, thus reinforcing the 'Balanced Growth' doctrine which stresses complementarity on the demand side. By supporting these interindustry relationships, protection to facilitate the growth of a range of industries or an entire industrial complex may then allow each industry to become profitable, whereas investment in each of the separate industries considered in isolation might be unprofitable. The same concept can be applied to the case of the 'Unbalanced Growth' doctrine clearly demonstrated by the 'linkage effects' referred to earlier.

It is to be noted at this juncture that, whatever the views of the original proponents of Balanced and Unbalanced Growth doctrines were, development policies in the LDC's seem generally to be geared to supporting general programmes of industrialisation via protection so as to overcome all the problems so far mentioned. The industry versus agriculture controversy has by now receded to the background and the choice between the two sectors as a launching pad for development

has been described as nothing but a 'false issue'.¹¹⁵ The current concern in the literature seems to be more and more with the inter-relationship between the two sectors and the contribution that each will make to the other. Emphasis on either will naturally depend on the structure and nature of each economy, on the resources available for development and on the phase of development reached in each LDC. 'Agriculture and industry need not be in conflict and that expansion of agriculture and emphasis on this sector should not necessarily indicate opposition to industrialisation.'¹¹⁶ Thus, in many cases, attempts to develop in the LDC's via industrialisation seem to be appealing; to put it differently, industrialisation seems to be the idée maitresse of development economists.

The industrialisation policies, suggested or actually pursued in the LDC's, generally imply nothing but import-substitution. Here, free traders would argue that import-substitution is a waste of scarce resources because goods are being produced at a higher cost than otherwise obtained via foreign trade, that import substitution in itself is no guarantee of cumulative growth beyond the point that imports have been replaced and that the problems involved in initiating or sustaining economic development might well be served through reaping the direct and indirect benefits of international specialisation. Protectionists would counter-argue by explaining that almost by

115. G.M. Meier, Leading Issues in Economic Development (Oxford U.P., 1970).

116. J. Bhagwati, The Economics of Underdeveloped Countries (World University Library, 1966).

definition LDC's are unlikely to be reaping the full gains from their 'potential' comparative advantage if market forces are left freely to operate, that if the LDC's do not exploit to the full their potential comparative advantage, not only their economies but the world as a whole will be poorer, that the case for protection does not deny the validity of the principle of comparative cost but rather argues that a better distribution of world output and resources might 'eventually' be secured if the LDC's are given the opportunity to develop industries in which possibly they possess a potential, but not as yet actual, comparative advantage. In fact, it is argued that the acceptable 'infant industry' argument could be extended, in the case of the LDC's, to cover the 'manufacturing sector'.

But can we expand the 'infant industry' argument to include the 'manufacturing sector' argument? Is it possible to find a sort of accommodation between the two? The prospects seem to be not very bright, and the following reasons have been put forward:-¹¹⁷

1. The 'manufacturing sector' in most LDC's typically consists of a collection of industries producing import substitute consumers' goods; the proposal to protect this sector as a whole amounts to selecting the industries for protection according to their CAPACITY to satisfy the existing pattern of domestic demand for manufactured consumers' goods. On the other hand, the 'infant industry' argument, however broadly interpreted, is concerned with an industry's CAPACITY to lower costs in the future through the process of learning by doing. The two concepts cannot be treated on the same level and we cannot, therefore, compare the criteria of efficiency embodied in the 'infant industry' argument with the 'balanced growth' type of industrialisation based on the enlargement of the market.

117. Myint, op. cit. (ref. 17).

2. The import-substitution approach is based on the principle of promoting economic growth through the DIVERSIFICATION of resources to cater for the domestic market. On the other hand, the infant-industry argument is based on the principle of SPECIALISATION and only differs from the free trade theory in that it allows the protected industry a period of learning to specialise according to its potential genuine advantage. The mere enlargement of the market is not sufficient to ensure that an industry will be able to lower its costs.

3. If the import-substitution industries of the LDC's were genuine cases to qualify under the infant-industry argument, they would not only be able to dispense with protection but would also ease the balance of payments situation on attaining maturity. The facts are that few countries, of those which embarked on a policy of import-substitution, have been able to reduce protection or to ease their balance of payments problems. Though here it is recognised that it is rather difficult to generalise in assessing how far the balance of payments difficulties of the LDC's were due to the wrong choice of industries or to some other macro-economic factor such as inflation, budget deficits, over-valued rates of exchange, excessively high level of urban wages and the like.

4. The old version of the infant-industry argument, as expounded by List, recommends that countries should embark on industrialisation only if they have achieved a level of 'advanced agriculture'. Few of the present LDC's can claim such a level.

Furthermore, it is claimed that in some of the LDC's, allocation of resources to social overhead capital may be more urgent and more important in the context of development than spending on import-substitution industries. Moreover, in some of the LDC's too, an increase in domestic agricultural production might offer a considerable scope for import substitution because a number of these countries do import large proportions of their food and raw materials requirements from abroad and do spend foreign exchange to secure them, thus aggravating their balance of payments difficulties. In other words, why concentrate only on industrial import substitution when the chances are indeed bright

for agricultural or primary import substitution in which these countries possess a comparative advantage or at least can produce at a lesser inefficiency relative to the former?

1.10. Capital accumulation

Finally, there are some arguments for protection, suggested in the literature, that concentrate on the need to increase investment. There is, for example, a certainly widespread notion that by cutting down imports of consumers' goods through direct controls or prohibitive duties, a country can make more real capital available for its economic development in the form of imports of capital goods. This 'luxury import restriction' idea is indeed very common in the LDC's and it appears simple: reduce your import bill by restricting the import of consumption articles and consequently the country's capacity to import capital goods urgently needed for economic development is automatically increased. In other words, economise on the use of foreign exchange in favour of capital accumulation. But the matter is not that simple. To examine the consequences of such policies, we have to answer the important question of what exactly will happen to that part of income which was spent on the goods now unavailable due to the government commercial policy.¹¹⁸ Firstly, if people save all that part of their income that used to leak out in the form of consumers' goods imports

118. Nurkse, op. cit. (ref. 31).

because they are unable to spend it anywhere else, the saving is real enough: the increase in the flow of investment goods imported due to the additional foreign exchange amounts made available will be matched by an increase in the flow of domestic income saved. In such a case, the increased imports of investment goods will represent a genuine addition to the rate of capital accumulation. Secondly, suppose that, instead, this part of the income is now spent on domestic consumers' goods and services, e.g. import restrictions lead not to a change in the volume of consumers' spending but to a complete switch in the flow of spending from imports to domestic commodities. Here, it is true that imports of investment goods can be increased, assuming export proceeds remain the same, and the country's foreign exchange account considered by itself seems to leave room now for more capital formation in the shape of imported equipment. But in terms of local currency, the purchase of such equipment is likely to require financing through domestic credit expansion. The result could be a disruption of monetary equilibrium — an inflicting pressure on money costs and prices. 'When the escape valve of consumable imports is shut off the pressure of the steam in the system increases; demand becomes excessive in relation to domestic supply and tends to push up the level of prices.'¹¹⁹ In addition, the increase in consumer spending in the home market will tend to bid the factors of production away from domestic investment and maintenance and will draw them into activities catering for current

119. Ibid.

consumption; domestic consumption is important because imported capital goods usually constitute only a part of capital formation in the LDC's and the greater part consists of things that cannot enter into international trade such as roads, buildings, land improvements and the like. Thus domestic capital production has to make room for the increased domestic consumer spending. Consequently, the increase in imported capital goods tends to be offset by reduced domestic investment activities, or actually by domestic disinvestment caused by failure to maintain and replace capital as it wears out. Thus there is no increase in total net capital formation. The effectiveness of protection as a means of increasing investment thus depends upon a complimentary domestic policy of mobilising additional saving. Even if import restrictions allow more imports of capital goods in place of consumption goods, it is ultimately an increase in voluntary or compulsory saving that makes for the net contribution to capital formation. It is, of course, realised that in the short run import restrictions may lead to a substantial consumption and investment postponement, and hence hoarding, but in the long run a country cannot do without an appropriate financial policy.¹²⁰

In connection with this argument, proponents of import controls frequently maintain that import restrictions will not reduce the total volume of imports but only alter their composition in favour of capital goods. But this assumes that protection has no adverse effects on

120. Ibid.

exports. Suppose that protection of import-competing industries did attract some resources away from the export industries; in that case, export production could be adversely affected. In addition, it has been often mentioned that in some LDC's the peasants may have the alternative of either remaining in the subsistence sector or producing cash crops for export, and that the incentive to engage in the latter often depends upon an aspiration to consume imported goods which usually are nothing but simple manufactured goods. In that case also, the denial of these 'incentive goods' may result in a reduction of production for export. Alternatively, if protection results in higher internal costs, this too could prejudice the country's competitive position in world markets.¹²¹

Let us conclude by stating another argument, often suggested, to support the case for protection. It has been alleged that protection might attract direct foreign investment and thereby increase capital formation in the protecting country. This has been based on the assumption that foreign investment, because of the ban on imports, would attempt to jump over the protective wall and so establish the so-called 'tariff factories'. The country involved can even encourage foreign investors by granting them, in addition to a protected market, other incentives such as facilities to acquire plots of land, or imported capital equipment, tax exemptions and the like. But, of course, the probable success of such a policy would depend on the

121. Meier, op. cit. (ref. 15).

relative attraction of the protected domestic market because, at least in the initial stages, the proposed factories would generally be geared to nothing but an objective of import substitution. In other words, the potential rate of returns on capital would decide whether or not foreign investors will be prepared to embark on such ventures.

1.11. End to begin

The promise has been fulfilled: an attempt has been made to present the differing views, expressed in the literature of development economics, on the subject of the possible effects of international trade on the economic growth of the less developed countries. The traditional analysis, which postulates that international trade has been, is, and shall always be beneficial to the growth of such economies, has been outlined. The main opposing arguments, that call for a different approach to handle the special problems of these countries, have been detailed. It might be appropriate at this juncture to mention three more points which deserve our attention.

Firstly, it could be argued that the realities of our contemporary world do not provide the suitable basis for the realisation of international specialisation as postulated by the traditional theory. Our world is full of imperfections. There is hardly any country today, in whatever level of development or type of economic system,

that does not impose some sort of restrictions on the movements of its foreign trade. Even the richest of nations are not immune from trade intervention, the most recent example being the so-called Mills trade bill in the United States attempting to restrict the import of textiles and shoes into that country. It could be argued, therefore, that because restrictive policies are adopted by the developed and the less developed countries alike, the policies of the latter cannot be evaluated and assessed in terms of the comparative cost doctrine without reference to the restrictive policies of the former. Besides, with the exception of Great Britain, there is hardly one of the so-called industrialised developed countries that has not transformed its economic structure and built its own factories without violating the law of comparative cost; protective policies in the history records of the development of these countries abound. In fact, even after achieving high levels of development and prosperity, most of these countries do not as yet feel sufficiently secure to dismantle completely their protective walls. In practical terms, it is indeed very difficult to persuade the LDC's to allow international market forces freely to transform their economic structures when the facts around them reveal that the richest of nations would not hesitate at all to protect any line of their production whenever it is in danger of being swamped by more competitive products from abroad, whether these originate in some other rich country or in a less developed country. But it is equally correct to argue that efforts should be mobilised to free our world from such imperfections so that international specialisation may prevail.

In this case, the structure of foreign trade would respond freely to the structural changes taking place in the internal economies of the developed countries (due to technological advance) and of the LDC's (due to efforts of transformation and capital investment). Onitiri, for example, has commented that 'the theory of comparative advantage, in a dynamic sense, will be relevant to trade policy only in so far as the structure of foreign trade is free to respond to changes in the structure of domestic production. To some extent the relatively slow growth in the exports of developing countries arises from the difficulty of transforming their export structure to reflect changing patterns of domestic production.'¹²² In fact, efforts to promote the case for free trade have been made and are still being made by the United Nations and its agencies, though the rewards have not so far been satisfactory. But, in the interim, how can the LDC's reconcile the aims of securing an optimum allocation of resources through free trade and of achieving the necessary structural transformation required to raise per capita incomes?

Secondly, the distinction between a 'free-trade' approach and a 'protectionist' approach does not seem to be correct. In this extreme form, these positions hardly exist except in the textbooks and in the elegant models so often presented in the learned journals. Protectionist arguments are not by definition anti-trade, nor do they postulate

122. H.M.A. Onitiri, "Comments on Professor Myint's Paper," in P. Samuelson (ed.), International Economic Relations (Macmillan, 1969).

an economic 'iron curtain' for the less developed countries. All they call for, whether correctly or not, is the pursuit of a degree of protection that would realise a so-called potential comparative advantage that may not be obtainable if free trade is left to function.

Thirdly, and very importantly, the so-called less developed countries are not in fact a homogeneous group. These countries differ in factor endowments, in levels of technological advance, in stages of economic development and in prospects of exportables. This is why it is basically wrong to postulate one policy, whether outward-looking or inward-looking, to embrace such a heterogeneous group of nations. To attempt to formulate such a policy is to attempt the impossible. There is, consequently, a need to analyse the 'special conditions' of each less developed economy before useful conclusions can be reached and sound policies drawn up to act as a guide along the path of economic development.

It is here that we shall end our theoretical analysis so as to begin the specific case of our study, viz.: How has international trade actually affected the economic growth of the Democratic Republic of the Sudan?

CHAPTER TWO

Chapter Two

THE CASE OF THE SUDAN

2. Introduction

Before proceeding to examine the performance of the foreign trade of the Democratic Republic of the Sudan (DRS), it might be appropriate to outline, very briefly, the basic features of the economy.

In terms of area, the DRS is the largest country in Africa, extending over one million square miles. With a population estimated at 15.5 millions in 1970,¹²³ the country has an average density of only 15 persons per square mile. However, when the unproductive parts of the country are excluded,¹²⁴ the effective density becomes, of course, a little higher; but, nevertheless the figures indicate clearly that the country does not have the overpopulation problem experienced in some of the LDC's, in particular those in Asia.

123. Five Years Plan of Economic and Social Development of the Democratic Republic of the Sudan for 1970/71-1974/75, Volume II, Part I (Ministry of Planning, Khartoum, 1970).

124. One third of the area consists of unproductive barren desert. See, for example, O. Osman and A.A. Suleiman, "The Economy of Sudan," in P. Robson and D.A. Lury, The Economies of Africa (George Allen & Unwin Ltd., 1969).

The economy is basically agricultural and pastoral. It is estimated that 13.7 millions, or about 88 per cent of the total population, live in the rural areas and that over 85 per cent of the labour force are employed in primary activities.¹²⁵ In other words, the bulk of the population have their income or are members of families whose main source of income is from some phase of agriculture. Agriculture is taken here to include crop production, animal husbandry, forestry and fishing. These activities contribute about 54.3 per cent of the gross domestic product¹²⁶ and provide virtually all the country's export earnings. This degree of dependence on agriculture can be considered high even in comparison with other LDC's. For example, a study made by the UNCTAD secretariat, which covered 109 developing countries, shows that only five countries have a higher degree of dependence on agriculture than the DRS.¹²⁷

The Sudanese agricultural sector is usually classified

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125. Five Years Plan (ref. 123).
126. Review of International Trade and Development, 1969/70, Part One, document TD/B/309 (UNCTAD, 7th August, 1970).
127. Ibid. The five countries, with percentages of the share of agriculture in their gross domestic products, are: Ethiopia (63.7), Uganda (57.7), Malawi (55.8), Nigeria (55.6) and Upper Volta (54.7).

into three different sub-sectors according to the method of watering employed, i.e. irrigated, flood and rain-fed agriculture. The irrigated agriculture represents the most developed part of the country's cultivable land with the highest productivity and which possesses the most modern capital equipment. Its share in the country's investment programmes for the agricultural sector is the largest. Although the irrigated area represents a small part of the total land cultivated each year, it enjoys a relatively much greater stability in size and average yield as well as volume of output. It produces almost all the extra-long-staple cotton for which the country is famous and accounts for 75 per cent of the total cotton exports. This sub-sector includes the Gezira scheme, usually described as the largest scheme under one management in the world. A lot has, of course, been written on Gezira,¹²⁸ but it might be in order to mention in passing that it involves a tripartite partnership between the government, the farmers and the management invested in a public board. The area utilised in the scheme, including its Managil

128. See, for example, A. Gaitskell, Gezira: A Story of Development in the Sudan (Faber and Faber, London, 1959), and Development of Agriculture and Organisational Planning in the Main Gezira Area, final report of the working party, Ministry of Agriculture (Khartoum, 1966).

extension, covers nearly two million feddans¹²⁹ and is irrigated from the Sennar dam on the Blue Nile. Cotton is mainly grown in the scheme under a system of crop rotation which also includes groundnuts, wheat and dura (sorghum). In addition to Gezira, the fertile central plain situated between the Blue Nile and the White Nile also includes a number of irrigated pump schemes, previously privately-owned but now nationalised. These schemes produce chiefly cotton and comprise an area of about one million feddans. Several pump schemes are also found in the northern province which cultivate mostly food crops. A relatively recent addition to the irrigated sub-sector is the Khashm el Girba scheme where a little over 400,000 feddans are now being irrigated from the newly-constructed dam on the Atbara river in the eastern part of the country. The crops cultivated at Khashm el Girba include cotton, wheat and groundnuts.

On the other hand, flood agriculture is undertaken in areas watered annually by the flood of the Nile and its tributaries. This type of agriculture is mostly practised in the eastern part of the country where the flooded plains of Gash and Tokar deltas are irrigated by seasonal streams. In addition to cotton, various food crops are grown in this sub-sector. However, flood agriculture is liable to wide

129. One feddan = 1.038 acres.

fluctuations in area as clearly shown in Table I below.

TABLE I: TOTAL AREA OF MAIN CROPS BY TYPES OF IRRIGATION IN THE DRS: 1955/56-1969/70

Crop Year.	Irrigation*	Rain*	Flood*	Total*
1955/56	628,815	4,648,403	68,175	5,345,393
1956/57	724,708	4,834,103	262,168	5,820,979
1957/58	739,554	4,575,668	106,157	5,421,379
1958/59	891,708	5,364,860	203,233	6,459,801
1959/60	998,477	5,355,270	192,509	6,546,256
1960/61	1,139,029	5,003,809	139,691	6,282,529
1961/62	1,242,386	5,500,090	266,113	7,008,589
1962/63	1,242,225	5,980,230	110,846	7,333,301
1963/64	1,295,983	6,567,160	125,645	7,988,788
1964/65	1,414,002	6,224,819	190,106	7,828,927
1965/66	1,478,433	6,256,896	72,773	7,808,102
1966/67	1,635,759	6,038,945	91,616	7,766,320
1967/68	1,651,825	7,870,590	223,814	9,746,229
1968/69	1,706,837	6,000,126	93,897	7,800,860
1969/70**	1,786,997	7,882,311	151,431	9,820,739

Source: Economic Survey, 1969 (Ministry of Planning, Khartoum, December 1970).

* areas in feddans.

** tentative.

Rain-fed agriculture is practised throughout the country, excluding the part stretching from north of Khartoum to the Egyptian border. The modern techniques of production employed in the irrigated areas are perhaps completely absent in this agricultural sub-sector where traditional methods are still being used; but, recently, mechanisation

has been introduced particularly in the Gedaref area in the east and in Dali/Mazmum scheme in the central Blue Nile province. The main crops produced are foodstuffs (especially sorghum) and oilseeds. Recently, the production of short-staple cotton has also been spreading. However, the total output of this sub-sector depends heavily on the availability of rains.

On the whole, although the arable land available is estimated to be about 100 million feddans,¹³⁰ only slightly over 7 million feddans are being cropped each year on the average. Still a lower figure represents the irrigated area under cultivation (see Table I). In addition to this vast agricultural potential yet to be utilised, the country possesses a considerable animal wealth the bulk of which is still economically under-used. Thus, one can argue that the country's agricultural potentials provide enormous opportunities for further expansion and development. Indeed it has been suggested that the DRS is 'the only country in the middle east which due to availability of such potentialities can be self-sufficient in foodstuffs and raw materials as well as export them on ever larger scale to international markets'.¹³¹

130. The Ten Year Plan of Economic and Social Development, 1961/62-1970/71 (Ministry of Finance and Economics, 1962).

131. Five Years Plan of Economic and Social Development of the Democratic Republic of the Sudan for 1970/71-1974/75, Vol. I (Ministry of Planning, Khartoum, 1970).

The manufacturing sector is still very small, though in recent years it has been expanding very rapidly and a number of industries have been established, mainly engaged in the processing of agricultural products or the production of consumers' goods. The output of this sector includes shoes, textiles, clothing, sweets, food canning, leather tanning, sugar, vegetable oils, cement, etc. With the exception of vegetable oils, part of which is available for export, all existing industries cater for the domestic market. However, despite the rapid expansion of the manufacturing sector, its share in the country's gross domestic product is still very small, about 5.6 per cent,¹³² and the country still depends to a large extent on imports to meet its requirements of most consumers' goods as well as all capital goods needed for economic development.

Mineral production is still very insignificant. Although exploratory surveys have indicated the presence of possible commercial quantities of iron-ore, copper, manganese and other minerals, their exploitation has been prevented by several obstacles, notably high transportation costs. As things stand today, mining still plays a negligible part in the economy.

132. UNCTAD, ~~op.cit.~~ (ref. 126).

For planning purposes, the Sudanese authorities usually divide the economy into a traditional and a modern sector. The latter includes all the activities employing modern techniques and capital equipment; besides all the modern industrial plants, this sector includes all the irrigated and mechanised areas of cultivation and obviously all the production of extra-long-staple cotton. On the other hand, the former sector still employs traditional techniques of production and is characterised by low productivity and absence of modern capital and organisational methods. It is estimated that about 60 per cent of the rural population are employed in the traditional sector, the balance being in the modern sector.¹³³ However, this traditional concept should not be confused with the usual subsistence definition. The so-called traditional sector in the DRS is far from stagnant and does produce important cash crops, e.g. gum arabic and oilseeds, for export as well as large quantities of dura, the principal staple food of the population. Although some of the communities within this sector do live in a typically subsistence stage, the sector as a whole, though

133. A. Mirghani, "Problems of Increasing Agricultural Productivity in the Traditional Sector", in D.J. Shaw (ed.), Agricultural Development in the Sudan (Papers for the Thirteenth Annual Conference of the Philosophical Society of the Sudan in conjunction with the Sudan Agricultural Society, Khartoum, 1966), Vol. II.

using traditional techniques, is contributing an appreciable share of the country's gross domestic product. However, one of the objectives of the 'Ten-Years Plan', launched in 1961/62, aimed at reducing the share of the traditional sector in the country's total product in favour of the expansion of the relatively more productive modern sector. It stipulates 'the strengthening of the economy and the broadening of its structure by increasing the national income at a greater rate than the rate of population growth to achieve a continuous and substantial increase in the average per capita income, by removing the barriers which prevent traditional communities from participating in the modern sector; and by increasing, diversifying and improving the agricultural production'.¹³⁴

Table II below gives rough estimates of the share of both sectors in the gross domestic product of the country. These figures 'may not be completely reliable',¹³⁵ but they are the only figures available to indicate the relative importance of either of the two sectors. However, all series of national accounts are being revised at the moment

134. The Ten Years Plan (ref. 130).

135. Economic Survey, 1967 (Ministry of Finance and Economics, Khartoum, August, 1968).

with the help of a United Nations expert and are to be published in the near future. According to the figures, the gross domestic product has been increasing at an annual average rate of growth of 4.1 per cent during the period 1960/61-1967/68. It has further been estimated that, during the last five years, the gross domestic product has increased from L.S.448.2 millions in 1964/65 to L.S.564 millions in 1969/70, both figures being at 1967/68 prices, i.e. at an annual average rate of growth of 4.7 per cent.¹³⁶ With an estimated population growth of 2.8 per cent per annum, per capita income was increasing by only 1.3 per cent per annum during the period 1960/61-1967/68. However, in 1969/70, the per capita income has been estimated at about L.S.36.4 (or £43.55p), a very low figure even when compared with some other LDC's.

It is to be noted that the share of the traditional sector in the total gross domestic product fell from 51.5 per cent in 1960/61 to about 49 per cent in 1967/68. A detailed breakdown of activities in this sector is not available but it is assumed that over 70 per cent of its output is agricultural. The figures for the traditional sector are based on the assumption of an annual rate of

136. Five Years Plan, Vol. I (ref. 131).

TABLE II: GROSS DOMESTIC PRODUCT AT FACTOR COST (IN L.S. MILLIONS)
(constant 1964-65 prices)

	1960/61	1961/62	1962/63	1963/64	1964/65	1965/66	1966/67	1967/68
Modern Sector	177.9	221.6	214.5	214.0	224.0	229.4	228.5	250.4
Traditional Sector	191.6	197.7	204.2	211.1	218.2	225.4	232.8	240.5
Total GDP	369.5	419.3	418.7	425.1	442.2	454.8	461.3	490.9
GDP per capita*	31.0	34.2	33.2	32.8	33.2	33.1	32.7	33.8

Source: Economic Survey, 1967 (Ministry of Finance and Economics, Khartoum, August 1968)
* in Sudanese pounds. 137

137. One pound sterling is equal to 83.58 piastres.

growth of 3.3 per cent on the average. The rate of growth of the modern sector has been higher, i.e. 5 per cent per annum during the period reviewed in Table II above. This sector is also dominated by agriculture which contributes about a third of its total product. Table III below shows the relative share of the different activities in the modern sector of the economy.

Another important feature of the Sudanese economy is the dominant role of the government in providing the investment funds needed for economic expansion. This fact is well manifested by the figures shown in Table IV below. Out of a total investment of L.S. 309.2 millions during the period examined, the public sector provided L.S. 219.2 millions, or about 71 per cent. It could be argued that the exceptionally high share of the public sector was due to the abnormal period examined. This period represents the first five years of the "Ten Years Plan" when government activity was very high, in particular during the first three years of the Plan. However, this fact does in no way minimise the important role of public investment in the development effort which usually accounts for over half the capital formation.

A coup d'oeil at the pattern of public investment would reveal the special importance attached to economic

TABLE III: PERCENTAGE COMPOSITION OF THE MODERN SECTOR

	1960/61	1961/62	1962/63	1963/64	1964/65	1965/66	1966/67	1967/68
Agriculture	30.2	38.4	30.2	24.2	31.6	32.1	31.5	33.6
Transport, distribution and banking ..	33.1	29.6	32.6	34.8	29.6	29.3	29.5	30.3
Industries	11.8	8.9	11.9	15.2	11.4	11.6	11.8	10.9
Administration and social services	17.9	17.3	19.1	19.6	21.3	21.0	21.1	19.5
Other services	7.0	5.8	6.2	6.2	6.1	6.0	6.1	5.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Economic Survey, 1967 (Ministry of Finance and Economics, Khartoum, August 1968)

TABLE IV: GROSS FIXED INVESTMENT
(IN L.S. MILLIONS)

Year	Private Sector	Public Sector	Total
1961/62	22.1	40.5	62.6
1962/63	17.8	47.7	65.5
1963/64	22.3	58.7	81.0
1964/65	15.8	35.9	51.7
1965/66	12.0	36.4	48.4
	90.0	219.2	309.2

Source: Ninth Annual Report, 1968
(Bank of Sudan, Khartoum, March, 1969).

infrastructure in the development strategy, particularly with regard to agriculture. Apart from investment in transport and other public utilities and social services, the government plays a dominant role in the extension of irrigated agriculture through the construction of dams, canals and the provision of assistance to mechanised schemes. Table V shows that the agricultural sector claimed 36 per cent and 34.8 per cent of the public outlays during the periods 1961/62-1965/66 and 1965/66-1969/70 respectively. Transport and communications, as well as social services, also claimed high shares of the government investment programmes.

In fact the central projects of the 'Ten-Years Plan'

TABLE V: PERCENTAGE DISTRIBUTION OF PUBLIC INVESTMENT OVER SECTORS

	1961/62- 1965/66	1965/66- 1969/70	Five-Years Plan for 1970/71-1974/75
Agriculture	36	34.8	38.3
Industry	9	6.4	13.2
Power	4	9.0	6.4
Transport and communications..	21	17.6	14.8
Social services and others	30	32.2	27.3
Total	100	100	100

- Sources: a) Ninth Annual Report, 1968 (Bank of Sudan, Khartoum, March, 1969).
 b) Five Years Plan of Economic and Social Development of the Democratic Republic of the Sudan for 1970/71-1974/75, Volume I (Ministry of Planning, Khartoum, 1970).

included the extension of the irrigated area at Gezira as well as the construction of two new dams. Firstly, the Managil extension, already completed, added 800,000 feddans to Gezira for permanent irrigation. Secondly, the Khashm el Girba dam, constructed on the Atbara river in the eastern part of the country and completed in 1966, has made possible the development of about 600,000 feddans of new land. By

1970, 454,000 feddans of that area had been actually developed.¹³⁸ Over 40,000 people from the northern Halfa area, whose lands were flooded by the reservoir behind the Aswan High Dam, have been resettled in this new area. Thirdly, the Roseiris dam on the Blue Nile, the most important project of the Plan, was completed in 1966. This project is designed to make possible the extension of the Gezira area, intensification of cropping in the Gezira scheme and the development of new schemes in the central plains between the two Niles. Its projected capacity is designed to irrigate 3,827,000 feddans.¹³⁹ However, the Roseiris project has not yet been completed though the construction of the dam, costing about L.S. 38 millions¹⁴⁰, was finished four years ago. The actual work on the irrigation system started only in 1970.

Nor will the pattern of investment change much during the period of the current five-year plan where 38.3 per cent of the total outlay of public investment has been earmarked for agricultural development. Of a projected investment of L.S.200 millions for the public sector during the plan period, L.S.76.63 millions have been allotted to

138. The Five Years Plan, Volume I (ref. 131).

139. Ibid.

140. Ibid.

agricultural development, designed to increase output through the increased productivity of existing schemes as well as the construction of an irrigation system to develop new lands to make use of the Roseiris dam.¹⁴¹

A basic feature of the pattern of agricultural production in the DRS is, of course, the dominance of a single crop, i.e. cotton. In fact this crop has been the mainstay of the economy since the establishment of the Gezira scheme in 1925. Cotton and cottonseed account regularly for over half of the country's exports as well as for 'one-fifth of the income generated within the economy'.¹⁴² Moreover, it has been estimated that cotton provides directly or indirectly some 40 per cent of the government revenue.¹⁴³ Thus any variations in the average yields of cotton per feddan or in its world prices would undoubtedly subject the whole economy to considerable instability. In addition to the fact that the dependence on a single crop could cause severe fluctuations in the incomes of the producers and the country's foreign exchange earnings, it has been suggested that prosperity of the cotton sector is the 'major determinant of all business activity',¹⁴⁴ in the DRS.

141. Ibid.

142. The Ten Years Plan (ref. 130).

143. Ibid.

144. Osman and Suleiman, op.cit. (ref. 124).

However, the predominance of agriculture does not mean that the successive economic plans have ignored industrialisation. In fact, during the 'Ten Years Plan', 9 per cent and 6.4 per cent, in 1961/62-1965/66 and 1965/66-1969/70 respectively, were devoted to the 'establishment of industries that help to substitute imports'.¹⁴⁵ In addition, it must be mentioned that most of the expansion in the industrial sector has been initiated by the private sector. We shall be discussing details of the industrialisation effort later in this chapter; but what is to be noted here is the relatively higher share of public investment devoted to this sector in the current 'Five Year Plan', i.e. 13.2 per cent. In addition, 14.1 per cent of the L.S. 170 millions tentatively earmarked for the private sector's investment during the plan period is devoted to the industrial sector.¹⁴⁶

To summarise, we have so far noted that the Sudanese economy is not only dominated by agricultural and primary activities but that its modern sector, the potential initiator of economic growth, is governed by the performance of a single crop, i.e. cotton. A large share of this primary production is still being carried out in the traditional sector characterised by low productivity, though it

145. The Ten Years Plan (ref. 130).

146. The Five Years Plan, Volume I (ref. 131).

seems the relative share of this sector in the total national product is declining. Although the country does not suffer from an overpopulation problem, relative to its available land and resources, the per capita income is very low. This low per capita income is, of course, a reflection of the low productivity of the agricultural sector as a whole. The low productivity is due to the lack of capital, which in turn is due to the small capacity to save, a reflection of the low per capita income. So Nurkse's 'vicious circle' is complete.¹⁴⁷ Consequently, we have noted the government's special role in providing the required expansion investments, in particular those related to infrastructure. Because the industrial sector is relatively small, the country has to rely on the international markets not only for capital goods but, in addition, for a large variety of manufactured consumers' goods. Needless to mention, the country's foreign exchange earnings depend on the export of primary commodities.

After this brief survey of the main features of the Sudanese economy, we shall proceed to discuss in more detail the subject theme of our study. We shall devote the rest of the chapter to an analysis of the performance

147. R. Nurkse, Problems of Capital Formation in Underdeveloped Countries (see above, Chapter One, section 1.5).

of the Sudan's foreign trade and its impact on the country's development effort. Our period of study will cover the first fourteen years of the country's independence, i.e. 1956-69. But, first, what is the importance of foreign trade in the context of the Sudanese economy?

2.1. The importance of foreign trade

The relative importance of a country's foreign trade sector is usually measured by the share of export production in the total national product. The higher the share of exports, the greater is the degree of the country's dependence on the international market. Consequently, it has often been contended that the majority of the LDC's are more dependent on the foreign trade sector due to the fact that the ratio of exports to their national products is high. This contention cannot, of course, be taken as a general rule because in a developing country like India, for instance, the export sector does not claim more than 4 per cent of the total national product.¹⁴⁸ However, the UNCTAD secretariat relates the size of the exporting sector to the absolute size of the population of the individual LDC and argues that the data collected for a number of

148. UNCTAD (ref. 126).

countries show that there is a 'tendency' for smaller countries (with population under 20 millions) to have a median value of exports equal to 20 per cent of the gross national product.¹⁴⁹

Table VI gives the relative importance of exports in eighteen countries in North Africa and the region neighbouring the DRS. All these countries, except the United Arab Republic, fall within the UNCTAD's definition of smaller economies. It is evident that the importance of the export sector in the Sudanese economy is relatively less than all the countries examined except Kenya, Chad, U.A.R. and Ethiopia. Excluding the U.A.R. on reasons of size, only three countries show less dependence on exports than the DRS. The ratio of 14.9 per cent recorded for the DRS is not only less than the 20 per cent contemplated by the UNCTAD but deviates considerably from the African average of 21.5 per cent.

But it can be argued that the share of exports to the total national product does not necessarily give a clear picture of the degree of the country's dependence on foreign trade. This is so because, as mentioned earlier, the Sudanese economy consists of a traditional and a modern sector, the latter being the more progressive and dynamic of

149. Ibid.

TABLE VI: EXPORTS AS PERCENTAGE OF GNP (1968)

Country	% share of exports
Saudi Arabia	88.4
Libya	63.3
South Yemen	59.5
Zambia	57.5
Congo (Kinshasa)	38.0
Congo (Brassa)	28.2
Uganda	25.0
Tanzania	24.1
Algeria	22.6
Central African Republic	18.0
Somalia	17.6
Tunisia	15.1
Morocco	15.1
Sudan	14.9
Kenya	13.7
United Arab Republic	10.8
Chad	10.4
Ethiopia	6.9
Africa	21.5

Source: Review of International Trade and Development 1969/70, UNCTAD document TD/B/309 (7th August, 1970).

the two on whose expansion and prosperity the whole development effort of the country is based. Thus, it could be suggested that the importance of foreign trade should be analysed in terms of its share in the total product of the 'modern sector', the prime mover in the economy. Consequently, the degree of the country's dependence on foreign

trade would be more pronounced when we take into consideration the fact that this sector has become the most important cornerstone of the dynamic modern part of the Sudanese economy. It has, for instance, been suggested that roughly one-third of the output of the 'modern' part of the economy is being marketed abroad, that on the average its consumption consists of approximately one-fifth of imported consumers' goods, its imports of raw materials equal 8 per cent or more of the total value of its share in the national product and that the value of its imports of capital goods and building materials account for almost half of its investment.¹⁵⁰ These are, on the whole, approximate calculations but the argument could be reinforced further when we note that almost all the cotton output, on which the whole economic activity depends, is in fact produced solely for the international market. Local consumption of cotton has only started very recently and, in any case, the existing two factories consume small quantities of the short-staple variety, chiefly rain-fed cultivated, as distinct from the fine long-staple variety which constitutes the bulk of the country's production. In fact, the whole structure of the 'modern' sector is geared to foreign trade. This is

150. The Ten Year Plan (ref. 130).

not to deny that the 'traditional' sector, at least the monetised part of it, has some relation with the international market. In fact, 100 per cent of the gum arabic produced in this sector, as well as a major share of the output of oilseeds, finds its way to overseas users.

In addition, we must remember that it is the country's exports which provide the chief source of its foreign exchange earnings. These earnings are not only needed to finance capital goods for further development and expansion but are also required to acquire a wide range of consumers' goods which the domestic economy is unable to supply, including some foodstuffs. Consequently, we can argue that foreign trade is a basic element in any development drive in the DRS. Development means the capacity to import, which is a function of the availability of foreign exchange which, excluding the unpredictable variable of foreign aid and grants, is determined by the country's own ability to export.

Another aspect to be considered is the high degree of dependence of the Sudanese government's current revenue on the foreign trade sector. Table VII shows that indirect taxation, as a whole, accounts for between 56 and 71 per cent of the government revenue. Import duties and export royalties alone account for between 30 and 45 per cent of

TABLE VII: PERCENTAGE SHARE OF VARIOUS SOURCES OF THE CENTRAL GOVERNMENT REVENUE

Financial Year	Indirect Taxation			Direct Taxation	Other Sources*	Grand Total
	Import & export duties	Sugar monopoly	Others			
1959/60	-	-	-	2.8	38.5	100
1960/61	-	-	-	2.0	38.0	100
1961/62	42.7	2.6	14.4	3.3	37.0	100
1962/63	40.1	2.0	14.4	3.0	40.5	100
1963/64	45.6	0.7	14.6	4.5	34.6	100
1964/65	43.9	15.6	7.3	5.4	27.8	100
1965/66	43.6	18.5	9.6	5.7	22.6	100
1966/67	36.9	19.4	12.9	5.5	25.3	100
1967/68	36.3	18.4	14.0	5.8	25.5	100
1968/69**	38.8	17.0	12.0	6.0	25.9	100
1969/70***	30.1	12.0	14.4	12.3	31.2	100

Sources:- various Economic Surveys published by the Ministry of Finance and Economics, Khartoum, during 1960-67.

- Economic Survey 1969 (Ministry of Planning, Khartoum, December 1970)

* Other sources include proprietary receipts, fees and charges, interdepartmental services, pension contributions, etc.

** Provisional actual.

*** Budget.

the government's annual income. This share becomes much higher when the sugar monopoly is added.¹⁵¹ Nor is the degree of dependence likely to be changed as a result of the current 'Five Years Plan': at the end of the plan period, i.e. the financial year 1974/75, indirect taxation is expected to supply 65.6 per cent of the government's revenue despite the fact that direct taxation is programmed to contribute the unprecedented share of 13.9 per cent of the total government earnings. Within the indirect taxation category, import and export duties alone would contribute about 39 per cent and sugar monopoly about 13 per cent of the total budget.¹⁵²

Besides the fact that the government is the main investor, let us note that it is the surplus of its revenue over its current expenditure that really determines how far the development projects can be carried out. Excluding foreign borrowing and deficit financing, the government has to depend on its own resources to finance development. These resources, as we have seen, are a function of the performance of the country's foreign trade. Thus, it could be argued that the financing of development, as well as the

151. Import, as well as domestic production, of sugar is a government monopoly in the Sudan.

152. The Five Years Plan, Volume II (ref. 123).

social services, depends to a large extent on the country's foreign trade sector.

With the importance of foreign trade having been established, let us proceed to discuss directly how this sector actually performed.

2.2. Exports

A basic feature of the Sudanese exports is that they consist almost entirely of agricultural primary commodities. Not only is the country's export trade dominated by a single crop, i.e. cotton, but the bulk of its foreign exchange earnings depend entirely on the performance of four commodities, i.e. gum arabic, groundnuts and sesame in addition to cotton. The general pattern of exports is clearly shown in Table VIII below. During the period under review, cotton and cottonseed together accounted for between 48.9 per cent and 71 per cent of the total export earnings. When adding groundnuts, sesame and gum arabic to these figures, the total share of the four commodities accounted for between 79.6 per cent and 91.8 per cent of the country's total exports. Nor could we expect a drastic change in this pattern at the end of the current development plan: in 1975, export projections show that cotton alone is expected to yield 58.3 per cent of total export earnings. Perhaps the

TABLE VIII: PERCENTAGE SHARE OF PRINCIPAL COMMODITIES IN THE TOTAL EXPORT VALUES

	1956	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	Average 1960-69	Plan 1975
Cotton	63.8	62.3	50.1	54.8	58.3	47.6	46.2	49.5	54.8	60.2	60.0	54.2	58.3
Cottonseed	7.2	4.4	5.8	6.9	4.9	1.8	2.7	1.9	0.8	2.4	2.7	3.0	-
Gum arabic	8.2	11.0	9.9	5.8	7.2	9.9	11.1	10.2	11.2	10.3	10.0	9.6	5.1
Sesame	3.1	7.2	6.7	7.1	6.1	9.4	7.0	8.0	8.8	7.8	8.4	7.6	5.4
Groundnuts.....	5.8	6.9	8.6	8.4	8.1	13.4	12.6	10.3	8.7	6.7	5.8	8.9	6.6
Oilcakes		2.2	3.1	3.1	4.4	5.7	6.6	6.3	4.4	3.2	3.5	4.0	4.9
Hides and skins	1.6	1.6	1.8	1.2	1.6	1.4	1.8	2.3	1.9	1.8	2.2	1.7	1.3
Others	10.3	14.4	14.0	12.7	9.4	10.8	13.0	11.5	9.4	7.6	7.4	11.0	18.4
T o t a l s	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Sources:- Economic Survey, 1960 (Ministry of Finance and Economics, Khartoum).

- Tenth Annual Report (Bank of Sudan, Khartoum, March 1970).

- Five Years Plan of Economic and Social Development, Vol. II, Part I (Ministry of Planning, 1970).

only change appears to be the disappearance of cottonseed from the export list in favour of cottonseed oil as a result of the planned increase in the crushing capacity of the oil industry. However, it should be noted that the four main commodities, i.e. cotton, gum arabic, groundnuts and sesame, would still account for 75.4 per cent of total export earnings in 1975 as compared with an average of 83.3 per cent during the 1960s. The chief objective of the current plan seems to be the increase of export proceeds, both in absolute and relative terms, of the animal sub-sector: exports of cattle are, for example, programmed to account for 5.9 per cent of the total export earnings of the country in 1975 as compared with an estimated share of only 2.6 per cent in 1970.¹⁵³ The share of meat exports is hoped to rise from a mere 0.2 per cent in 1970 to 3.6 per cent by 1975.¹⁵⁴ Nevertheless, it seems appropriate to assume that the country would depend for a considerable time on the export of these few primary commodities. Thus we have here a classical example of a developing country whose ability to export, and consequently its capacity to import, lies entirely within the range of primary production.

153. The Five Years Plan, Volume II. From an estimated export value of L.S.2,760,000 in 1970, cattle sales abroad are planned to yield L.S.10,660,000 in 1975.

154. Ibid. Value of meat exports is planned to rise from an estimated L.S.200,000 only in 1970 to L.S.6,600,000 in 1975.

But, of course, we have been warned that dependence on such primary activities is both harmful and retarding to the process of economic growth. This pattern of trade, we have been told, is bound to place the country concerned in a very risky and unfavourable situation. In the first place, it is often alleged, primary commodities face a slow-growing demand in world markets, much slower than the desired rate of growth of imports needed to sustain development in the economies exporting such products. That is why, it is often contended, primary producing countries are bound to face a 'trade gap' prejudicing their whole effort of structural transformation. In the second place, because of the observed supply and demand price inelasticities for most primary products, coupled with the susceptibility of these demands and supplies to short-term variations, the economies of such primary producing countries are liable to experience severe fluctuations in their export earnings, resulting in swings and variations in the incomes of their individual producers as well as the foreign exchange earnings; both, it is assumed, constitute a serious impediment to economic growth.¹⁵⁵

But what is the experience of the DRS? Have these

155. For details of these contentions, please see Chapter One, in particular sections 1.5, 1.6, 1.7 and 1.8.

contentions been vindicated? In Table IX below, an attempt has been made to measure the average annual rates of growth of both imports and exports since 1939. In both the

TABLE IX: AVERAGE ANNUAL RATES OF GROWTH OF SUDANESE EXPORTS AND IMPORTS

	1939-49	1949-59	1959-69	1960-64	1965-69
Exports	17	9.3	2.6	2	6.1
Imports	15	9.1	4.9	10.6	6.4

Source: The above rates of growth have been calculated on the basis of figures collected from:

- (1) Annual Foreign Trade Report, 1962 (Department of Statistics, Khartoum);
- (2) Foreign Trade Statistics for 1963-1969, issued by the Department of Statistics, Khartoum.

decades 1939-49 and 1949-59, exports were growing at a faster rate than imports, though the gap is more pronounced in the former than the latter. The exceptionally high rates of growth in the period 1939-49 could, of course, be explained by the fact that both exports and imports basically started from very small beginnings; in addition, the immediate post-war boom enjoyed by primary commodities could

probably be considered an influencing factor. The value of Sudanese exports increased from only L.S.5.7 millions in 1939 to L.S.27.4 millions in 1949; while import spending rose from a mere L.S.5.9 millions to L.S.23.9 millions in the two years respectively. It could also be argued that the second period examined in the table, i.e. 1949-59, was somewhat distorted by the Korean boom when exports rose to L.S.62.8 millions in 1951; in other words, more than twice the level attained in 1949. Furthermore, it should be realised that 1959 was an exceptional year: although the cotton crop was more than doubled that season compared with the previous one, mainly due to the cultivation of the first phase of the Managil extension in Gezira, the country succeeded in selling not only this relatively huge output, but also all stocks accumulated in previous seasons.¹⁵⁶ It was the year when the country managed to carry no stocks of cotton over to the next, a feat that has not as yet been repeated. Besides, it could be argued that, though some annual programmes of expansion were carried out during the period, the country's real development effort had not as yet gained momentum; the first programmed effort to transform the Sudanese economic structure in a systematic overall

156. Economic Survey, 1959 (Ministry of Finance and Economics, Khartoum).

integrated way actually began in 1961 with the launching of the first plan of social and economic development. That is why the growth rates given in the table for the third decade, 1959-69, would be of particular interest.

Here we have a completely different picture: while exports increased at the comparatively slow average rate of 2.6 per cent per annum, imports grew at the relatively faster average rate of 4.9 per cent per annum. In absolute terms, export earnings increased from L.S. 66.8 millions in 1959 to L.S. 92.5 millions in 1969; while imports rose from L.S. 57.1 millions to L.S. 92 millions in the two years respectively. Thus the relative slackness in the growth of exports appeared at a time when a reasonable increase in foreign exchange earnings is mostly needed as the country inaugurated its new phase of economic planning. However, this general pattern of growth for the decade as a whole does conceal marked variations in the performance of the foreign trade sector. If we consider, for example, the first five years of the 1960s, i.e. 1960-64, we find that exports increased at an average rate of only 2 per cent per annum; on the other hand, imports increased by the relatively higher average rate of 10.6 per cent per annum. This period, of course, covers the first three years of the 'Ten Years Plan' which witnessed very high rates of

investment and expansionary activities in the economy, resulting obviously in increased demands for imports. Consequently imports increased from L.S.63.7 millions in 1960 to L.S.82.9 millions in 1961, i.e. an increase of about 30 per cent; they further increased to L.S.99.2 millions in 1962 and settled at L.S.95.5 millions in 1964, both being record levels. On the other hand, during the last five years of the 1960s, i.e. 1965-69, the gap between the growth rates of imports and exports narrowed, though the former were still higher than the latter. During this period, exports increased from L.S.67.9 millions in 1965 to L.S.86.2 millions in 1969, i.e. at a comparatively higher average rate of growth of 6.1 per cent per annum. This has been mainly due to a marked improvement in the demand for the country's export commodities in the international markets resulting in a continuous increase in the volume of Sudanese sales abroad. Imports during the period increased from L.S.72.2 millions in 1965 to L.S.92.5 millions in 1969, i.e. at an average rate of growth of 6.4 per cent per annum which is slower than the one prevailing in the preceding five years but still faster than that of exports. But we should note that the tempo of development spending has been much slowed in the later period due to the completion of the major projects of the plan as well as to the

problems of the balance of payments which we shall be discussing in more detail later in this chapter. But it could be argued that the gap between the rates of growth of imports and exports could have been much wider had the rate of development spending of the first half of the decade been maintained.

But what does the overall picture show? Generally, it appears that in recent years the rate of growth of the country's export earnings has not been sufficiently high to keep pace with the required growth of imports. This is clearly demonstrated by the fact that by the end of 1969, the DRS has accumulated an unprecedented amount of foreign debts of L.S.109.3 millions¹⁵⁷ which would undoubtedly tremendously burden its limited foreign exchange resources for a considerable time in future in terms of funds for repayments and servicing. If the country is to continue its development effort at an accelerated rate, its capacity to import must expand steadily at a reasonable rate to cater for the anticipated growth of imported needs. It cannot be denied that the performance of the Sudanese exports comparatively improved during the last five years of the 1960s; but taking into consideration the erratic

157. Economic Survey, 1969 (Ministry of Planning, Khartoum, December 1970).

nature of the markets for primary commodities, this improvement can hardly be taken as a continuous phenomenon of a long-term duration.

But what about the contention that dependence on primary production would mean severe fluctuations in earnings? It cannot be challenged that the Sudanese export trade has been characterised by extreme variations. The country ranks fifth in the order of instability produced by MacBean for sixty-three countries, calculated for the period 1946-58.¹⁵⁸ In a similar study made by Erb and Campo for the same group of countries, but for the period 1954-66, the DRS still kept its fifth place in the order of instability.¹⁵⁹

Table X below depicts clearly the marked variations that characterised the country's export trade. Indices of the total value of domestic exports reveal a high degree of annual fluctuations. Compared to the base year, for example, the value index fell to 90.4 in 1954, rose to 113.5 and 151.8 in 1955 and 1956 respectively; it dropped

158. A.I. MacBean, Export Instability and Economic Development (ref. 70). See also above, Chapter One, section 1.8.

159. G.F. Erb and S.S. Campo, Export Instability, Level of Development, and Economic Size of Less Developed Countries (ref. 72); see also above, Chapter One, section 1.8.

TABLE X: INDICES OF SUDAN'S EXPORTS
(1953 = 100)

Year	Volume Index	Price Index	Value Index
1954	77.9	116.1	90.4
1955	106.7	106.4	113.5
1956	129.6	117.1	151.8
1957	96.4	117.8	113.6
1958	92.1	100.3	92.4
1959	163.7	89.8	147.5
1960	128.8	109.4	140.9
1961	130.9	104.9	137.3
1962	173.4	99.3	172.2
1963	-	97.8	-
1964	-	106.3	-
1965	133.8	116.5	155.9
1966	162.8	99.6	162.1
1967	167.4	102.8	172.1
1968	180.8	103.9	187.8
1969	172.4	115.5	199.0

Source: Department of Statistics, Khartoum.

(-) not available.

to 113.6 in 1957 and further to 92.4 in 1958, rising to 147.5 in 1959. In 1962, the value index rose to 172.2 compared to only 137.3 in the preceding year. However, we note that only in two years of the period examined in the table did the value index fall below that of the base year, i.e. in 1954 and 1958. The drop in both years, as well as the variations so far mentioned, are, of course, nothing but a reflection of the state of the cotton trade.

On the evidence of Table X, it could be argued that despite the year-to-year fluctuations, export earnings tend to show generally an upward trend. In our period of study, export earnings actually rose from L.S.66.8 millions in 1956 to a record L.S.86.2 millions in 1969, the upward tendency being particularly marked in the last five years. This fact should in no way undermine our previous finding that growth of exports failed to keep pace with the country's imports. But it does show that, despite the marked annual variations, the country's exports have been steadily increasing though not at a sufficiently high rate of growth.

The total value of exports depends, of course, on the quantities of commodities shipped abroad as well as prices obtained for them from overseas buyers. The above table indicates that both volume and price indices tended to fluctuate considerably during the period. Despite the year-to-year variations, the volume index tends to show a rising trend. On the other hand, the price index tended generally to fluctuate around a downward trend. Never had the price index reached the record 147.8 achieved in 1951.¹⁶⁰ The sharp rise in prices in 1956 was not repeated,

160. In comparison, the volume index has far exceeded the 97.7 recorded in that boom year.

apart from a certain increase in 1964 and 1965, until 1969 when the price index rose to 115.5 compared with only 103.9 in 1968. Finally, it is to be noted that the total value of export earnings tended to fluctuate more often with changes in volume rather than in prices. In other words, export receipts tended generally to increase with the increase in the quantities exported and to decrease when these fell. Only in two years have the changes in total export values been directly influenced by changes in prices: firstly, in 1961 the fall in prices was not sufficiently compensated by the rise in quantities exported thereby resulting in a decrease in export receipts; secondly, in 1969 the value index rose to the record 199.0 compared to 187.8 in 1968 despite the fall in the volume index, mainly because of the increase in the price index from 103.9 in 1968 to 115.5 in 1969. In four of the years examined, i.e. 1956, 1958, 1967 and 1968, all three indices moved in the same direction. Generally, it could be argued that the upward trend in export earnings could be attributed in most of the years examined to the rising volume of commodities exported rather than to any spectacular changes in prices received in the world markets.

But what about the Sudan's terms of trade? Have they experienced a secular deterioration as predicted by

some economists?¹⁶¹ Table XI shows both the commodity as well as the income terms of trade of the DRS for the period 1950-1968. Despite the annual variations, it is evident that the commodity terms of trade have deteriorated during the period examined, i.e. from 121 in 1950 to 101 in 1968. On the other hand, the income terms of trade have shown some improvement rising from 91.3 in 1950 to 182.6 in 1968. Pursuant to our discussion in the previous chapter, it is not surprising to note that in some years the commodity terms deteriorated while the income terms improved, i.e. 1953, 1955, 1959, 1962 and 1966. In some others, the commodity terms improved while the income terms deteriorated, i.e. 1954 and 1960. In four years, both indices improved, i.e. 1951, 1956, 1961 and 1968; while they both deteriorated in 1952, 1957, 1958 and 1967.

However, in order to improve our understanding of the Sudanese export sector, it might be appropriate to examine the actual performance of each of the main commodities of export. Obviously, we shall begin our discussion by attempting to analyse the state of the cotton trade.

161. For a full discussion of the terms of trade and the different concepts used in the literature, see Chapter One, section 1.6.

TABLE XI: SUDAN'S TERMS OF TRADE (1953 = 100)

Year	Export Price Index*	Import Price Index*	Export Volume Index*	Commodity Terms*	Income Terms**
1950	102	84.6	75.5	121	91.3
1951	147.8	117.0	97.7	126	123
1952	147.5	122.3	66.2	121	80
1953	100	100	100	100	100
1954	116.1	92	77.9	126	98.1
1955	106.4	93	106.7	115	122.7
1956	117.1	94	129.6	125	162
1957	117.8	105	96.4	112	108
1958	100.3	94	92.1	107	98.5
1959	89.8	87	163.7	103	168.6
1960	109.4	97.9	128.8	111	142.9
1961	104.9	90.2	130.9	117	153.1
1962	99.3	90.8	173.4	109	189
1963	97.8	98.6	-	99	-
1964	106.3	94.5	-	112	-
1965	116.5	79	133.8	125	167.2
1966	99.6	87.1	162.8	114	185.6
1967	102.8	110.8	167.4	93	155.7
1968	103.9	102.6	180.8	101	182.6

*Source: Department of Statistics, Khartoum.

**Commodity terms multiplied by export volume index.

2.2.A. Cotton

We have already emphasised the dominant role of cotton production in the economic activity of the DRS. In the preceding section, we have stressed the importance of this crop in the country's total exports. It has been indicated that cotton and cottonseed accounted for between 48.9 per cent and 71 per cent of the total export earnings during the period under review. Because cotton is mainly produced for the international market, its export performance would naturally assume special significance. This performance is depicted in Table XII below which shows total receipts and quantities exported of all varieties of cotton. The table also shows the average annual prices per ton for the Sakel variety which constitutes almost 90 per cent of the cottons exported.¹⁶²

It is evident that cotton exports fluctuated considerably during the period; this could explain the marked variations in the total export receipts of the country noted earlier. Variations in cotton exports were particularly marked between 1956 and 1957 when export values of this commodity fell from L.S.41.7 millions to only L.S.22.9 millions, i.e. a decrease of 45 per cent. However, exports

162. Sakel is the extra-long-staple variety exported from the Sudan. We shall be discussing the different types of cotton later in this section.

TABLE XII: SUDANESE COTTON EXPORTS

Year	Quantity [*]	Value ^{**}	Price per ton ^{***}
1956	115	41,691	379.75
1957	63	22,925	386.67
1958	78	22,275	295.45
1959	179	40,152	230.88
1960	105	33,148	320.19
1961	106	31,155	302.42
1962	160	43,530	275.06
1963	179	45,895	259.51
1964	115	32,570	289.63
1965	117	31,377	301.67
1966	141	34,806	249.26
1967	171	40,853	244.36
1968	183	48,561	266.42
1969	172	49,497	293.99

Source: Annual Foreign Trade Statistics, 1956-69
(Department of Statistics, Khartoum).

^{*} quantity in 000's tons.
^{**} value in 000's Sudanese pounds, FOB.
^{***} in Sudanese pounds per ton of Sakel.

recovered in 1959 when they reached L.S.40.1 millions compared to only L.S.22.3 millions in the previous year, i.e. an increase of about 80 per cent. Such variations continued throughout the period under review until the last five years of the 1960s when cotton earnings showed a continuous rising trend increasing from L.S.31.4 millions in 1965 to the record figure of L.S.49.5 millions in 1969.

During the whole period, 1956-1969, foreign exchange earnings from cotton exports increased at an average rate of 1.4 per cent per annum. This rate of growth can in no way be considered satisfactory particularly when we take into account the strategic role of cotton in the country's economic structure.

Both quantities demanded abroad and prices obtained for Sudanese cotton showed marked fluctuations throughout the period. Generally, while the quantities shipped overseas fluctuated with an upward trend, prices showed a pronounced downward tendency. During the period under review, quantities of cotton exported increased from 115,000 tons in 1956 to 172,000 tons in 1969, i.e. at an average rate of 3.1 per cent per annum. On the other hand, Sakel prices fell from an average of L.S.379.8 per ton in 1956 to L.S.293.9 per ton in 1969, i.e. decreasing at an average rate of 2 per cent per annum. It could, therefore, be argued correctly that the upward trend in total export earnings from cotton can be explained in terms of increases in quantities shipped rather than any improvement in prices. Only in one clear case, i.e. 1969, has a rise in prices directly resulted in a parallel increase in total value of cotton exports despite a fall in the quantities shipped overseas.

In order to assess the causes of these variations and to attempt to evaluate the prospects of cotton in the context of the country's development effort, it might be appropriate to consider two aspects of the cotton situation: the domestic supply position of Sudanese cotton and the demand for it in the world markets.

On the supply side, it is clear from Table XIII below that total production of cotton increased from 290.2 million tons in 1955/56 to 526.9 million tons in 1967/68, i.e. expanding at about 5.1 per cent on the average each year during the thirteen crop seasons examined. In other words, the supply of cotton has been increasing much more than the rate of growth of shipment to overseas markets. Here we have to distinguish between cotton produced in the irrigated areas and that part of it which is cultivated in the rain-fed and flood areas. The latter are, of course, liable to relatively more variations in area cultivated, yield obtained and, obviously, in output collected. These variations are clearly shown in Table XIII, in particular the more marked fluctuations in the output of the flood cultivation sector. However, the point to stress is that almost 90 per cent of the Sudanese cotton is being produced in the irrigated areas under a fixed rotation system. This irrigated sector is not only characterised by a relative stability in areas

TABLE XIII: AREA, PRODUCTION AND YIELD OF ALL VARIETIES OF COTTON

Season	I r r i g a t i o n			R a i n			F l o o d		
	Area*	Produc-tion**	Average yield***	Area*	Produc-tion**	Average yield***	Area*	Produc-tion**	Average yield***
1955/56	369,725	246,575	.667	168,097	31,718	.189	38,575	11,869	.308
1956/57	413,754	359,349	.869	149,703	20,498	.137	172,568	25,113	.146
1957/58	442,854	98,743	.223	194,478	37,808	.194	64,057	13,429	.210
1958/59	535,608	328,495	.613	231,860	30,254	.130	87,233	18,707	.214
1959/60	608,577	332,729	.547	175,870	14,685	.083	123,509	19,406	.157
1960/61	653,769	300,979	.460	209,639	31,697	.151	37,521	6,995	.186
1961/62	699,196	563,161	.805	271,130	32,378	.119	162,293	16,306	.100
1962/63	720,001	417,323	.580	315,905	55,855	.177	30,026	2,818	.094
1963/64	740,446	270,943	.366	286,220	36,905	.129	22,775	2,224	.098
1964/65	756,797	391,013	.517	225,679	35,154	.156	85,097	16,223	.191
1965/66	788,728	417,787	.530	245,781	28,466	.116	15,284	2,581	.169
1966/67	835,723	492,279	.589	299,015	37,563	.126	23,623	6,694	.283
1967/68	873,317	499,055	.571	178,720	20,793	.116	96,939	7,017	.072

Source: Bulletin of Agricultural Statistics of the Sudan, No. 8: 1967/68 (Ministry of Agriculture, Khartoum)

* area in feddans.
 ** production in metric tons.
 *** yield in metric ton per feddan.

devoted to cotton cultivation, but the acreage is steadily rising as more land is being brought under organised irrigation. In the period covered by Table XIII, for example, the irrigated area under cotton cultivation increased from 369,725 feddans in 1955/56 to 873,317 feddans in 1967/68, i.e. an increase of 136 per cent. In addition, the yield per feddan is much higher in the irrigated areas compared with those obtained under the other two methods of cultivation. On the average, the yield per feddan was 0.564 ton in the irrigated area, 0.171 ton in the flood area and 0.140 ton in the rain-fed area during the period under review. This is not to deny that the average yield per feddan of cotton grown in the irrigated area has fluctuated from season to season, thereby resulting in variations in the total output of this crop despite the continuous increase in acreage. In fact, as shown in Table XIII, such fluctuations did occur during the period. But what is relevant in our discussion is that, because the area devoted to cotton production in the irrigated area is usually decided by the authorities in the DRS, there seems to be no serious obstacle to expanding the available supplies of cotton for export. This could, of course, be achieved through expansion of acreage, more extensive use of fertilizers, effective pest control and, generally, more emphasis on

productivity factors aiming at increasing the yield per feddan. In fact, that is exactly what the current 'Five Years Plan' is attempting to do; if its objectives are realised, total cotton output is programmed to stand at 8,475,500 kantars¹⁶³ in 1974/75 as compared with a total crop of 4,655,000 kantars in 1969/70, i.e. an increase of 82 per cent.¹⁶⁴

Moreover, it should be remembered that the mere existence of continuous carry-over stocks at the end of each season is a good indicator that supply is not the source of the prevailing imbalance in the cotton trade. Table XIV below clearly indicates the magnitude of the carry-over problem which has become a permanent feature throughout the period with the exception of 1959 when only 51,000 bales were left in the hands of exporters at the end of the year which were already contracted for shipment. Stocks carried over during the 1960s ranged from 24.2 per cent to 43.0 per cent of the total available supplies. This ratio would, of course, rise if stocks at the end of the year were measured only against the cotton production of that specific year. Thus the problem does not seem to be associated with

163. A kantar is approximately equal to 100 lbs.

164. The Five Years Plan, Volume I (ref. 131).

TABLE XIV: CARRY-OVER STOCKS OF COTTON
(IN 000'S BALES)[Ⓜ]

Year	Carry-over at end of year	Carry-over as % of total supply during year ^{ⓂⓂ}	Carry-over as % of production during year
1959	51	5.1	7.6
1960	176	24.2	26.0
1961	234	29.5	37.9
1962	490	35.5	42.8
1963	351	26.3	41.6
1964	234	26.4	43.7
1965	444	43.0	55.7
1966	556	42.6	64.6
1967	585	37.3	57.7
1968	456	28.2	44.3
1969	632	38.3	52.9

Source: Bank of Sudan annual reports, 1960-69.

[Ⓜ] a bale is about 420 lbs.

^{ⓂⓂ} total supply = production + carry-over at beginning of the year.

availabilities of supplies. To complete our analysis of the cotton trade situation, we have to explore the position on the demand side. This would, of course, mean the demand for Sudanese cotton in the world markets.

Traditionally, Western Europe has always been the main outlet for Sudanese cotton, in particular U.K. and E.E.C. It is clear from Tables XV and XVI below, cotton shipments

TABLE XV: COTTON SHIPMENTS (IN 000'S BALES)

	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
E.F.C.	111	343	106	188	244	242	194	154	255	301	393	297
U.K.	163	298	187	113	129	121	89	60	55	83	74	81
Others	7	13	7	15	11	21	12	16	26	19	25	34
Total West Europe	281	654	300	316	384	384	295	230	336	403	492	412
Socialist countries	29	105	123	90	181	315	136	203	169	177	312	244
India	76	140	98	95	226	117	105	61	126	116	131	166
Japan	13	25	19	35	43	83	64	32	56	89	91	81
Others	22	23	10	23	38	39	19	21	14	76	32	27
Grand Total	421	947	550	559	872	938	619	547	701	861	1058	930

Source: Bank of Sudan annual reports, 1960-69

to Western Europe accounted for between 40.9 per cent and 69.1 per cent of the total during the period 1958-69. However, the share of the region seems to decline gradually: it fell from 69.1 per cent in 1959 to 44.3 per cent in 1969. The main cause of this decline has undoubtedly been the tremendous decline in cotton shipments to the United Kingdom. The British market had always been the most important single outlet to the Sudanese cotton, accounting for more than a third of total exports each year. Even as recently as 1960 British purchases of cotton from the DRS exceeded the combined imports of the countries of the European community. However, due to the decline of the cotton industry in the U.K., coupled with severe competition from the man-made fibres in that market, British purchases of Sudanese cotton fell drastically, in particular during the 1960s. Total shipments of cotton to the U.K. fell from 187,000 bales in 1960 to a mere 81,000 bales in 1969, i.e. declining at an average rate of 9.7 per cent per annum. This decline could have been catastrophic to the Sudanese economy had it not been compensated by expansion of sales to other markets, in particular India and the Socialist countries.¹⁶⁵ On the other hand, purchases by the E.E.C.

165. Throughout this study socialist countries would include the U.S.S.R., Poland, Czechoslovakia, Bulgaria, Rumania, Hungary, Yugoslavia, East Germany and the People's Republic of China.

continued to expand; the share of these countries in the total shipments of cotton from the DRS ranged between 25.8 per cent and 37.1 per cent during the period under review, thus replacing the U.K. as the most important outlet for Sudanese cotton. In the 1960s, about 31 per cent of total cotton shipments from the DRS went to the E.E.C. on the average, compared with an average share of 14.0 per cent for the U.K. during the decade.

Sudanese cotton has recently established a new expanding outlet in the socialist countries. These countries increased their share of total cotton sales by the DRS from only 6.8 per cent in 1958 to 26.2 per cent in 1969. In absolute terms, they increased their purchases from 29,000 bales in 1958 to 244,000 bales in 1969, i.e. increased to more than eight-fold. During the 1960s the share of the socialist group was 25.2 per cent of the total cotton exports of the DRS on the average. There is evidence to suggest that the expansion of cotton sales to the group was mainly stimulated by the series of bilateral agreements concluded by the Sudan with each of these countries since independence. We shall be discussing the arguments, pros and cons, concerning such bilateral arrangements later in this chapter. But what is to be emphasised at this juncture is that future trends in cotton consumption in these countries

would be of special significance to the DRS as by now almost one-fifth of its cotton exports are being purchased by this group.

India is another important consumer of Sudanese cotton. Shipments to this country increased from 76,000 bales in 1958 to 166,000 bales in 1969, i.e. more than doubled. During the 1960s, Indian purchases alone accounted for an average share of 16.2 per cent of all cotton shipped from the DRS. In 1962 over a quarter of all Sudanese exports was consumed by Indian mills. In 1969, India was the largest single buyer of cotton from the DRS.

Although the share of Japan in the total Sudanese cotton sales is relatively small, averaging 7.5 per cent during the 1960s, shipments to that market have steadily increased from only 13,000 bales in 1958 to 81,000 bales in 1969, i.e. to more than six-fold.

We have so far outlined the main markets of Sudanese cotton. It might be useful to proceed to examine the general trends concerning the consumption of this industrial fibre in these and other markets. Our assessment will be brief; we shall neither attempt to explain all the numerous relevant details on the subject nor shall we cover all the varied aspects of the cotton trade. This is not an essay in the marketing of this or any other commodity. What we

hope to achieve is simply to outline the basic facts of the situation to help us to assess the validity of the argument that too much dependence on primary commodities could be a retarding factor to the process of economic growth.

It might not be inappropriate to begin our exercise by stating a well-known fact, that cotton consists of a number of different varieties and types. Usually the cotton crop is classified according to grade and length. Grade takes account of colour, feel and presence of impurities. The staple-length is a measure of fibre-length of a sample of raw cotton and is important in determining how fine a yarn can be spun. There are several distinct but overlapping ranges of staple, varying from about $\frac{5}{8}$ in. to 2 in. A convenient grouping divides this range as: short staples (less than $\frac{7}{8}$ in.); medium staples ($\frac{7}{8}$ in. to $1\frac{1}{8}$ in.); long staples ($1\frac{1}{8}$ in. to $1\frac{5}{16}$ in.) and extra long staples ($1\frac{5}{16}$ in. and above).¹⁶⁶

It is to be mentioned that the bulk of the Sudan's cotton output is of the extra-long-staple variety (ELS). But what is the industrial importance of this variety of cotton? Traditionally, ELS cottons are used in the manufacture of 'many of the finest and most sought after luxury

166. "Industrial Fibres", No. 19, published by the Commonwealth Secretariat, 1970.

textiles. Because of their length and fineness, these cottons can be spun into finer, stronger yarns than the medium staples and they impart a higher lustre, sheerness, strength and general appearance to fabrics and knit goods. Among their important end-uses are thread, poplin, broad-cloth and other fine shirtings, fine dress goods, typewriter ribbons, handkerchiefs and lace.¹⁶⁷ These varieties are mainly grown in the DRS, UAR, USSR, USA and Peru. Table XVI gives figures of production of ELS cottons by source while Table XVII shows the percentage share of each of the main producing countries of this variety, i.e. DRS and UAR. It is clear from the two tables that these two countries accounted for more than 75 per cent of world production of ELS cottons in the period examined. But it is to be stressed that the bulk of world production and trade of cottons does not belong to the ELS variety. Medium staples alone account for some 80 per cent of the non-communist world output of cottons.¹⁶⁸ In fact the United States is the world's main producer and exporter of cotton because it supplies the bulk of this medium staple variety.

167. Ibid.

168. Ibid.

TABLE XVI: ESTIMATED PRODUCTION OF ELS COTTON (1³/₈" and over)

Country	1958/59	1959/60	1960/61	1961/62	1962/63	1963/64	1964/65	1965/66	1966/67
Aden	16	28	18	24	33	25	31	16	20
Morocco	10	10	8	14	21	25	37	45	30
Peru	129	120	144	148	183	196	219	176	217
Spain	19	28	30	37	25	15	12	11	11
Sudan	535	560	490	930	655	405	610	670	755
U.A.R.	1,185	1,078	1,045	638	1,060	950	1,064	1,041	844
U.S.A.	82	69	66	61	110	161	117	86	71
Others	10	6	7	7	5	5	3	3	5
Total	1,986	1,899	1,808	1,859	2,092	1,782	2,093	2,048	1,953
USSR	80	100	170	220	170	180	200	230	250
World	2,066	1,999	1,978	2,079	2,262	1,962	2,293	2,278	2,203

Source: Cotton - World Statistics, quarterly bulletin of the International Cotton Advisory Committee, Vol. 21, No. 3, Part II (October 1967)

* quantities in 000's bales of 478 pound net weight each.

** crop year beginning August 1st.

*** 1966/67 preliminary figures.

ELS cottons account for only about 5 per cent of the total world cotton output. It should be mentioned, therefore, that although the DRS produces over 20 per cent of the ELS variety on the average, its share in the aggregate world output of cotton is usually less than 2 per cent.

TABLE XVII: PERCENTAGE SHARE OF ELS COTTON PRODUCTION

Season	Sudan	U.A.R.	Sudan + U.A.R.	Others	Total
1958/59	25.9	57.3	83.2	16.8	100
1959/60	28.0	53.9	81.9	18.1	100
1960/61	24.8	52.8	77.6	22.4	100
1961/62	44.7	30.7	75.4	24.6	100
1962/63	28.9	46.9	75.8	24.2	100
1963/64	20.6	48.4	69.0	31.0	100
1964/65	26.6	46.4	73.0	27.0	100
1965/66	29.4	45.7	75.1	24.9	100
1966/67	34.3	38.3	72.6	27.4	100

Source: based on Table XVI.

In terms of export trade, the world markets for ELS cottons are actually dominated by the DRS and UAR. USSR and USA are net importers though the latter often exports ELS cottons from its stocks under the P.L. 480 programme. Peru is a relatively small producer. Table XVIII below

TABLE XVIII: PERCENTAGE SHARE OF WORLD EXPORTS OF ELS COTTONS

Season	Sudan	U.A.R.	Sudan + U.A.R.	Others	Total
1954/55	29.4	62.1	91.5	8.5	100
1955/56	40.1	51.7	91.8	8.2	100
1956/57	30.9	52.2	83.1	16.9	100
1957/58	32.4	58.3	90.7	9.3	100
1958/59	35.8	54.3	90.1	9.9	100
1959/60	28.7	65.0	93.7	6.3	100
1960/61	27.3	62.8	90.1	9.9	100
1961/62	39.1	51.9	91.0	9.0	100
1962/63	40.0	49.4	89.4	10.6	100
1963/64	38.3	51.0	89.3	10.7	100
1964/65	27.4	58.9	86.3	13.7	100
1965/66	31.9	56.2	88.1	11.9	100
Average	33.4	56.2	89.6	10.4	100

Source: Based on figures quoted in "Sudan and the European Economic Community", a report prepared by a research team from the Institute of Social Studies, The Hague (May, 1968).

shows the relative importance of the DRS and UAR in the world export trade of the ELS cottons. During the period examined, their combined share of world exports ranged from 83.1 per cent to 91.8 per cent. On the average, the two countries accounted for about 89.6 per cent of the total world exports of ELS cottons. Of this average share, Egyptian exports accounted for 56.2 per cent while the Sudanese sales accounted for 33.4 per cent of world trade.

Thus the Sudan's share in world trade in ELS cottons does not depend only on the state of demand for this variety, but also on the state of the Egyptian crop and quantities of it available for shipment to overseas users.

But, generally, what is the state of world demand for ELS cottons? Since the demand for cotton (all varieties) depends considerably upon the total demand for apparel fibres, i.e. cotton, wool and man-made fibres, it might be useful to study first the general trends in the consumption of all such fibres and to assess the relative importance of cotton within the overall consumption of industrial fibres. Then, we can proceed to discuss specifically the trends in world demand for the ELS variety.

It is evident from Table XIX that the share of cotton (all varieties) in the world consumption of industrial fibres has declined considerably from an average of 80 per cent in 1934-38 to 69 per cent by the end of the 1950s; the share of cotton was further reduced to 54 per cent in 1969. This decline has, of course, been mainly due to the increased production and consumption of the man-made fibres which replaced cottons in quite a range of end-uses. The share of man-made fibres in the total world consumption of apparel fibres increased from 17 per cent at the end of the 1950s to 38 per cent in 1969, i.e. more than doubled. This

TABLE XIX: ESTIMATED WORLD CONSUMPTION OF APPAREL FIBRES (IN MILLION LB.)

Year	Wool	Cotton	Rayon filament yarn	Rayon staple fibre	Non-cellulosic man-made fibres	Silk	Total apparel fibres	Percentage Cotton	Percentage Rayon	Shares Man-made fibre
1934/38 aver.	2,025	14,230	997	447	1	109	17,809	80	8	-
1950	2,652	15,583	1,927	1,570	152	35	21,919	71	16	1
1951	2,288	17,089	2,114	1,875	218	34	23,618	72	17	1
1952	2,336	16,921	1,819	1,709	280	39	23,104	73	15	1
1953	2,648	18,023	2,060	2,066	349	41	25,187	72	16	1
1954	2,565	18,761	2,016	2,466	440	39	26,287	71	17	2
1955	2,662	19,323	2,281	2,739	594	44	27,643	70	18	2
1956	2,866	20,062	2,261	3,001	677	49	28,916	69	18	2
1957	2,939	20,525	2,330	3,126	897	48	29,865	69	18	3
1958	2,741	21,054	2,131	2,899	931	41	29,797	71	17	3
1959	3,178	22,377	2,411	3,140	1,271	54	32,431	69	17	4
1960	3,304	22,840	2,494	3,255	1,548	54	33,495	68	17	5
1961	3,331	22,245	2,503	3,433	1,832	50	33,394	67	18	5
1962	3,336	21,782	2,650	3,673	2,381	52	33,874	64	19	7
1963	3,324	22,046	2,714	4,009	2,940	46	35,079	63	19	8
1964	3,203	23,402	2,927	4,366	3,727	53	37,678	62	19	10
1965	3,277	24,071	3,015	4,392	4,523	56	39,334	61	19	12
1966	3,396	24,733	3,028	4,407	5,470	58	41,092	60	18	13
1967	3,244	24,985	2,960	4,416	6,318	60	41,983	59½	17½	15
1968	3,408	25,216	3,125	4,747	8,292	60	44,848	56	17½	18½
1969	3,510	25,300	3,159	4,824	9,589	65	46,447	54	17	21

Sources: Industrial Fibres, Nos. 11, 12, 13, 14, 15, 18, 19, issued by the Commonwealth Secretariat.

* 1969 provisional.

is not to say that cotton consumption has not expanded in absolute terms. In fact it has been increasing at an average annual rate of 2.6 per cent between 1950 to 1969. But what is relevant here is that, with the falling share of cotton in the total world consumption of apparel fibres, coupled with the increasing production of this commodity mainly as a result of increased yields, a situation has been created whereby total world supplies of cotton tended generally to exceed the overall demand for it. Thus it seems that despite the rising demand for cotton in recent years, world consumption is still lagging behind world production. This imbalance is clearly manifested by the world cotton stocks that have been accumulating, reaching in 1965/66 season 'the highest level since 1945'.¹⁶⁹ In recent years, however, the stock position has improved, i.e. stocks were reduced from 14,581 million lbs. in 1966 to an estimated 10,485 million lbs. in 1969.¹⁷⁰ The improvement has been mainly caused by the reduction of the U.S.A. cotton stocks from 8,060 million lbs. in 1966 to 3,111 million lbs. in 1969¹⁷¹ as a result of the operations of the Agricultural Act

169. "Sudan and the European Economic Community", a restricted report prepared for the Sudanese government by a research team from the Institute of Social Studies, The Hague, under the supervision of Dr. Hans Linnemann, Professor of Economics at the Institute (May, 1968).

170. "Industrial Fibres" (ref. 166).

171. Ibid.

of 1965 designed to reduce American output of cotton, and therefore stocks, via the control of acreage devoted to the production of this commodity as well as the reduction in support prices.

But what determines the demand for cotton? The total demand for cotton depends on a number of factors, the most important being the demand for its end-products and the degree of competition it faces from other fibres in each end-use. The first factor, i.e. the demand for cotton end-products, can reasonably be related to changes in total population and in real incomes per head. In general, the growth of population as well as the rise in the level of economic activity will cause a higher demand for all cottons. But it has been argued that, after a certain level, there may be a tendency for a declining elasticity of demand for textile products as real income per head rises.¹⁷² That is why, it is often argued, prospects for high growth-rates of cotton consumption in industrial countries of Western Europe, North America and possibly Japan are not very bright. The second factor, i.e. competition from other fibres, is a very complex issue: this not only reflects relative prices

172. A. Maizels, Exports and Economic Growth of Developing Countries (Cambridge University Press, 1968).

but also the differing technological characteristics of competing fibres, and in particular the different suitability of each in the manufacture of specific end-products. Since technology is continually developing, the relative balance of technological advantage of the different fibres is also subject to change and is accordingly more uncertain to project into the future.¹⁷³ But these factors generally govern the trends of consumption of all varieties of cottons; while our immediate concern lies within a specific variety of these cottons, namely the ELS type. Would it not be more useful if we restrict our discussion to the prospects of growth of consumption of this specific variety?

The proposition would be a logical one if, and only if, the rate of substitution between ELS and other staples of cotton on the one hand, and man-made fibres on the other, is zero or small. But modern technology has made this rate of substitution quite large and will even be larger as further advances are achieved in both textile machinery and the quality of man-made fibres in the future. In the first place, ELS is experiencing a growing challenge from synthetic fibres. In the post-war period, 'ELS cotton supplied a declining percentage of the fibre needs of Western Europe,

173. Ibid.

Japan and North America as man-made fibres, and particularly synthetics, were making greater inroads into the end-uses traditionally supplied by ELS-cotton'.¹⁷⁴ The displacement has been encouraged by the fact that, due to technological improvements, man-made fibres could be processed on traditional cotton-spindles. In general, ELS-cotton has been substituted by synthetics in fine goods and fabrics of higher strength requirements, in shirtings and dress fabrics, hosiery and glass curtains, tire fabrics, typewriter ribbons, parachutes, fishing nets, etc.¹⁷⁵ 'This was mainly due to the novelty and adaptability of synthetics in these uses, and the advantage of being processed at much lower costs than the spinning of ELS-cotton into very fine yarns.'¹⁷⁶ In the second place, there is evidence to suggest that the substitutability between the ELS cotton and the other varieties of cotton is not, after all, that small. ELS cotton, because of its special qualities, has always been treated as a category on its own. But this special treatment has long been challenged by the advance of technology. It has, for example, been suggested that 'the correlation coefficient between the prices of American

174. "Sudan and the European Economic Community" (ref. 169).

175. Ibid.

176. Ibid.

middling, a short-staple cotton, and the prices of Sakel, an ELS cotton, was 0.8 for the period 1922-36, and that both prices changed in the same direction in 13 cases out of the 15 studied.¹⁷⁷ In other words, modern machinery and equipment have introduced more flexibility in the use of different staples by making the production of the strongest yarns from the shorter staples of cotton possible. It has for example been mentioned that, in order to maintain its markets in Western countries, 'ELS cotton has been substituted for other cottons in coarser-count yarns (60's and coarser), the manufacturing of which was cheaper. This was made possible by price reduction in the past, which helped ELS-cotton to keep its volume and uses to the same level, despite the increasing popularity of synthetic fibres in the manufacturing of textiles formerly spun with ELS cotton.'¹⁷⁸ Thus it would be correct to assume that the Sudanese ELS-cotton has not only to compete with man-made fibres but, to some extent, even with other varieties of cottons. This means that Sudanese cotton would no longer be able to escape the impact of the American cotton policies, the U.S.A. being a price leader in the world cotton market

177. A.A. Suleiman, "Stabilisation Policies for Cotton in the Sudan" in I.G. Stewart and H.W. Ord (eds.), African Primary Products and International Trade (Edinburgh U.P., 1965).

178. "Sudan and the European Economic Community" (ref. 169).

due to the fact that it is the largest single exporter of cotton as well as a residual supplier by virtue of its large surplus stocks.

To summarise, future trends in the consumption of ELS-cotton would greatly depend on the requirements of the textile industry, on the one hand, and on technological improvements in manufacturing machinery and their effect on the substitution between ELS-cotton and other cottons or synthetics, on the other. They will also depend on the levels of income and patterns of consumption in the principal using regions as well as on the capacity of these economies to expand in the international markets. The possible effects of these forces on the consumption of ELS-cotton is very difficult to measure. These forces seem to be quite complex and cannot be easily reduced to 'specific concrete terms'.¹⁷⁹ This complexity arises from the fact that 'prices are not a major element in determining the level of consumption of ELS-cotton'.¹⁸⁰ In some instances, the situation becomes more complicated when the consumption of ELS-cotton is influenced by a phenomenon much more difficult to appraise, i.e. style changes. This is illustrated by the 'shifting in the use of ELS-cotton in the finest and strongest yarns (where it is now displaced by synthetics)'

179. Ibid.

180. Ibid.

to its use in coarser-count yarns in 'easy-care and wash-and-wear fabrics'.¹⁸¹ In other words, changes in consumers' tastes have changed the nature of demand for ELS-cotton 'which is now more appreciated for its exceptional strength than for its high length and luster'.¹⁸²

Moreover, the assessment of these forces would probably produce conflicting results in different regions. For instance, despite the fact that numerical estimates of future growth-rates of demand for cotton vary considerably, it is generally assumed that the development of cotton imports in the industrialised rich countries will be sluggish. Strong competition from man-made fibres is expected to continue though the rate of displacement of cotton by competing fibres 'will be appreciably less in future than it has been over the past decade'.¹⁸³ It has been estimated by Maizels, for example, that the share of cotton in total fibre consumption in the industrial nations of Western Europe, U.S.A., Canada and Japan would decline from 29 per cent in 1962-63 to 20-24 per cent by 1975.¹⁸⁴ It has also been suggested that the future annual growth-rates of imports of ELS-cotton

181. Ibid.

182. Ibid.

183. A. Maizels, op.cit. (ref. 172).

184. Ibid.

into Western Europe might be 'anywhere between 0.5 and 2.5 per cent'.¹⁸⁵ This is not a bright prospect for Sudanese cotton exports whose main outlet, as already noted, is still Western Europe. However, aggregate export projections are conflicting and, in any case, might not be a good basis for drawing definite conclusions on prospects of exports of a single country,¹⁸⁶ so it is likely that export of Sudanese cotton to Western Europe might expand in the future. But, at the same time, it is very unlikely that spectacular growth-rates of absorption in these markets could ever be achieved. Because of the need for a faster growth-rate of exports than the existing one, the DRS must find other more expanding outlets for its cotton if the development effort is to proceed at an accelerated pace.

Such a possible outlet could be in the socialist countries. These countries increased their imports of ELS-cotton from 159,700 bales in 1954/55 to 726,000 bales in 1965/66¹⁸⁷, i.e. at an average rate of 14.8 per cent

185. "Sudan and the European Economic Community" (ref. 169).

186. For instance, in the case of the Sudan, cotton exports to Western Europe and Japan in the 1960s increased from 319,000 bales in 1960 to 493,000 bales in 1969, i.e. at an average annual rate of 5 per cent.

187. "Sudan and the European Economic Community" (ref. 169).

per annum. These purchases represent 18 per cent and 43.6 per cent of the world total exports of ELS-cotton in the two seasons respectively.¹⁸⁸ Thus the socialist countries have gradually become an important consuming centre of ELS-cotton. In the 1960s, these countries have increased their imports of cotton from the DRS from 123,000 bales in 1960 to 244,000 bales in 1969, i.e. at an average rate of 7.9 per cent per annum. It might be difficult to predict with any reasonable accuracy the future growth-rates of ELS-cotton consumption in the socialist countries; but because of the recent increased emphasis on quality consumers' goods in these countries and to the relatively lower incomes per head prevailing at the moment, it is very likely that the potential growth of demand would be much greater than in Western countries. It is probable, therefore, that Sudanese exports of cotton to the socialist countries will expand at high rates in the future.¹⁸⁹ But it must be remembered that, although these markets offer good prospects for expansion, an element of uncertainty lies in the speed of

188. Ibid.

189. For instance, the U.S.S.R. signed an agreement at the end of 1969 to buy about L.S.17.5 million worth of cotton from the Sudan during 1969/70. This is more than the combined sales to socialist countries in 1969 which stood at L.S.14,638,000. In 1969 exports to the U.S.S.R. alone stood at only L.S.2,538,000.

substitution of natural by synthetic fibres, which is at present 'in its initial stages'.¹⁹⁰ In addition, India offers another potentially good market for Sudanese cotton. In the 1960s, exports to India increased from 98,000 bales in 1960 to 166,000 bales in 1969, i.e. at an average rate of 6 per cent per annum. In fact, as previously mentioned, India is at the moment the largest single market for Sudanese cotton. Again it is very likely that exports to India will continue to expand at a satisfactory rate; this depends to a large extent on India's own export performance of cotton end-products, on the rate of expansion of its domestic textile production, and, most importantly, on India's ability to overcome its foreign exchange difficulties. At least to minimise the last problem, the DRS has concluded in 1965 a bilateral trade agreement with India to facilitate the continuous flow of cotton to that market.

It could be argued that, while there are some possibilities of expansion in the socialist countries and in India, the prospects of cotton exports cannot be generally considered to be encouraging. It is true that the Sudan will depend for a considerable time on cotton; but it is equally true that there is an urgent need to start

190. "Sudan and the European Economic Community" (ref. 169).

diversifying the country's economic activities, or at least, to reduce the high degree of dependence on this commodity. We are in a race with technological advance and the latter will almost definitely be victorious at the end. Thus, under the circumstances, it is very doubtful if the existing economic structure in the Sudan, whatever cotton prospects may be at the moment in any one market, is conducive to sustained economic growth.

2.2.B. Gum Arabic

Gum arabic was used at least 4000 years ago when it was shipped as an article of commerce by Egyptian fleets. Ancient Egyptian inscriptions make frequent mention of gum arabic, called kami, which was used largely in painting as an adhesive for mineral pigments. Eventually the gum found its way into Europe through various Arab ports and acquired the name gum arabic after its place of origin or port of export.¹⁹¹ Today gum arabic has multifarious uses throughout the industrial world. The food industry seems to be the main user of this commodity, particularly

191. Roy L. Whistler and James N. BeMiller, Industrial Gums (Academic Press, New York & London, 1959).

confectionery; but gum arabic is also used in pharmaceuticals and medicine, in adhesives, in paints, in inks, in textiles and in a number of other industries.

The DRS is the largest producer of gum arabic in the world, providing over 80 per cent of the world output and virtually has control over the world supplies of this commodity. In fact, the gum market at El Obeid, capital of Kordofan province in the western part of the Sudan, does not only set prices for the Sudanese crop but also prices of gum arabic throughout the world. Unlike other export commodities of the DRS, gum arabic does not involve any sort of cultivation; it is rather a gift of the Lord, collected from trees growing wild in different regions of the country. The best grade of gum arabic comes from the 'acacia senegal' tree and is commonly known in commercial circles as Hashab or Kordofan, after the name of the province in which it is found. About 90 per cent of the Sudan's production comes from these trees. Less than 10 per cent of the gum production comes from the 'acacia seyal' tree found in the south-western part of the country and in the Nile region. This latter is markedly inferior to the Hashab and is usually known by the name Talh.

Table XX below gives total production of both types of gum arabic since 1958/59. It is to be noticed that gum

TABLE XX: GUM PRODUCTION IN THE SUDAN (IN TONS)

Season	Hashab	Talh	Total
1958/59	34,600	2,933	37,533
1959/60	46,200	3,371	49,571
1960/61	42,955	4,011	46,966
1961/62	45,647	1,518	47,165
1962/63	42,713	902	43,615
1963/64	37,366	2,273	39,639
1964/65	44,749	3,387	48,136
1965/66	47,960	2,444	50,404
1966/67	42,713	2,296	45,009
1967/68	58,896	2,649	61,545
1968/69	40,955	4,592	45,547
1969/70*	30,000	4,000	34,000

Source: Economic Survey, 1969 (Ministry of Planning, Khartoum, December 1970).

* estimate.

output is not expanding much; on the contrary, it has been decreasing particularly in the last two seasons. The climatic conditions are usually considered as a direct cause of these continuous fluctuations in gum production. Often it is alleged that, since gum collection is taken as a part-time vocation, the extent of the collection depends on the seasonal prosperity of the potential collectors, i.e. the success or failure of crops in the area has a direct effect on the effort made by collectors of gum.¹⁹²

192. ~~Whistler and BeMiller~~, Ibid.

Recently, the Ministry of Planning outlined certain 'adverse factors inherent in its production' and which are to be removed:¹⁹³

'The most severe hindrance to increase productivity is the lack or scarcity of drinking water in the production centres. Another common deterrent factor is the lack of transport means linking the main markets with the production centres. This latter adverse factor induces the farmer to sell his produce cheaply to the village merchant who exploits his weak bargaining position by several malpractices, the most important of which is the sheil system. Talh and Hashab growing land is legally the property of the government, however its distribution among the producers of gum is neither on a systematic nor on an equitable basis.'

However, the expansion of gum production seems to be an urgent problem which must be given attention by the government; it further offers a field for more research work to ascertain the different factors involved.

With regard to the gum trade, it is to be noted that all production of this crop is available for export; it has no domestic industrial uses. The country depends,

193. Economic Survey, 1969 (Ministry of Planning, Khartoum, December 1970). The 'sheil system' referred to in the quotation above is a widespread phenomenon in the country. It is a system whereby the small producer commits his crop before harvest to the local merchants against payment of needed cash, usually much below the actual value of the produce. The system thus burdens the small producer with debts and discourages improvements in the techniques of production or even the increase of the crop.

therefore, completely on the international market for the disposal of its output of gum arabic. It is also to be remembered that gum arabic is the second foreign exchange earner for the country after cotton. In the 1960s, this crop accounted for almost one tenth of the total foreign exchange earnings of the DRS. Table XXI below gives the details of exports of all types of gum arabic by destination during the period under review. It is evident from Table XXI that, despite the year-to-year fluctuations, exports of gum arabic have been generally rising. Their value increased from L.S.5,369,000 in 1956 to L.S.8,693,000 in 1969, i.e. at an average rate of 3.8 per cent per annum. During the period under review, the E.E.C. was the largest buyer taking about 32 per cent of the total exports of the DRS, followed by the U.S.A. which accounted for about 23 per cent and the U.K. for about 16 per cent on the average. Thus the three trading areas together accounted for over 70 per cent of the total exports of gum arabic from the DRS. The socialist countries increased their purchases from L.S.46,000 only in 1956 to L.S.365,000 in 1969, i.e. increasing at an average rate of 17.3 per cent per annum; but their share in the total exports of gum arabic is still very small, averaging about 4 per cent only during the period. Japan, India and the U.A.R. also take small shares

TABLE XXI: SUDANESE EXPORTS OF GUM ARABIC (IN 00's SUDANESE POUNDS)

Year	E.E.C.	U.S.A.	U.K.	Japan	Socialist countries	India	U.A.R.	Others	Total
1956	1,599	1,508	1,381	171	46	277	59	328	5,369
1957	1,387	989	1,012	161	193	207	59	683	4,691
1958	1,570	1,063	1,116	222	288	237	39	672	5,207
1959	1,393	1,142	1,120	219	262	250	60	645	5,091
1960	2,030	1,595	1,056	329	405	379	72	1,104	6,970
1961	2,053	1,101	1,292	256	118	162	97	1,164	6,143
1962	1,470	1,106	551	285	177	79	67	835	4,570
1963	2,060	1,309	723	317	179	132	36	932	5,688
1964	2,351	1,466	1,055	316	250	253	17	1,080	6,788
1965	2,486	1,587	1,231	337	305	241	92	1,249	7,528
1966	2,368	1,769	979	377	243	191	80	1,177	7,184
1967	2,427	2,372	1,248	571	265	266	21	1,168	8,338
1968	2,693	2,127	855	453	324	225	19	1,153	7,849
1969	2,865	2,212	932	572	365	290	167	1,290	8,693

Source: various Annual Foreign Trade Statistics issued by the Department of Statistics, Khartoum

of the Sudanese exports of this commodity.

The prices of gum arabic during the period have shown a satisfactory upward trend compared with other Sudanese exports, despite the annual fluctuations. According to Table XXII below, prices of Hashab increased from L.S.115.68 per ton on the average in 1956 to L.S.193.36 per ton as an average for 1969.

TABLE XXII: PRICES OF GUM HASHAB
(IN SUDANESE POUNDS, FOB)

Year	Price per ton
1956	115.68
1957	112.48
1958	112.40
1959	126.13
1960	143.20
1961	124.62
1962	126.93
1963	128.90
1964	134.44
1965	136.98
1966	138.52
1967	173.87
1968	164.60
1969	193.36

Source: based on export figures collected from several 'Annual Foreign Trade Statistics' (Department of Statistics).

Unlike other Sudanese exports, gum arabic has not as yet faced serious marketing problems in the world markets.

The monopolistic supply position of the DRS has not as yet been challenged. In recent years, however, there are indications that production of gum has been steadily expanding in some West African countries, in particular Nigeria and Senegal.¹⁹⁴ In 1969, for example, the Sudan's share in total world production of gum arabic has been reduced for the first time to 71.4 per cent,¹⁹⁵ indicating that new sources are gradually being created. But, however, with the available resources, threat of competition does not seem to be very serious provided that more attention is given to the problem of the marked variations in the Sudanese crop so as to ensure a regular supply to the consumers in the traditional overseas markets. In the absence of such regularity, alternative sources are bound to be expanded in the future. In addition, there is some evidence to suggest that substitutes are being developed to replace gum in some industrial uses.¹⁹⁶ So far these efforts have not proved damaging to the markets of natural gum, particularly when we note the varied industrial fields in which it is being used. Of course, nobody could predict what technological advance would achieve in future; but, as

194. Economic Survey, 1969.

195. Ibid.

196. Ibid.

things stand today, it seems safe to assume that exports of gum arabic might continue to expand, at least at the same rate of growth obtained in the last decade.

2.2.C. Vegetable oils and oilseeds

Despite the fact that improved processing methods have made the different vegetable oils largely and increasingly interchangeable, it is possible to distinguish three broad groups:¹⁹⁷

- (1) The 'edible' group: comprising principally groundnut, soyabean, cottonseed, rapeseed, sunflower, sesame, and olive oils. As the name implies, these oils are used for edible purposes. Among the vegetable oils, this group is the most important, accounting for over three-quarters of the total supplies.¹⁹⁸ Groundnut, soyabean and sunflower oils together now account for about two-thirds of all 'edible' vegetable oils.¹⁹⁹ Among these, soyabean oil appears to be the most important, accounting alone for about a quarter of all

197. M.Z. Cutajar and A. Franks, The Less Developed Countries in World Trade, an O.D.I. publication (1967).

198. Vegetable Oils and Oilseeds, Publication of the Commonwealth Secretariat, No. 19 (1970).

199. Ibid.

vegetable oil supplies.²⁰⁰ In terms of volume of supplies, soyabean oil is followed by groundnut oil and sunflower oil.

- (2) The 'edible-industrial' group: including the so-called 'hard oils', i.e. palm, palm kernel, and coconut oils. Like the first group, these are used in margarine manufacture as well as in some more specialised food uses; but they are equally used in soap, chemical, and synthetic detergent production.²⁰¹
- (3) The 'industrial' group: comprising mainly linseed, tung and castor oils which are used chiefly as drying agents or lubricants. Castor oil is now being used on a large scale in the manufacture of special types of nylon.²⁰²

The DRS mainly exports vegetable oilseeds, though trade in oils has been recently expanding. Practically all the Sudanese production comprises oilseeds that belong to the 'edible' group and includes groundnuts, sesame and cottonseed. However, an 'industrial' oilseed, i.e. castor seed, has recently been added to the Sudanese export list and its production is steadily increasing. Since the beginning of

200. Ibid.

201. Cutajar and Franks, op.cit. (ref. 197).

202. Ibid.

the 1950s, these oilseeds, in particular groundnuts and sesame, have become important earners of foreign exchange for the DRS. It will be recalled that Table VIII above (p.133) has shown that groundnuts contributed between 5.8 per cent and 13.4 per cent, sesame between 3.1 per cent and 9.4 per cent, and cottonseed between 0.8 per cent and 7.2 per cent of the total Sudanese exports during the period 1956-69. During the 1960s, the average share of groundnuts in the country's total exports was 8.9 per cent, that of sesame 7.6 per cent and of cottonseed 3.0 per cent. Thus, during the decade, the three oilseeds together accounted for an average of 19.5 per cent of the Sudanese total exports each year. It will, therefore, be useful to consider the export performance of each of these commodities during the period under review:

(A) Groundnuts

Production of groundnuts has been steadily increasing since the 1950s mainly stimulated by demand in the world markets. This increase has been achieved through an expansion in the planted area and not to any appreciable improvements in yields per feddan. The expansion has taken place in ~~both~~ the irrigated as well as the rain-fed areas, though the latter still claims the larger share of the

country's supplies of this commodity. According to Table XXIII below, the area under groundnuts cultivation has increased from 460,000 feddans in 1956/57 to 1,042,000 feddans in 1969/70, i.e. more than doubled. Total production, on the other hand, increased from 146,000 tons in 1956/57 to 383,000 tons in 1969/70, i.e. at an average rate of growth of 7.6 per cent per annum. On the average, about three-fifths of the total crop is usually available for export,²⁰³ the balance being crushed by the domestic industry. It is to be emphasised, however, that ~~until~~^{at} the moment Sudanese exports of groundnuts consist almost entirely of seeds rather than groundnut oil. It seems that nearly all the groundnut oil produced within the country caters for local consumption. However, this is not to deny that few tons of oil are being exported from time to time; but it is rather to emphasise that groundnut oil is not as yet a major foreign exchange earner. As shown in Table XXIV below, the export performance of groundnuts has witnessed wide variations during the period 1956-69. If we consider the whole period, it is true that exports increased from L.S.3,789,000 in 1956 to L.S.5,991,000 in 1969, i.e. at an average rate of 3.5 per cent per annum. But behind this

203. Vegetable Oils and Oilseeds, ~~pp. 111~~ (ref. 198).

TABLE XXIII: PRODUCTION OF GROUNDNUTS

Season	Area*	Production**
1956/57	460	146
1957/58	449	129
1958/59	464	189
1959/60	461	186
1960/61	471	193
1961/62	472	149
1962/63	694	229
1963/64	847	289
1964/65	779	280
1965/66	935	305
1966/67	926	314
1967/68	847	297
1968/69	782	197
1969/70***	1,042	383

Source: Economic Survey, 1969
(Ministry of Planning, December, 1970).

*area in 000's feddans.

**production in 000's tons.

***tentative.

general picture, there are two distinct trends: firstly, in the period 1956-64, exports steadily increased from L.S.3,789,000 to L.S.9,182,000, i.e. at an average growth rate of 11.7 per cent per annum; but, secondly, in the later period 1965-69, exports have shown a continuous downward trend declining from L.S.8,596,000 to L.S.5,991,000, i.e. a decrease of 9.4 per cent per annum on the average. In fact, in 1968, the government had to cancel the 10 per cent royalty imposed on exports of groundnuts in an attempt to boost shipments. The most important market for Sudanese groundnuts throughout the period has been the E.E.C: its share ranged

TABLE XXIV: EXPORTS OF GROUNDNUTS
(IN 000'S SUDANESE POUNDS)

Year	E.E.C.	Socialist countries	Japan	U.K.	Others	Grand Total
1956	3,168	-	-	2	619	3,789
1957	3,457	206	-	25	1,016	4,704
1958	1,304	1,405	-	3	717	3,429
1959	2,175	536	-	3	863	3,577
1960	2,720	421	-	1	1,251	4,393
1961	3,098	745	-	1	1,527	5,371
1962	4,234	1,679	-	-	766	6,679
1963	3,690	1,668	-	19	1,024	6,401
1964	5,916	912	20	27	2,307	9,182
1965	5,820	1,152	15	146	1,463	8,596
1966	3,758	1,863	158	39	1,437	7,255
1967	4,617	674	267	35	916	6,509
1968	2,341	1,074	697	26	460	4,598
1969	2,814	1,106	1,103	33	935	5,991

Source: Various "Annual Foreign Trade Statistics",
(Department of Statistics, Khartoum).

from 38 per cent to 83.6 per cent of the total exports of this commodity during the period. On the average, the E.E.C. accounted for some 60 per cent of shipments of groundnuts from the DRS. The socialist countries increased their purchases from only L.S.206,000 in 1957 to L.S.1,106,000 in 1969; on the average, these countries accounted for about 18 per cent of the total exports of groundnuts from the DRS. On the other hand, the U.K., a major world market for oilseeds, bought very small quantities from the Sudanese crop, probably obtaining most of its requirements from the African

Commonwealth countries, e.g. Nigeria and Gambia. Japan entered the Sudanese market fairly recently and increased its purchases tremendously from only L.S.20,000 in 1964 to L.S.1,103,000 in 1969, i.e. accounting for more than 18 per cent of total exports in the last year.

But, generally, what are the prospects of this commodity in the world markets? It is to be recalled that groundnut oil is the second largest source of edible vegetable oils in the world providing about a fifth of all supplies of this group and about 15 per cent of all vegetable oils.²⁰⁴ Between 1950 and 1966, world exports of groundnuts and groundnut oil have more than doubled.²⁰⁵ An important factor to mention is that many large producing countries, e.g. India, China and the U.S.A., retain all or most of their crops for domestic utilisation. Most of the world exports of groundnuts and groundnut oil is being supplied by African countries. In fact, six African countries, i.e. Nigeria, Senegal, Mali, Gambia, Niger and the DRS, supply ^{over} ~~almost~~ three-quarters of world exports of groundnuts and about two-thirds of that of groundnut oil.²⁰⁶ The Sudanese share in world production is very small and usually does not exceed 2 per cent; but, in terms of export, the DRS is the

204. Ibid.

205. Ibid.

206. Ibid.

third largest supplier in Africa, i.e. after Nigeria and Senegal, and accounts for about an average of 7 to 8 per cent of total world exports of groundnuts. It could, therefore, be argued that the DRS, because of its relatively small share in world trade, can expand its exports without affecting world prices. But the success of such an effort would depend, of course, on the state of world demand for this commodity, as well as on the competitiveness of other producers.

It is to be noted that groundnut oil, like other 'edible' oils, is either processed into foodstuffs or used in the preparation of food. It is mainly used in the manufacture of margarine and compound cooking fat, but frequently it is used directly as either a cooking or a salad oil. Groundnuts are sometimes consumed directly. Because about four-fifths of world exports go to Western Europe,²⁰⁷ trends in demand for groundnut oil and groundnuts in that market would much affect further expansion of trade. It has been suggested that there is little hope for a growing market in this region.²⁰⁸ This is because most of the countries in Western Europe have already reached high consumption per capita of fats and oils as a result of the

207. Ibid.

208. "Sudan and the European Economic Community", op.cit. (ref. 169).

high level of per capita incomes achieved.²⁰⁹ According to a F.A.O. forecast, although there may be some increases in certain Mediterranean countries like Italy, Spain and Portugal, the share of Western Europe in total world imports of all vegetable oils and seeds would decrease to 45 per cent by 1975.²¹⁰ If this forecast is realised, the only possibility for an individual country to increase its exports to the region would lie in increasing its market share with respect to other countries. The same forecast argues that some expansion is possible in the consumption of vegetable oils in Eastern Europe, in India and China, and possibly in Japan. China and India, it is argued, would at least in the short run go on trying to meet their demand from their own production. Japan's demand is still growing 'more or less proportionally to income' but the share of groundnuts and groundnut oil in its total imports of oils and fats is still small and thus provides 'an attractive market'.²¹¹

209. Ibid.

210. Ibid. On the average about three-fifths of world exports of vegetable oils and seeds are now consigned to Western Europe. Vegetable Oils and Oilseeds, ~~op. cit.~~ (ref. 198).

211. Ibid. To compare per head consumption of food fats and oils in different countries, the estimates for 1967, in lb. per head, were: U.K. (48.3); France (52.3); United States (49.1); Canada (45.9); Japan (18.5); India (7.2); Egypt (15.3); see Vegetable Oils and Oilseeds, ~~op. cit.~~ (ref. 198).

But this is not the whole story. Groundnuts have been facing, in recent years, a serious challenge from two other oilseeds, i.e. soyabean and sunflower. Both oilseeds are produced in developed countries and are 'probably the greatest competitors to the oils and oilseeds produced in developing countries'.²¹² In the first place, because the oil content of the soya bean is relatively low compared with other oilseeds²¹³, while on the other hand its protein content of 40 per cent or more is high, this oilseed is much in demand in developed countries like Western Europe and the United States where the market for oil is increasing only slowly while protein requirements are advancing rapidly.²¹⁴ The secret of the game is the high protein oilcake which is obtained from crushing the soya bean and used as feedingstuff. Thus soya beans are ideal for a market situation where demand for high protein feedingstuffs was growing much more rapidly than that for oil. It is to be noted that world production of soya oil, stimulated by the rising demand for soya meal resulting from the growth of the livestock industry in the Western countries, has risen

212. Vegetable Oils and Oilseeds, 1944.

213. Soya bean oil content averages 17-18 per cent compared to an average of 45 per cent for groundnuts. Ibid.

214. Ibid.

rapidly in the post-war years from some 1.6 million tons in 1950 to 5.2 million tons in 1968.²¹⁵ While in 1955 soya oil accounted for 15 per cent of the world vegetable oil supplies, in 1968 it provided 24 per cent of the total.²¹⁶ Consequently, its relative importance has greatly increased and ^{it} is now the largest single source of edible vegetable oil. Thus, paradoxically, the largest source of edible oil is a by-product of soya meal production; the soya beans are mainly crushed for the oilcake. The main supplier of soya is the United States. Almost 90 per cent of world imports of this seed go to Western Europe, Canada and Japan.²¹⁷ In the second place, another challenge was created by the rapid expansion of exports of sunflower seed. This is mainly grown in the Soviet Union and Eastern Europe and, to some extent, in Argentina. Until 1965 world trade in sunflower seed and oil accounted for 5 per cent on the average of total exports of oils and seeds; however, the proportion rose to a tenth in 1966, while in 1967 sunflower displaced groundnuts as the third largest item in world trade of oils and seeds.²¹⁸ Between 1960 and 1968, world sunflower-seed output rose from 5.9 million tons to 9.6 million tons, i.e. an advance of

215. Ibid.

216. Ibid.

217. Ibid.

218. Ibid.

62 per cent.²¹⁹ The increased availabilities of Eastern European sunflower seed and oil have been mainly absorbed by Eastern and Western Europe, while recently Japan has become a prominent buyer of Soviet seed.²²⁰ It has been suggested that the movement of such large amounts of sunflower oil on to world markets at comparatively low prices had serious effects on 'values of other edible oils, and was a major cause of the weakness in edible oil prices which characterised 1967 and much of 1968'.²²¹

Thus we have an example of how the expansion of output of two primary commodities, not manufactured products, produced in the developed countries, could adversely prejudice the growth prospects of exports of similar commodities originating in the LDC's. It is further of interest to note that, while the overall growth rate of exports of oils and seeds in the LDC's was only 5.5 per cent over the period 1960-68, it was 32 per cent in the developed countries and no less than 145 per cent in the centrally-planned economies for the same period.²²² In fact, the share of the LDC's in the vegetable-oil market fell from 59 per cent in 1960 to 55 per cent in 1966 and further to 49 per cent in 1968.²²³ It is not surprising, therefore,

219. Ibid.

220. Ibid.

221. Ibid.

222. Ibid.

223. Ibid.

that the African Groundnut Council was formally established in 1966 to harmonise national marketing policies of its members and to co-ordinate their export promotion efforts with a view to protecting the interests of African producers of groundnuts against the increasingly severe competition in world markets.²²⁴ In 1968, the Council decided to open a permanent office in Europe for the promotion of groundnut sales, while it was also agreed to enlarge the Council's headquarters staff in Lagos by the addition of a department of studies and scientific research. In 1969 a report on groundnut marketing, prepared for the Council, was published by the International Trade Centre which suggested a \$1.5 million a year promotional campaign to be run in France, West Germany, the United Kingdom and Switzerland.²²⁵

(B) Cottonseed and oil

The availability of cottonseed is naturally determined by the volume of the cotton crop each year. During the period under review, both cottonseed and cottonseed oil have

224. The African Groundnut Council includes Nigeria, Gambia, Niger, Senegal, Mali, Sudan, Congo (Kinshasa) and Upper Volta. Its headquarters are in Lagos, Nigeria. Members of the Council account for almost 85 per cent of world exports of groundnuts and oil.

225. Vegetable Oils and Oilseeds, ~~op. cit.~~ (ref. 198).

been available for export from the DRS. Table XXV below gives the pattern of exports of cottonseed from the Sudan during the period: it is evident that export values actually declined from L.S.4,674,000 in 1956 to only L.S.1,489,000 in 1969, i.e. declining at an average rate of 9.1 per cent per annum. This decline has been mainly caused by the expansion in the domestic crushing capacity stimulated by a rising home

TABLE XXV: EXPORTS OF COTTONSEED
(IN L.S. 000'S)

Year	E.E.C.	U.K.	Japan	Socialist countries	U.A.R.	Others	Totals
1956	411	1,163	64	53	2,785	198	4,674
1957	179	1,715	185	-	2,198	883	5,160
1958	31	1,022	6	27	136	120	1,342
1959	375	2,873	374	-	277	436	4,335
1960	-	1,932	52	107	-	693	2,784
1961	40	2,546	117	390	-	544	3,637
1962	799	3,550	-	34	921	159	5,463
1963	571	2,690	-	212	-	378	3,851
1964	16	773	-	201	27	222	1,239
1965	315	612	-	540	-	392	1,859
1966	129	189	88	640	-	272	1,318
1967	64	335	22	598	-	23	1,042
1968	8	149	507	87	-	142	893
1969	76	331	742	-	-	340	1,489

Source: Various "Annual Foreign Trade Statistics",
(Department of Statistics, Khartoum).

demand for oils. In fact, the current 'Five Year Plan' postulates the complete cessation of export of cottonseed by next year in favour of cottonseed oil.²²⁶

On the other hand, export of cottonseed oil has been steadily increasing during the period under review. It increased from L.S.441,000 in 1956 to L.S.920,000 in 1969, i.e. at an average annual rate of 5.8 per cent. Because of the strong competition from other edible vegetable oils described above and, partly due to the relatively higher tariffs on oils compared to oilseeds,²²⁷ exports of cottonseed oil to the industrial countries, in particular the E.E.C., were negligible. The United Kingdom imported reasonable quantities in only four of the fourteen years examined by Table XXVI below. The main market for Sudanese cottonseed oil seems to be the United Arab Republic which increased its purchases steadily in particular during the last four years. The future prospects of export of cottonseed oil would naturally depend on its competitive position vis-à-vis other edible oils, particularly with regard to price. Consequently chances of expansion in Western Europe do not seem to be bright; but countries in the Middle East

226. Five Years Plan, Volume 1, ~~op. cit.~~ (ref. 131).

227. No tariffs are levied on the import of oilseeds in the E.E.C.

might provide potentially expanding markets, in particular the United Arab Republic. Here, it could be argued, prospects of Sudanese exports could be improved if, at least, American exports to the region under various programmes would cease and allow the DRS to benefit from the demand already existing in these countries.²²⁸ Various U.S.A. programmes, it is to be mentioned, supplied in aggregate almost 6 per cent of world exports of vegetable oils on the average between 1964 and 1968.²²⁹

**TABLE XXVI: EXPORTS OF COTTONSEED OIL
(IN L.S. 000'S)**

Year	E.E.C.	U.K.	U.A.R.	Saudi- Arabia	South Yemen	Iran	Others	Total
1956	69	-	215	71	10	-	76	441
1957	-	-	645	60	19	-	1	725
1958	-	-	23	114	4	-	37	178
1959	36	-	-	83	23	219	118	479
1960	-	-	-	61	35	221	4	321
1961	13	136	-	94	45	-	263 [*]	651
1962	18	64	377	86	11	27	54	637
1963	43	230	139	99	8	-	78	597
1964	105	518	-	97	23	-	55	798
1965	65	635	84	83	23	-	68	958
1966	11	401	472	56	22	-	36	998
1967	-	21	596	68	-	-	6	691
1968	44	35	755	10	37	-	-	881
1969	-	88	823	8	-	-	1	920

Source: Various "Annual Foreign Trade Statistics"
(Department of Statistics, Khartoum).

*of which China imported quantities worth L.S.256,000.

228. "Sudan and the European Economic Community" (ref. 169).

229. Vegetable Oils and Oilseeds (ref. 198).

In addition to oil, the expanding crushing industry has also been providing increasing quantities of cottonseed cake and meal available for export. This by-product is used in animal feedingstuff. Table XXVII below shows that exports of cake and meal steadily increased from just L.S.524,000 in 1956 to L.S.2,354,000 in 1969, i.e. increasing at an average rate of 12.3 per cent per annum during the period. E.E.C. supplies the main outlet for Sudanese oilcakes and future expansion in that market would greatly depend on the competitiveness of the Sudanese production.

TABLE XXVII: EXPORTS OF COTTONSEED CAKE AND MEAL

Year	E.E.C.	U.K.	Others	Total
1956	181	297	46	524
1957	181	342	24	547
1958	85	275	8	368
1959	703	141	40	884
1960	751	113	85	949
1961	747	194	53	994
1962	1,299	222	35	1,556
1963	1,807	119	25	1,951
1964	1,996	123	23	2,142
1965	2,252	76	91	2,419
1966	2,836	29	81	2,946
1967	2,295	101	61	2,457
1968	2,838	12	78	2,928
1969	2,313	10	31	2,354

Source: as for Table XXVI.

(C) Sesame

Among the soft vegetable oils and oilseeds, sesame takes a place of minor importance in world trade. The oil is of high quality and is used for much the same purposes as olive oil; it is also utilised for some medicinal purposes.²³⁰ The leading producers of sesame are India and China but these countries retain most of their output. In terms of world exports, Nigeria and the DRS are the main suppliers; the Sudan alone supplies almost half of the world's requirements.²³¹

Despite the year-to-year variations, production of sesame in the DRS has shown an upward trend. Table XXVIII below clearly indicates that output of this crop increased from 153,000 tons in 1956/57 to 202,000 tons in 1969/70, i.e. at an average rate of 2.1 per cent per annum.

Table XXIX below gives the value of exports of sesame seed from the Sudan during the period 1956-69. Exports, during the period, have been steadily increasing from L.S.2,050,000 in 1956 to L.S.8,018,000 in 1969, i.e. at an average of 11.0 per cent per annum. The high increase in exports in 1969 is attributed to increased imports by Japan, U.A.R., and the Socialist countries, of which China alone

230. Ibid.

231. Ibid.

TABLE XXVIII: PRODUCTION OF SESAME

Season	Area [*]	Production ^{**}
1956/57	793	153
1957/58	563	141
1958/59	747	154
1959/60	991	179
1960/61	694	127
1961/62	981	232
1962/63	776	142
1963/64	1,184	174
1964/65	1,116	184
1965/66	948	160
1966/67	925	134
1967/68	1,234	187
1968/69	1,090	122
1969/70 ^{***}	1,333	202

Source: Economic Survey, 1969 (Ministry of Planning, Khartoum, December 1970).

^{*} in thousand feddans.

^{**} in thousand tons.

^{***} tentative.

bought sesame to the value of L.S.1,417,000. The main market for sesame exports is the E.E.C. thanks to the large purchases of Italy; the E.E.C. accounts for about 30 per cent on the average of all exports from the Sudan, while Italy alone takes almost an average of 21 per cent of the total, thus being the most important market for the DRS. The second important market in the European Community, after Italy, is Belgium. Both countries are large importers

TABLE XXIX: EXPORTS OF SESAME
(IN L.S. 000'S)

Year	E.E.C.	Japan	U.A.R.	Socialist	Others	Total
1956	507 (256)*	217	360	-	966	2,050
1957	694 (262)	158	880	149	1,111	2,992
1958	822 (384)	250	406	45	674	2,197
1959	1,162 (764)	301	583	110	597	2,753
1960	1,116 (844)	199	616	323	2,340	4,594
1961	775 (503)	262	521	750	1,869	4,177
1962	646 (321)	290	1,067	2	3,636	5,641
1963	1,875 (1,401)	938	681	430	903	4,827
1964	1,753 (1,398)	1,178	195	817	2,511	6,454
1965	1,942 (1,440)	613	465	843	887	4,750
1966	2,420 (1,904)	961	782	100	1,387	5,650
1967	2,569 (1,982)	900	1,160	802	1,100	6,531
1968	2,018 (1,564)	876	892	1,380	1,051	6,217
1969	1,857 (1,491)	1,184	1,663	2,065	1,249	8,018

Source: Various "Annual Foreign Trade Statistics"
(Department of Statistics, Khartoum).

* share of Italy.

of sesame from the world markets and, consequently, it is possible that further expansion of sales by the Sudan to either is possible. Italy, in particular, offers a good market because its large annual purchases are attributable to a 'legal requirement that edible oils (including margarine) sold in Italy must contain 5 per cent of sesame oil'.²³² Another important world market for sesame is Japan which, in

232. Ibid.

recent years, absorbed about a third of total world trade.²³³ The Japanese purchases of sesame from the DRS have been increasing and accounted on the average for about 12 per cent of total exports. However, prospects for increasing the Sudan's share in this market are indeed encouraging. An average of about 16 per cent of total exports of sesame from the DRS are usually shipped to the United Arab Republic; this is an expanding market for edible oils and could offer outlet for an appreciable amount of Sudanese produce in the future. The purchases of the socialist countries have fluctuated considerably, probably depending on the supply position of their own edible oils. The U.S.S.R., among countries of this group, appears to be the most important market for sesame, though in the last two years, i.e. 1968 and 1969, China bought relatively large quantities accounting, in terms of value, for L.S.720,000 and L.S.1,417,000 for the two years respectively. It is not clear whether these Chinese purchases represent a trend of a long duration or are just temporary imports to meet domestic shortages of oils. In general, it has been suggested that 'tastes and established trade patterns would seem to dominate the future chances for increasing world sales of sesame. As the world's leading exporter, Sudan

233. "Sudan and the European Economic Community", (ref. 169).

has the possibility of influencing the market and trying to pursue active sales policies.²³⁴

Very small quantities of sesame oil are being exported at the moment, mostly to Saudi Arabia and the Republic of South Yemen. In only one year, i.e. 1962, in the period examined has this oil been exported in any appreciable quantity to Europe, when Spain bought quantities worth L.S.254,000.* It seems that the present pattern of world trade, which is all conducted in terms of sesame seed rather than oil, will continue. The local crushing industry would probably continue to cater for the home market, although some expansion of sesame oil sales to Saudi Arabia, both the Yemens and the Persian Gulf states might not be discounted. Table XXX below gives the values of sesame oil exports during the period.

Exports of the by-product of the sesame crushing industry, i.e. sesame cake and meal, are still small; but these have been increasing from L.S.286,000 in 1956 to L.S.812,000 in 1969. The bulk of these exports were shipped to the E.E.C. Table XXXI below gives details of these exports.

234. Ibid.

* possibly to supplement its olive oil supplies.

TABLE XXX: EXPORTS OF SESAME OIL
(IN L.S.000'S)

Year	Total Exports	Year	Total Exports
1956	20	1963	111
1957	30	1964	99
1958	42	1965	94
1959	72	1966	117
1960	100	1967	105
1961	139	1968	27
1962	344	1969	29

Source: Various "Annual Foreign Trade Statistics",
(Department of Statistics, Khartoum).

TABLE XXXI: EXPORTS OF SESAME CAKE AND MEAL
(IN L.S.000'S)

Year	E.E.C.	Others	Total Exports
1956	243	43	286
1957	324	13	337
1958	292	15	307
1959	427	32	459
1960	366	9	375
1961	831	42	873
1962	437	53	490
1963	376	61	437
1964	487	254 [*]	741
1965	574	223 [*]	797
1966	635	213 [*]	848
1967	272	42	314
1968	372	9	381
1969	685	127	812

Source: as Table XXX.

^{*} increase mainly due to purchases by Spain.

Finally, a word can be said about a new addition to the Sudanese export list, i.e. castor seed. Since the beginning of the 1960s, the area under castor cultivation, mainly in Kassala province in the eastern part of the country, has been steadily increasing from 9,000 feddans in 1960/61 to 46,000 feddans in 1969/70 or at an annual average rate of 19.9 per cent. Consequently, production of castor seed increased from 4,000 tons in 1960/61 to 12,000 tons in 1969/70, i.e. at an annual average rate of 13 per cent. But it can easily be noticed that the output growth has been relatively slower than the corresponding growth in acreage expansion. It is clear from Table XXXII below that, for instance, although the area under castor cultivation increased by 15,000 feddans in 1969/70, production actually fell by 3,000 tons. The main cause of this conflicting situation can be found in the deteriorating productivity in castor production: average yield per feddan, for example, fell from 0.64 ton in 1967/68²³⁵ to 0.48 ton in 1968/69, and further to only 0.26 ton in 1969/70.²³⁶ In fact, one of the objectives of the current 'Five Years Plan' is to increase castor production to 31,000 tons by 1974/75 through raising productivity to 0.7 ton per feddan.²³⁷

235. "Bulletin of Agricultural Statistics of the Sudan", No. 8, 1967/68 (Ministry of Agriculture, Khartoum).

236. Economic Survey, 1969 (Ministry of Planning), (ref.193).

237. Five Years Plan, Volume II (ref. 123).

TABLE XXXII: PRODUCTION OF CASTOR SEED

Season	Area [✱]	Production ^{✱✱}
1960/61	9	4
1961/62	13	4
1962/63	11	5
1963/64	16	7
1964/65	22	6
1965/66	19	10
1966/67	32	19
1967/68	33	21
1968/69	31	15
1969/70 ^{✱✱✱}	46	12

Source: Economic Survey, 1969 (Ministry of Planning, December 1970).

✱ in thousand feddans.

✱✱ in thousand tons.

✱✱✱ tentative.

It is evident from Table XXXIII below that exports of castor seed have been increasing from only L.S.199,000 at the beginning of the 1960s to over a million pounds in 1968. After a temporary setback in 1969, export earnings from castor recovered in 1970 to L.S.900,000. The main buyers were France and the United Kingdom. But, however, the volume of export of castor seed from the DRS is still very small due to the existing limited production. In terms of world output of castor seed, Sudan's share is negligible.²³⁸

238. World output of castor seed is estimated at 830,000 tons in 1968/69 in Vegetable Oils and Oilseeds, (ref. 198).

TABLE XXXIII: EXPORTS OF CASTOR SEED

Year	Quantity*	Value**
1960	4	199
1961	3	192
1962	4	173
1963	6	268
1964	5	257
1965	3	114
1966	8	335
1967	10	504
1968	14	1,076
1969	3	161
1970***	-	900

Source: Various 'Annual Foreign Trade Statistics' (Department of Statistics, Khartoum).

* in 000's tons.

** in 000's pounds Sudanese.

*** estimates obtained from The Five Years Plan, Vol. II (Ministry of Planning).

(-) not available.

Thus it can be said that the DRS has the chance to expand its exports of this commodity without upsetting its world trade. But, what are the prospects of this commodity in world markets?

It might be appropriate to mention that castor oil is used in the manufacture of 'high-grade lubricants, soaps, paints, varnishes, resins, plastics, nylon, other industrial products, in textile dyeing, and for medicinal purposes. The most important uses now, however, are probably plastics,

nylon and paints. Large quantities of castor oil are used in France and Brazil in the manufacture of Rilsan, a polyamide fibre, also known as Nylon 11; in France this is now the largest outlet for castor oil'.²³⁹ Because the industrial uses of castor oil, already widespread, are gradually being expanded by research into new applications, it has been suggested that 'the long-term market prospects for castor oil can probably be considered as very favourable. At present castor oil appears to suffer little competition from synthetic products; and provided prices do not fluctuate too greatly, additional output from primary producing countries can expect to be absorbed successfully on the world market; furthermore, industrial development in producing countries will probably lead to higher internal consumption, as in fact is already happening in India and Brazil.'²⁴⁰ Thus, at least for a change, we have a primary

239. Vegetable Oils and Oilseeds, ibid. It is to be mentioned that the leading importer of castor is the United States, followed by France and the U.K.; West Germany and Japan are also important buyers. Consumption in the Soviet Union is equally high but increasingly met from domestic sources. Leading exporters of castor oil are normally Brazil and India though the position of the latter has declined in world trade in recent years. Other major shippers are China, Thailand and Tanzania. (Same reference)

240. Ibid.

commodity which probably could offer good prospects of expansion for the DRS. The wonder is that no expansion in acreage devoted to castor production has even been contemplated in the current 'Five Years Plan'.²⁴¹

2.2.D. Dura

Dura, or sorghum, is the main staple food crop for almost the majority of the population in the DRS. It is produced throughout the country. Even in the irrigated areas, dura is usually included in the crop rotation system with the purpose of ensuring adequate supplies to meet the consumption of the tenants. Thus, ironically, the most developed system of the agricultural sector contains an element of subsistence within it. However, the bulk of dura is being supplied by rain cultivation, where traditional methods of production are still being employed. But, recently, mechanised cultivation has been introduced, in particular in Gedaref and Dali/Mazmum areas. In fact, these

241. Increases in production, as already mentioned, are contemplated to be obtained via increases in productivity. By the end of the Plan period, acreage under castor cultivation would remain 45,000 feddans, the same as in 1970/71, the first year of the Plan. (Information obtained from The Five Years Plan, Volume II (ref. 123).)

two areas provide at the moment a large share of the surpluses for both domestic consumption in other parts of the country as well as for export. Table XXXIV below gives the pattern of production of this crop during the period under review.

TABLE XXXIV: PRODUCTION OF DURA

Season	Area [✱]	Production ^{✱✱}
1956/57	2,492	1,067
1957/58	2,607	1,139
1958/59	3,252	1,372
1959/60	3,251	1,313
1960/61	3,067	1,051
1961/62	3,516	1,434
1962/63	3,517	1,266
1963/64	3,277	1,348
1964/65	3,158	1,138
1965/66	3,200	1,095
1966/67	3,182	850
1967/68	4,700	1,980
1968/69	2,780	710
1969/70 ^{✱✱✱}	4,160	1,417

Source: Economic Survey, 1969 (Ministry of Planning, December 1970).

[✱] in 000's feddans.

^{✱✱} in 000's tons.

^{✱✱✱} tentative.

Despite the annual fluctuations, production of dura was adequate to meet the domestic consumption as well as to

provide surpluses for export in all but two of the crop seasons covered by the table. In both 1966/67 and 1968/69, poor rains reduced the output to such a level that the government had to prohibit export of dura in an endeavour to meet domestic requirements. In fact, in 1967, dura worth L.S.985,250²⁴² was imported from the U.S.A. under the P.L. 480 programme to cover local shortages. Because dura is such an important domestic food crop, quantities available for export each year are a residue depending on the total supplies obtained. Nevertheless, as shown in Table XXXV below, dura exports did earn some foreign exchange for the country. The main markets for dura are the neighbouring countries of Saudi Arabia, the Yemens, U.A.R. and Somalia, though some quantities are being exported to the E.E.C. and U.K. There could be ~~(a)~~ scope for expansion of dura production in the DRS, particularly when the existing Plan envisages the construction of a factory for the manufacture of glucose and starch based on this crop as a raw material.²⁴³

242. "Annual Foreign Trade Statistics, 1967" (Department of Statistics, Khartoum).

243. The Five Years Plan, Vol. I (ref. 131).

TABLE XXXV: EXPORT OF DURA

Year	Quantity [*]	Value ^{**}
1960	171	2,795
1961	93	1,863
1962	76	1,479
1963	74	1,557
1964	61	1,539
1965	112	2,442
1966	79	1,872
1967	0.6	16
1968	55	1,071
1969	2	43

Source: Various "Annual Foreign Trade Statistics"
(Department of Statistics, Khartoum).

^{*}in 000's tons.

^{**}in L.S.000's.

2.2.E. Animal resources

It might be appropriate to end our survey of the general performance of Sudanese exports by examining briefly the contribution of the animal sector to the country's foreign exchange earnings. Paradoxically, it is the sector which seems to be most neglected while it appears to offer reasonable potential for further expansion. A United Nations expert, for example, points out the fact that the 'Sudan is rich in animal resources when compared with other countries; but the growth of such resources would be enhanced if

adequate care and protection are given to them.²⁴⁴ In 1969/70, the animal population of the country is estimated to stand as follows:²⁴⁵

	<u>in 000's heads</u>
Cattle	12,300
Sheep	10,300
Goats	7,200
Camels	2,500
Total	<u>32,300</u>

It is estimated that cattle population increases at an annual growth rate of 3.5 per cent while sheep and goats increase at an annual growth rate of 3 per cent and 2.8 per cent respectively. Camel population growth is static.²⁴⁶ However, it could be reasonably argued that the country has not benefited as much as it should from this considerable animal wealth. Before attempting to outline the causes that ^{have} prevented the country from realising an optimum utilisation of these resources, let us survey briefly the actual contribution of this sector to the country's exports during the period under review.

(A) Cattle

Live cattle have been mainly exported to the United Arab

244. The Economic Survey, 1968 (Ministry of Planning, Khartoum August 1969).

245. The Economic Survey, 1969 (ref. 193).

246. Ibid.

Republic though, in recent years, new outlets have been developed in some other Arab countries. It is clear from Table XXXVI below that the reduced exports of cattle during the period reflect a decline in purchases by the United Arab Republic. However, the Sudan has gradually established

TABLE XXXVI: EXPORTS OF CATTLE

Year	Total Quantity [*]	of which UAR's share [*]	Total Value ^{**}
1956	59,480	(58,415)	1,026
1957	60,719	(59,009)	1,397
1958	34,544	(33,355)	923
1959	8,869	(2,656)	168
1960	39,992	(38,788)	967
1961	33,240	(32,978)	807
1962	7,723	(5,433)	161
1963	22,082	(21,278)	533
1964	12,414	(11,744)	299
1965	9,595	(5,535)	276
1966	17,434	(14,949)	519
1967	9,242	(7,174)	282
1968	8,083	(781)	249
1969	9,476	(1,519)	318

Source: Various "Annual Foreign Trade Statistics",
(Department of Statistics, Khartoum).

^{*}in heads of cattle.

^{**}in L.S. 000's.

new markets for its cattle, in particular in Saudi Arabia, Kuwait, Libya and the sheikhdoms of the Persian Gulf. In

particular it is to be noted that the Saudi Arabian absorption has been fast~~(ly)~~ increasing from just 729 heads of cattle in 1960 to 6,235 heads in 1968 and further to 6,338 heads in 1969, i.e. representing about 77 per cent and 67 per cent of total Sudanese exports in the last two years respectively. It is probable that exports to Saudi Arabia, as well as to the other Arab countries in the region, will continue to expand. It is fair to assume that, with increasing incomes, meat consumption is bound to rise; consequently, the Sudanese exports have good prospects to meet a large share of this anticipated rise. However, the success of such a venture would naturally depend on the regularity of the Sudanese exports, on their price competitiveness and on the extent of an export promotion drive to be launched to utilise these potential opportunities.

(B) Sheep

As shown in Table XXXVII below, exports of sheep have been steadily increasing throughout the period under review. Export values rose from only L.S.493,000 in 1956 to L.S.1,985,000 in 1969, i.e. at the high annual average rate of 11.3 per cent. The largest share of these exports were shipped to Saudi Arabia; but again new markets are being established in other Arab countries, in particular Libya and

the sheikhdoms of the Persian Gulf, Yemen and Jordan. What has been said about cattle prospects could also be repeated here: potential prospects for possible expansion are quite promising in the region and await a serious drive for utilisation.

TABLE XXXVII: EXPORTS OF SHEEP

Year	Total Number [Ⓜ]	of which Saudi Arabia's share [Ⓜ]	Total Value ^{ⓂⓂ}
1956	148,569	(147,079)	493
1957	132,417	(130,153)	642
1958	94,959	(93,359)	685
1959	139,272	(96,561)	931
1960	75,333	(69,268)	504
1961	99,545	(99,545)	665
1962	94,979	(90,729)	653
1963	72,965	(72,565)	509
1964	80,242	(70,362)	574
1965	227,219	(220,668)	1,701
1966	163,051	(161,951)	1,267
1967	219,543	(216,343)	1,767
1968	210,506	(201,956)	1,794
1969	224,737	(221,507)	1,985

Source: Various "Annual Foreign Trade Statistics" (Department of Statistics, Khartoum).

[Ⓜ] in heads of sheep.

^{ⓂⓂ} in L.S. 000's.

(C) Camels

Exports of camels have fluctuated considerably depending on the volume of purchases by the United Arab

Republic. As Table XXXVIII shows, the main market, or probably the only one, is the U.A.R., though occasional imports by Saudi Arabia and Libya are made from time to time. There seems to be no possibility for a new expanding outlet for camel exports; perhaps it is correct to assume that future trends would much depend on the development of consumption in the Egyptian market.

TABLE XXXVIII: EXPORTS OF CAMELS

Year	Total Number [*]	U.A.R.'s share [*]	Total Value ^{**}
1960	63,121	(63,121)	2,196
1961	53,044	(53,044)	1,878
1962	55,510	(55,510)	2,043
1963	101,552	(101,473)	4,477
1964	25,529	(24,919)	1,149
1965	33,438	(33,161)	1,816
1966	60,992	(60,942)	3,670
1967	48,367	(47,705)	3,004
1968	53,669	(53,067)	3,173
1969	27,751	(27,603)	1,560

Source: Economic Survey, 1969 (Ministry of Planning, Khartoum, December 1970).

^{*}in heads of camels.

^{**}in L.S. 000's.

(D) Meat and meat preparations

Due to the absence of proper refrigeration, storage and transport facilities, export of meat is negligible.

Scattered efforts were made by individual private exporters to capture the ready available neighbouring markets; but such efforts were bound to fail due to lack of organisation, of capital, of facilities, and, above all, surprisingly, to complete absence of any assistance from the government. The highest exports of meat ever achieved were valued at only L.S.305,000 in 1969, mostly to the United Arab Republic. Indications show that there are good prospects for meat export in Libya, Lebanon, Saudi Arabia and the Persian Gulf sheikhdoms, besides the U.A.R. However, what is needed, therefore, is a serious effort to overcome all the obstacles aforementioned.

(E) Hides and skins

Though the country seems to possess a great potential in hides, skins and leather, the present output solely depends on the number of slaughtered animals for domestic consumption. The output would have been much higher if meat was exported instead of live animals. Exports consist mainly of raw hides and skins but, recently, small quantities of tanned leather have also been sold abroad. Table XXXIX below shows that export values of hides and skins increased from L.S.1,075,000 in 1956 to L.S.1,804,000 in 1969, i.e. at an average rate of 4.1 per cent per annum;

TABLE XXXIX: EXPORTS OF HIDES AND SKINS
(IN L.S. 000'S)

Year	Total Exports
1956	1,075
1957	1,048
1958	837
1959	1,070
1960	1,028
1961	1,042
1962	979
1963	1,279
1964	981
1965	1,252
1966	1,604
1967	1,446
1968	1,509
1969	1,804

Source: Various "Annual Foreign Trade Statistics", (Department of Statistics, Khartoum).

most of these exports were shipped to the E.E.C., U.A.R. and U.K. However, with the expansion of domestic leather tanning capacity and the shoe industry, it seems that a large share of the available raw hides and skins would have to be diverted to meet the home requirements. If, however, a meat industry is established to cater for export, more quantities of this by-product would naturally be available for overseas sales.

But what seems to be the problem? Why did the country fail to utilise this vast animal wealth? The main obstacle

appears to be reflected in lack of adequate water and pasture in the animal areas as well as difficulties of transportation. It is to be mentioned that these animal areas are situated far away from either the export points or the main consuming centres. Animal breeding is not organised in modern farms but is still run in the traditional nomadic way where owners move from one place to another in search of water and pasture; this has resulted in the deterioration of the quality of the animals and the reduction of their marketable values. Thus wrote the Soviet experts:

'The increase in the number of livestock in the country was not followed by relative expansion in fodders and irrigated pastures. L.S.2 million was devoted for the development of animal resources during the last ten years and only within the last two years the Sudan Government started extensive drilling of deep bores and watering points.

Crowding of cattle at range and the failure to organise the areas resulted in disintegration of their capacities and sometimes made them unfit for future use.

The unsatisfactory conditions of fodder base and the low level of veterinary services led to the mass mortality of cattle, dryness of cows, low productivity and lowered the marketable value of the livestock sector which is considered among the most important economic sectors in the Sudan.²⁴⁷

247. Five Years Plan, Volume I (ref. 131).

The current 'Five Years Plan' devotes a lot of attention to this neglected sector. It envisages the establishment of state animal-breeding farms, the creation of a disease-free zone, the increase of pastures and watering points and the provision of a cattle-route from the western provinces to Khartoum with all facilities required to ensure a continuous supply of cattle throughout the year. These proposals, it is hoped, would play a major role in settling the nomadic population and in promoting the marketability of animal products.²⁴⁸

2.3. Imports

We have already mentioned that the DRS relies to a large extent on the international market for the supply of a wide range of its requirements. These imported needs do not only cover capital goods, in which the country has an obvious comparative disadvantage, but also include a variety of manufactured consumers' goods, often very simple articles, as well as, surprisingly, some agricultural products. All these items have to be imported

248. Ibid. Specialists estimate that the animal resources available within the country can achieve an annual output of 600,000 tons of meat and can provide for exports of animal products to the tune of L.S. 32 million. (Same reference)

simply because they are not available domestically. The level of total imports has been generally rising throughout the period under review. But this is not a startling discovery. The process of development inevitably sets in motion a growing demand for imports. A rising level of production and investment cannot be sustained without a steady increase in the demand for machinery, raw materials and consumers' goods.²⁴⁹ Thus, with the country's continuous effort to develop, total imports are bound to increase in the future. Consequently, as we have mentioned before, what is needed to sustain the development effort is to continue increasing the country's capacity to import either through a steady expansion of exports or via foreign aid and grants.

As shown in Table XL below, total imports of the DRS increased from L.S.45.2 millions in 1956 to L.S.92.5 millions in 1969, i.e. at an average rate of 5.6 per cent per annum. In comparison, exports increased during the period from L.S.66.8 million to L.S.86.2 million, i.e. at an annual average rate of only 2 per cent. We have already outlined the effects of the relatively slower growth of exports;

249. I.G. Patel, "Trade and Payments Policy for a Developing Economy", in R. Harrod and D. Hague (ed.), International Trade Theory in a Developing World (Macmillan, 1968).

again, we shall discuss its impact on the country's balance of payments later in this section. In the meantime, it is to be noted that the private sector accounted for the larger share of total imports during the period. As Table XL shows, government direct imports accounted for about 23 per cent of the total import bill on the average.

TABLE XL: IMPORTS OF THE SUDAN
(IN L.S. MILLIONS)

Year	Private Imports	Government Direct Imports	Total Imports
1956	34.5	10.7	45.2
1957	56.1	11.5	67.6
1958	40.1	19.4	59.5
1959	44.5	12.6	57.1
1960	50.2	13.5	63.7
1961	65.5	17.4	82.9
1962	67.8	23.0	90.8
1963	72.4	26.8	99.2
1964	67.4	28.1	95.5
1965	55.3	16.9	72.2
1966	60.1	17.4	77.5
1967	59.4	21.8	81.2
1968	78.1	11.6	89.7
1969	72.8	19.7	92.5

Source: Various "Annual Foreign Trade Statistics",
(Department of Statistics, Khartoum).

However, this is not to suggest that the government's consumption of imported goods is restricted to these direct

purchases. On the contrary, some of the imports of the private sector are directed to meet government's contracts. But, however, the exact share of the public sector in total imports cannot be verified by the available statistics.

The table also reveals considerable variations from year to year. These are assumed to reflect the corresponding variations in export earnings which we have previously outlined. Subject to a lag of approximately one year, imports generally followed exports closely, i.e. an increase in exports in one year would lead to a parallel rise in imports in the next and vice versa. It has been suggested, for example, that the correlation coefficient of the deviations of exports and imports of the DRS from their respective trend values was 0.81 when imports were lagged by one year.²⁵⁰ The explanation is simple. A good export performance would mean higher incomes in the economy: with high marginal propensities to consume and to import, higher incomes would lead to higher leakages in the form of additional imports. Consequently, the process would increase the government's revenue which, in turn, could boost development spending which, via the multiplier effect, would further mean additional spending power in the economy leading to

250. Adnan Mahhouk and Franz Drees, "Domestic Policies and Payments Problems of the Sudan, 1947-62", (I.M.F. Staff Papers, XI (March, 1964).)

additional imports. On the other hand, a poor export performance would have the opposite effects: less incomes, less spending and less import demand. However, in recent years, a new element has emerged, i.e. deficit financing and foreign borrowing. More and more the government tended to finance its development efforts through reliance on the banking system and, to some extent, on foreign dependence. This new tendency has created considerable difficulties which we shall revert to later in this section.

Table XLI below gives the share of the main categories in the total imports of the country. The pattern reveals that consumer goods accounted for the lion's share, ranging between 43 per cent and 63 per cent of total imports during the period examined. It is not surprising to find that the share of capital goods was at its highest during the first four years of the 1960s reflecting the accelerated pace of development spending during the period. However, with the completion of the most important projects of the 'Ten Years Plan', the share of this category has gradually declined. On the other hand, the share of raw materials has been increasing steadily from only 18 per cent during the first half of the 1950s to 42 per cent by 1969 reflecting a continuous rising demand for these materials by the economy.

But, briefly, what were the objectives of the import

TABLE XLI: PERCENTAGE SHARE OF CATEGORIES OF GOODS TO TOTAL IMPORTS

Year	Consumer Goods	Raw Materials	Capital Goods	Unclassified	Total
Average 1950-54	63	18	19	-	100
Average 1955-59	57	20	23	-	100
1960	52	21	27	-	100
1961	48	19	33	-	100
1962	44	21	35	-	100
1963	46	24	30	-	100
1964	47	36	16	1	100
1965	52	35	12	1	100
1966	54	29	16	1	100
1967	52	34	13	1	100
1968	58	31	11	-	100
1969	43	42	14	1	100

Sources: Economic Survey, 1964 (Ministry of Finance and Economics, Khartoum, November 1965).
Economic Survey, 1969 (Ministry of Planning, Khartoum, December 1970).

policy pursued by the DRS during the period under review? Generally, the period was characterised by a relatively liberal import policy that allowed goods to flow from abroad without causing any serious shortages or resulting in any inflationary trends in the economy. A list of commodities under the open general licence (OGL) has operated with various degrees of rigour throughout the period. This OGL list indicates the type of commodities whose import is

freely allowed from any foreign source.²⁵¹ The list has been shortened or enlarged several times during our period of study but, generally, it always included capital goods, raw materials as well as essential consumer goods. However, it should not be assumed that this liberal policy implied absence of any sort of import control. On the contrary, during the period several measures were taken to reduce the country's import bill. In our view, these measures were governed by two basic objectives:

- 1) Industrialisation, i.e. protection of domestic industries;
- 2) The balance of payments, i.e. attempts to correct the external imbalance.

It would be appropriate, therefore, to examine the set of policies employed to achieve each of these two objectives and try to assess the results obtained. Our assessment would, of course, be geared to a discussion of the impact of these policies on the process of economic growth.

2.3.A. Industrialisation

Because of the contention that primary exports of the LDC's are bound to face continuous obstacles in the international markets, some economists have argued that, in order

251. Except South Africa, Rhodesia, Portugal and Israel with which trade is completely prohibited.

to initiate a sustained process of economic growth, these countries have to embark on a strategy of industrialisation supported by a policy of protection.²⁵² This strategy would imply one (or both) of two things:

(a) It could suggest that a prime mover has to be created so as to activate the already available, but unrealised, resources in the developing economy. Thus, it is argued, the primary obstacle to development is not the inadequate supply of the sources of growth but rather the absence of a catalyst that creates an environment or a circumstance that pulls the already available latent forces of growth out of stagnation.

(b) It could also mean an approach to development that seeks to modify the nature of the economy in quite fundamental ways on the assumption that such modification is necessary before sustained growth is possible. Allocation of investment resources according to the conventional marginal productivity criteria would not help to change the economic structure of the developing economies which is in itself thought to be alien to growth. What is needed, therefore, is the creation of a new structure which is not only presumed to yield a higher output than what would otherwise be possible but

252. For theoretical arguments, see Chapter One, section 1.9.

that this new structure would permit continuing growth.²⁵³

Thus, industrialisation is thought to be a prime mover²⁵⁴ or an agent for structural change,²⁵⁵ or both, that could enable the LDC's to meet, at least, a wide range of difficulties believed to be blocking development. Now, a programme of industrialisation in the LDC's would invariably mean a drive towards import substitution (IS). IS is assumed to be 'not only the most common (frequently observed) strategy in practice, but it is indeed perhaps the only one'.²⁵⁶ This could be for two reasons. Firstly, the initiation (as distinct from the effective implementation) of industries catering for the domestic market appears to be very easy indeed: all the country has to do is simply to prohibit imports of the product to be manufactured locally, thus providing the potential domestic producers with a market where demand is already well established. Secondly, it would probably be unlikely that a newly introduced manufactured product would be able to compete successfully

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253. H.J. Bruton, "The Import-Substitution Strategy of Economic Development: A Survey", The Pakistan Development Review, Volume X, No. 2 (Summer, 1970).
254. i.e. Balanced and Unbalanced Growth doctrines.
255. i.e. 'Structuralist' approach to development.
256. Bruton, "The Import-Substitution Strategy of Economic Development: A Survey" (ref. 253).

in the world markets; this is so because the product is bound to have a comparative disadvantage in the initial stages (though it might be potentially competitive in later stages) due to higher cost of production than obtainable elsewhere. If production was efficient, the industry would not have needed protection in the first place. Moreover, in most cases, the simple manufactured products the LDC's are usually expected to start with are heavily protected in potential overseas outlets.

However, the experiences of many LDC's with IS are not at all encouraging. In many countries, IS policies have created enormous difficulties and distortions that hindered, rather than sustained, the process of economic growth. Prof. Sheahan, for example, argues that IS 'is both an essential aspect of development and a potential trap. A country with few industries in the first place must carry out a good deal of substitution to get industrialisation under way but should be aware from the start that the pattern being established can impede its future progress.'²⁵⁷

But what was exactly the experience of the DRS in this regard? This is the question of our immediate concern. We shall, therefore, limit our discussion to the various

257. John Sheahan, Import Substitution and Development, a Paper prepared for the Inter-regional Seminar on the Planning of the Foreign Trade Sector organised by UNCTAD, July 1970. UNCTAD document No. TAD/INT/SEM.1/4, GE.70-14206.

policies pursued by the Sudanese governments to encourage industrialisation and to the resultant pattern of industries that have since emerged.

The first serious drive towards industrialisation started immediately after independence with the enactment of the so-called 'Approved Enterprises (Concessions) Act' of 1956. The Act represented an attempt by the authorities to minimise the country's heavy reliance on cotton which exposed the economy to severe fluctuations; it was hoped that the promotion of industrialisation would assist in diversifying the economic structure and gradually eliminate the existing imbalance in the national economy. To achieve this objective, the Act aimed at encouraging the private sector, both domestic and foreign, to increase its investment in the industrial sector. Consequently, the Act empowered the Minister in charge to offer generous assistance to new enterprises, approved by the 'Industrial Advisory Committee'; the assistance includes 'the provision of industrial sites at a nominal price, exemption from import duties on machinery, equipment and raw materials and exemption from Business Profit Tax for a period of up to five years'.²⁵⁸ In addition the Act guaranteed protection against foreign competition via tariffs, partial prohibition or even complete

258. Osman and Suleiman, op. cit. (ref. 124).

import restriction. Foreign investors were allowed to repatriate their profits and to receive fair compensation in the event of nationalisation. These incentives were further intensified by 'The Organisation and Promotion of Industrial Investment Act' of 1967 which specifically stipulates 'total exemption from payment of Business Profit Tax for a period of five years, calculated from the date of the commencement of production, and in the case of an enterprise with an employed capital of one million pounds or more, exemption from half the tax for another period of five years. There is also the exemption of all machinery, equipment and spare parts necessary for production, maintenance and construction from present and future customs duties and customs charges of any kind, and reduction of such duties on raw materials, so that they will not exceed 10 per cent of the c.i.f. value. Furthermore, the government may reduce the applied rates for electrical power, and also for freight, applicable now and in the future, on equipment, spare parts, raw materials, products and by-products of the enterprises, where these are transported by government-owned or -controlled means of transport.'²⁵⁹ In addition to the protection of the products of new enterprises from foreign competition, the 1967 Act contemplates even restricting government

259. The Organisation and Promotion of Industrial Investment Act, 1967 (Ministry of Industry and Mining, Khartoum).

purchases to the products of the enterprise concerned 'if their prices are not in excess of 15 per cent of the similar imported products at the required place of delivery'.²⁶⁰

It is true that the above incentives have resulted in the establishment of a wide range of industries in the private sector. But it is equally true that the country has found itself more and more involved in a policy of IS. Both 'Development Plans' have specifically mentioned IS as an objective of policy. Moreover, one of the conditions that qualify an industry for the government's assistance in the 1967 Act is that it 'will make a partial or full import substitute'.²⁶¹ This is not to suggest that the government has restricted its own activities to providing assistance to the private sector. On the contrary, since the beginning of the 1960s a number of industries have been directly established by the public sector.²⁶² But we should remember that the number of industries created can hardly indicate the degree of success achieved by the policies pursued. What is important seems to be whether the industries so established possess the potential to assist in the structural transformation of the economy and whether their creation

260. Ibid.

261. Ibid.

262. The number of industries in the public sector has by now been tremendously increased as a result of the nationalisation and confiscation laws enacted since May, 1970.

could pave the way for a sustained process of economic growth. That is why it might be useful to consider the pattern of industries that resulted from the various policy measures taken by the government during the period under review.

To begin with, almost all the industries so far established cater for the production of consumer goods. This is not surprising because in most of the LDC's, IS usually starts with such a pattern of production. The pattern could be explained by the fact that consumer goods have an already established demand in the domestic market. It could also be due to the higher comparative disadvantage of capital and intermediate goods compared to consumer goods. In addition, consumer goods are universally deemed inessential to development, and an increase in their costs and in their prices assumed to be less harmful than increases in the prices of capital goods.²⁶³ Moreover, it could be argued that the level of technology existing in the country and the availability of basic resources in hand make the cost of producing capital goods in the DRS prohibitive. However, among the consumer goods' industries, already established in the country, two broad categories could be distinguished: Category One. In terms of number, most of the industries so far established by the private sector tend to have a

263. Bruton, op. cit. (ref. 253).

capital-using bias in production and a relatively high degree of dependence on imported inputs. The choice of capital intensity and high import dependence of production could be explained in the following argument. It is usually agreed that local currencies in the LDC's are much overvalued in terms of foreign exchange; thus the cost of foreign exchange to importers may generally understate the value of foreign exchange to the economy with the result that imports appear to be in effect subsidised. In addition, it is generally argued that wages of labour in the industrial sector in the LDC's may greatly overstate their marginal productivity in alternative activities. To correct such distortions, protection of local industries is generally deemed essential if such new enterprises could have any chance of success.²⁶⁴ Now it is further argued that, in view of available experiences in the LDC's, such corrections tend to create further distortions in the economy resulting from the industrial structure that would emerge following protective policies. Because the cost of capital equipment is much understated, and because all facilities are provided to import such equipment often including even reduced or nil tariffs, entrepreneurs tend to use relatively more capital-intensive

264. For detailed arguments on the protection of industries, please see Chapter I, especially section 1.9.

techniques in production than otherwise the case would be had they been charged the correct costs of these imports of capital goods. Such a line of action would not only dampen the employment effect of industrialisation, a means to minimise the costs of labour assumed to be higher than its opportunity costs, but could also create a structure which is incompatible with the factor endowment of the country concerned. Equally, because imported raw materials are relatively cheaper due to the undervalued foreign exchange spent on them, in addition to the facilities accorded by the official policy to such imports, entrepreneurs tend to concentrate on industries that use foreign inputs. The result of such a pattern of investment could well turn^{out} to be a misallocation of scarce resources and higher costs to the community despite the fact that some entrepreneurs are reaping huge profits made possible by the protective umbrella under which they happily operate. The outcome of such policies, it was suggested, could well be alienness in the economic structure of the country concerned which could rarely be considered as conducive to economic growth.²⁶⁵

Since the enactment of the 'Approved Enterprises (Concessions) Act' of 1956, a number of such import-biased capital-intensive industries have been established in the DRS.

265. Bruton, op. cit. (ref. 253).

The shoe industry, for example, was not based on the potentially available leather but, rather, on imported rubber, plastic and canvas. Beer industry was based on imported malt; the knitwear factories were geared to the use of imported yarn and thread. Other similar examples would include the manufacture of enamelware, aluminiumware, plasticware, steel furniture, packing materials, paints, matches, pharmaceuticals, perfumery, batteries, air-conditioning units, refrigerators, car assembly and the like. In terms of the existing economic structure, such industries could mean more and more claims on the country's limited foreign exchange earnings as a result of the need for a continuous flow of foreign inputs, in addition to maintenance imports, if ever they are to continue operating. Moreover, it is very doubtful whether the foreign exchange saved following the banning of imported finished articles now being produced by some of these industries would exceed, or at least equal, the present costs of the imported inputs required. In most cases, these industries may easily be grouped in the 'finishing touches' category à la Hirschman.²⁶⁶ This would imply that the value added resulting from the establishment of some of these industries could be so small that one wonders why they were assisted in the first place.

266. See Chapter One, section 1.9.

It could, of course, be argued that such industries might stimulate further expansion in the industrial sector as a whole by creating linkages. This might be true in some of these industries, e.g. the knitwear industry might stimulate local production of yarn. But, in most cases, the costs of domestic production of inputs is so prohibitive that it is very unlikely that any such 'backward' stimulation could ever take place in the foreseeable future. Besides, most of the products of these industries are intended for final consumption thereby leaving little room for any considerable 'forward' linkages. All indications show that such industries could well continue to be 'foreign enclaves' in the domestic economy even though these are owned by Sudanese capital. It could, therefore, be argued that such a pattern of industrial development could well increase the vulnerability of the economy thereby defeating the basic objectives which initiated it: shortages of imported requirements for these industries could cause more disruption in the economy than, say, shortages of imported final consumer goods.

Moreover, because of their capital intensity and the smallness of the domestic market, most of these industries are operating much below their full capacity. It has, for example, been estimated that individual private enterprises

in the Sudanese industrial sector utilise on the average between 15 and 25 per cent, and rarely above 50 per cent, of their rated capacity.²⁶⁷ This means that chances of reducing costs as a result of economies of scale are slim. It would also mean that the ability of these industries to realise a potential comparative advantage in the future, paving the way for an export drive, is much in doubt. Most likely, if the pattern continues, a horizontal expansion would take place comprising small inefficient units which could hardly help the process of economic development. Although some of these industries might have been able to satisfy a considerable portion of local demand, it is very doubtful if they represent a rational choice for resource allocation in the national interest of the country as a whole.

Category Two. This comprises industries that can be described as resource-based or agro-oriented. Although the capital equipment for starting these industries has been imported, raw materials used are usually available within the country. It has been suggested by a report prepared by the F.A.O.²⁶⁸ that many of the industries using agricultural raw materials have characteristics that make them

267. Five Years Plan, Volume I (ref. 131).

268. The State of Food and Agriculture, Food & Agriculture Organisation (FAO) of the United Nations, Rome (1966), CL/47/2.

particularly suitable for the circumstances of the LDC's. Firstly, many, if not all, of such industries have a lower capital intensity than other industries and their requirement of skilled labour is often also lower; however, this does not exclude the possibility that some of such industries could be very capital-intensive, e.g. rubber tyres and tubes, paper. Secondly, there is evidence that such industries have an especially high degree of linkages with other industries in the LDC's so that their establishment has beneficial effects throughout the economy. Thirdly, for a good many agro-oriented industries, small plants may be economically efficient, which is another important factor in the LDC's where the domestic market is usually small.

A number of resource-based industries have been established in the DRS, particularly in the 1960s. Although most of such industries were established by the public sector, some important factories based on local raw materials were initiated by private enterprise. It might be useful to give a short survey of some of the important industries in this category indicating their general performance during the period under review.

(1) Vegetable Oils

The oil industry is perhaps the oldest and one of the most successful in the country. About twenty oil mills of

various sizes are engaged in the crushing of cottonseed, sesame and groundnuts. A new mill for the crushing of castor seed is expected to be established during the current Plan period.²⁶⁹ It has been estimated that over 96 per cent of the total available capacity of the oil industry is being fully utilised.²⁷⁰ In 1969/70, total output of the industry was estimated at 93,000 tons of vegetable oil and 397,000 tons of oilcakes.²⁷¹ It is further programmed to increase the output of oil to 166,000 tons and that of oilcakes to 705,000 tons by 1974/75.²⁷² In addition to meeting the expanding requirements of the domestic market²⁷³ the oil industry has already started to compete overseas and to contribute to the country's foreign exchange earnings. We have already discussed the performance of exports of vegetable oils and cakes and opportunities for further expansion. What is to be emphasised here is the role of the industry in stimulating additional production of oilseeds in the agricultural sector in excess of the quantities usually absorbed

269. Five Years Plan, Volume I (ref. 131).

270. F. Wasfi, "Industrialisation in the Sudan", unpublished M.Litt. thesis, University of Glasgow, 1969.

271. Five Years Plan, Volume II (ref. 123).

272. Ibid.

273. Consumption of vegetable oils per capita is estimated to stand at 9.1 kgs. by 1975 as against per capita output of 9.5 kgs. (ibid.).

by the world markets. Moreover, the industry has paved the way for the establishment of a soap industry.²⁷⁴ Both laundry and good toilet soaps are being produced at the moment to meet all local consumption of the country; soap production is estimated to be 23,000 tons in 1969/70 and is expected to rise to 31,000 tons by 1974/75. The soap industry has by now reached the stage of export and might well compete in the neighbouring region.

(2) Textiles

Until the beginning of the 1960s, the Sudan did not have a single modern cotton mill. The statement looks curious especially when we note that the whole economic structure of the country has mainly been based on cotton production. Writing on the success of the Gezira scheme, Prof. Kindleberger commented that the scheme 'might have gone further in its preparation of that area for economic development if it had envisaged the development of light industry along with the peasant production of cotton.'²⁷⁵ In fact, the existing two modern spinning and weaving mills, both owned by the private sector, have been established, and started production, during the first half of the 1960s.²⁷⁶

274. F. Wasfi, op. cit. (ref. 270).

275. Charles P. Kindleberger, Foreign Trade and the National Economy (Yale University Press, 1962).

276. Sudan Textile Industry, the larger of the two mills, has 54,000 spindles and 1,680 looms, employing 3,680 people

Late as it is, the cotton textile industry still offers a good scope for further expansion. But, first, it should be remembered that both mills already established consume short-staple cotton; in other words, their establishment has in no way resulted in the diversion of cotton from the export markets, the bulk of which consists of the superfine ELS variety. On the contrary, the expansion of production in the two mills, as well as any future similar mills, would definitely stimulate the extension of area under short-staple cultivation. Because this variety of cotton is usually grown in the rain-fed areas, no part of the irrigated areas devoted to the cultivation of the ELS cottons for exports needs to be switched to its production. Thus an expansion in the textile industry would mean further expansion in the agricultural sector. We should not forget that raw cotton accounts for a high proportion of total manufacturing costs of the textile industry; it has been estimated by FAO that the import content of the finished textiles, consisting chiefly of the cost of capital, fuel, chemicals and dyes, 'rarely exceeds 25 per cent of the gross value of output'.²⁷⁷

276. (continued) of whom only 37 are foreigners. The second mill, Khartoum Spinning and Weaving Co., is equipped with 20,000 spindles and 700 looms and employs about 1,504 people, all Sudanese. F. Wasfi, op.cit. (ref. 270).

277. The State of Food and Agriculture, 1966, FAO (ref. 268).

Thus the industry seems to be ideal in view of the country's existing productive structure.

Both factories were designed to cater for import substitution. The country's total imports of cotton textiles during the period 1956-69 are shown in Table XLII.

**TABLE XLII: VALUE OF COTTON TEXTILES IMPORTS
(IN L.S. 000's)**

Year	Total Imports	of which greys	% of textiles in total imports
1956	5,602	2,898	12.4
1957	7,307	3,440	10.8
1958	5,841	2,537	9.8
1959	7,549	3,620	13.2
1960	8,311	3,395	13.0
1961	9,365	4,871	11.3
1962	9,760	3,997	10.7
1963	8,781	2,970	8.8
1964	6,417	855	6.7
1965	6,391	1,024	8.8
1966	7,111	656	9.2
1967	6,433	958	7.9
1968	13,147	799	14.6
1969	9,463	90	10.2

Source: Various "Annual Foreign Trade Statistics",
(Department of Statistics, Khartoum).

On the average, cotton textiles accounted for a little over 10 per cent of the total import bill during the period. However, it should be noted that both existing mills mainly

catered for the supply of grey textiles which is used by the bulk of the rural population due to its relative cheapness. Consequently, the imports of this type of textiles have been gradually declining, as shown in the table, and reached only L.S.90,000 in 1969. It has been suggested that imports of this variety could have long been eliminated had it not been for the government policy to allow some quotas to be obtained from abroad under the various bilateral arrangements.²⁷⁸ However, the scope for expanding the local textile industry is tremendous. Present domestic output is estimated to stand at about 91 million metres in 1969/70, i.e. an output per capita of only 6.2 metres as against a total consumption, including imports, of 12 metres per capita per annum.²⁷⁹ Moreover, output of printed and relatively higher quality textiles is still not produced within the country. Thus the current 'Five Years Plan' stipulates that 'by the end of the five years plan it is planned to increase output of cotton textiles up to 180 million metres as against 91 million metres in 1969/70. The expected increase in textile is due mainly to the increase in the activities of private sector and better utilisation of the existing capacity and the construction in

278. F. Wasfi, op.cit. (ref. 270).

279. Five Years Plan, Vol. I (ref. 131).

1973/74 of the first Public Textile Factory with an annual capacity of 12.3 million metres. Apart from that the percentage of high quality textile shall also be increased, (printed, poplin, dyed, etc.....),²⁸⁰ The objective of the Plan seems to be to increase output of textiles per capita to 10 metres by 1974/75.²⁸¹

In addition to the above two mills, various units have been established by the private sector to produce different varieties of knitwear, underwear, socks, etc. In addition, a ready-made clothing industry has also been started. All these units have been based on imported inputs, i.e. on foreign yarn and thread. Table XLIII shows the trends in imports of yarn and thread during the period. However, unlike most of ^{the} industries in category one above, these industries might offer a chance for potentially efficient production of their required inputs. It has, for example, been estimated that the knitwear industry was working at only 50 per cent of its capacity 'due to shortage of imported yarn'.²⁸² By 1969, the ready-made clothing industry utilised only about 75 per cent of its full capacity.²⁸³ Thus the current Plan calls for the 'increase of cotton yarn' and the 'output of knitwear is to increase and its value will be in the order of L.S.2.6 million showing

280. Ibid.

282. Ibid.

281. Ibid.

283. Ibid.

a rise of 2.7 folds as against 1969/70. The participation of the private sector will contribute to the improvement of the quality production. The plan provides for adequate supply of raw materials necessary for this industry.²⁸⁴ In addition, the value of total output of the ready-made clothing industry is programmed to be doubled as against the level of 1969/70, i.e. to increase from L.S.780,000 to L.S.1,600,000.²⁸⁵ However, the planned expansion in the textile industries would not eliminate imports of these items completely by the end of the plan period. On the contrary, due to the continuous rising demand in the country, absolute amounts of foreign exchange to be spent on imports of textiles appear to increase. The value of cotton textile imports is estimated to increase from L.S.8.0 millions in 1970 (or 7.6 per cent of total imports) to L.S.10.5 millions in 1975 (or 6.6 per cent of total imports).²⁸⁶ On the other hand, imports of ready-made clothing are expected to increase from an estimated L.S.2.2 millions in 1970 (or 2.1 per cent of total imports) to L.S.3.0 millions in 1975 (or 1.9 of total imports).²⁸⁷ The value of imported yarn

284. Ibid.

285. Ibid.

286. Five Years Plan, Volume II (ref. 123).

287. Ibid.

is programmed to rise from an estimated L.S.0.9 million in 1970 to L.S.1.5 millions in 1975, both figures representing about 0.9 per cent of total imports.²⁸⁸ Thus, future prospects of expanding the industry, even just to meet the domestic demand, are indeed very bright.

TABLE XLIII: VALUE OF IMPORTS OF COTTON YARN AND THREAD (IN L.S. 000'S)

Year	Cotton Yarn	Thread
1956	30	249
1957	85	365
1958	147	367
1959	141	380
1960	122	331
1961	154	501
1962	312	347
1963	473	202
1964	364	142
1965	244	109
1966	461	172
1967	287	229
1968	353	173
1969	376	196

Source: Various "Annual Foreign Trade Statistics", (Department of Statistics, Khartoum).

288. Ibid.

(3) Sugar

We have already mentioned that sugar is a government monopoly in the DRS. All requirements of this commodity, whether from domestic or foreign sources, are being obtained by the public sector. Table XLIV gives the total quantities and values of sugar imports during the period under review.

TABLE XLIV: IMPORTS OF SUGAR

<u>Year</u>	<u>Quantity*</u>	<u>Value**</u>
1956	114	4,638
1957	114	6,130
1958	103	3,815
1959	116	3,727
1960	108	3,662
1961	146	4,028
1962	108	2,853
1963	111	7,395
1964	121	8,775
1965	187	4,998
1966	84	2,839
1967	76	1,628
1968	161	4,165
1969	80	2,715

Source: Various "Annual Foreign Trade Statistics",
(Department of Statistics, Khartoum).

*in 000's tons.

**in 000's Sudanese Pounds.

The tremendous variations in values, in particular in 1963 and 1964, reflect changes in the prices of sugar in the world markets. Because sugar requirements were increasing,

the government thought it appropriate to start a domestic sugar industry. Consequently, two factories were established in the 1960s with the purpose of meeting part of the domestic consumption of sugar. Both factories were based on the use of local sugar cane and had an equal production capacity of 60,000 tons of refined sugar each per annum. The first factory was established at El Guneid on the Blue Nile, about 100 miles south of Khartoum, at a total investment of about L.S.10 millions²⁸⁹ and started production in 1962. The second factory at Khashm El Girba scheme on the Atbara river started production in 1965 and involved a total investment of L.S.7.8 millions.²⁹⁰ The actual performance of each of the two factories was not only different but also very instructive indeed. While the Guneid factory was a complete failure, the Girba factory proved to be a very rewarding investment. It is clear from Table XLV that the maximum output achieved at Guneid was 33,183 tons which represents 55.3 per cent of the total available capacity; for the eight seasons of operation, the factory has actually realised an average capacity utilisation of only 35.2 per cent. It is not surprising, therefore, that the factory has accumulated financial losses of L.S.5.5 millions during

289. Economic Survey, 1969, Ministry of Planning (ref. 193).

290. Ibid.

TABLE XLV: DOMESTIC PRODUCTION OF SUGAR (IN TONS)

Year	<u>EL GUNEID</u> <u>SUGAR FACTORY</u>		<u>KHASHM EL GIRBA</u> <u>SUGAR FACTORY</u>	
	Production	Percentage of utilised capacity	Production	Percentage of utilised capacity
1962/63	13,260	22.10		
1963/64	19,510	32.52		
1964/65	16,600	27.67		
1965/66	16,030	26.71	9,640	16.1
1966/67	22,856	38.10	48,020	80.0
1967/68	33,183	55.30	60,101	100.2
1968/69	29,149	48.58	52,944	88.2
1969/70 ^x	18,460	30.77	56,795	94.6

Source: Economic Survey, 1969 (Ministry of Planning, Khartoum, December 1970).

^x preliminary figures.

the period 1962/63-1968/69.²⁹¹ On the other hand, the Girba mill had reached its full capacity target by 1967/68, i.e. the third year of its operation. Consequently, while the cost of production of a ton of sugar was L.S.62.73 at Guneid, it was only L.S.26.2 at Girba.²⁹² In fact, the Girba factory seems to be one of the few profit-making enterprises of the public sector.²⁹³ In short, while the

291. Ibid.

292. Five Years Plan, Volume II (ref. 123).

293. Economic Survey, 1969 (ref. 193). Profits amounted to L.S.446,716 in 1967/68, for example.

Girba factory managed to operate efficiently at production costs which are 'lower than that of imported sugar',²⁹⁴ the Guneid factory was an example of inefficiency and waste of valuable resources. But what reasons can we give for the unhappy experience of Guneid? The answer is simply that the execution of the project was not preceded by a proper comprehensive feasibility study to evaluate all the aspects relevant to the investment. The main problem seems to concern the agricultural part of the project. Cane output per feddan is very low, reaching a maximum of only 18.28 tons in 1967/68 compared with 41.04 tons at Girba.²⁹⁵ Thus sufficient research was not conducted to ensure reasonable quantities of raw materials for the operations of the factory. It has been suggested that in order to enable the factory to operate fully, sugar cane yield should at least reach 32 tons per feddan approximately.²⁹⁶ However, this target is 'almost impossible to be realised due to the low yield of the Guneid land.'²⁹⁷ A government's report has summed up the problem as follows:

'The scheme suffers from various setbacks and disadvantages - most of which could have been avoided if a plan, or a pre-investment study, were undertaken. The most prominent problem, however,

294. Five Years Plan, Volume I (ref. 131).

295. Economic Survey, 1969 (ref. 193).

296. Ibid.

297. Ibid.

is its underutilisation, mainly arising from the fact that sugar cane supply is insufficient to feed the factory. Other hindrances are such as deficiency and irregularity in irrigation, deficiency in transport facilities and lack or deficiency in agricultural machinery. However, a report by the management of the factory points out that the most severe handicap arises from the negligence and inefficiency of the tenants who grow and supply sugar cane to the factory.' 298

It was rumoured that the military government at the time conceived the whole Guneid project as a splendid idea to present the people of the country with some achievements on the anniversary day of the coup; thus, despite the advice of the experts, the factory was hurriedly established irrespective of the obvious agricultural problems indicated and which are still awaiting solution. It could, therefore, be argued that the success of the Girba mill, a well-studied project, indicates that sugar production could offer a suitable scope for industrial expansion in the Sudan. At the same time, the Guneid experience undoubtedly emphasises the need for detailed planning and feasibility studies before the implementation of any project in the country. As the FAO report indicates, 'engineers, agricultural specialists and economists must combine in the necessary pre-investment studies, and the initial establishment of plant on a pilot scale may often be advisable.' 299

298. Ibid.

299. The State of Food and Agriculture, 1966, FAO (ref.268).

Of an estimated domestic consumption of 180-190,000 tons per year,³⁰⁰ the local industry has only supplied 75,255 tons in 1969/70. However, the current 'Plan' envisages that 'sugar production in the existing factories shall amount to 130,000 tons in 1974/75. This increase will be realised by the expansion of production in Guneid Sugar Factory and the introduction of new varieties of cane containing higher sugar contents, as well as by increasing sugar extraction up to 11 per cent as against 9.5 per cent in 1969/70.'³⁰¹ In addition, a new factory is also being considered. In addition to the direct domestic consumption, the expansion of sugar production would undoubtedly meet the growing demand of the local industry consuming this commodity, e.g. the confectionery industry.

(4) Flourmilling

With the increased urbanisation and rise in incomes, consumption of wheat flour has been rapidly rising in the Sudan in recent years. The general trend is that, as incomes rise, people tend to switch from the traditional 'kisra' made from milled dura to the consumption of flour

300. Five Years Plan, Volume I (ref. 131).

301. Ibid. For comparison, Cuba's extraction rate is 12.5.

bread. Thus it could be said that, in the Sudanese context, wheat flour has a high income elasticity of demand. The country's requirements of wheat has, for instance, increased from 106,900 tons in 1964/65 to 282,100 tons in 1969/70, i.e. in just five years, requirements increased by almost 264 per cent or at an average rate of 21.4 per cent per annum.³⁰² It is expected that this rising trend would definitely continue for a long time. Until the early 1960s, almost all the country's requirements were imported from abroad. The trends in imports of wheat and wheat flour are shown in Table XLVI below. It should be noted, however, that until 1960, all imports of the Sudan consisted entirely of wheat flour; but since 1961, both wheat and flour were purchased from abroad. The change in the pattern of imports has been due to the fact that the increasing demand has stimulated the establishment of a large modern flour-milling plant by the private sector in 1961. Before then, there were small obsolete mills scattered around the country catering mainly for dura milling as well as small quantities of wheat grown in the northern province. This modern mill, with a capacity of 200 tons of wheat a day, is considered by F.A.O. as an example of efficient investment where operating expenses are about a third to a half of those in smaller or less fully

302. Five Years Plan, Volume II (ref. 123).

**TABLE XLVI: IMPORTS OF WHEAT AND WHEAT FLOUR
(IN L.S. 000'S)**

Year	Wheat	Wheatflour
1956	-	1,318
1957	-	2,201
1958	-	914
1959	-	1,909
1960	-	1,859
1961	925	1,268
1962	1,093	997
1963	1,198	1,666
1964	1,620	1,898
1965	1,677	1,527
1966	820	2,830
1967	1,355	3,506
1968	1,427	2,138
1969	716	1,125

Source: Various "Annual Foreign Trade Statistics",
(Department of Statistics, Khartoum).

utilised mills in some other developing countries. Moreover, the cost of production in this mill corresponds to the situation in developed countries.³⁰³ The mill was initially very dependent on imported wheat as the domestic output of this commodity was not sufficient but to meet a very small fraction of the total demand. However, its establishment has created backward linkages in the economy by stimulating the rapid expansion of wheat production. As shown in Table XLVII, the area devoted to wheat production

303. The State of Food and Agriculture, 1966 (ref. 268).

TABLE XLVII: PRODUCTION OF WHEAT IN THE SUDAN

Season	Area [*]	Production ^{**}
1956/57	30	18
1957/58	31	20
1958/59	33	23
1959/60	39	25
1960/61	39	26
1961/62	41	29
1962/63	54	31
1963/64	56	37
1964/65	136	56
1965/66	137	69
1966/67	173	78
1967/68	213	88
1968/69	296	152
1969/70 ^{***}	315	-

Source: Economic Survey, 1969 (Ministry of Planning, Khartoum, December 1970).

^{*} in 000's feddans.

^{**} in 000's tons.

^{***} production not available.

increased from only 39,000 feddans in 1960/61 to 315,000 feddans in 1969/70, i.e. an increase of over eight-fold. Consequently, production of local wheat rose from 26,000 tons in 1960/61 to 152,000 tons in 1968/69, i.e. at an average rate of 24.7 per cent per annum.

It is not only that more and more local wheat is being used in the mill but that the expansion of wheat production has stimulated the establishment of new modern milling plants

in some of the agricultural areas, in particular Gezira. The fall in imports in 1969 could be attributed to the growing domestic production of wheat flour based on the local output. It is, of course, true that such modern milling plants are capital-intensive; but their indirect effects on employment should not be ignored, i.e. backward stimulation in the form of agricultural expansion and forward linkages in the form of creating food-processing industries such as bakeries, biscuits, macaroni, vermicelli and the like.

(5) Food processing

In the 1960s, the public sector established two fruits and vegetable canning factories, an onion dehydration plant and a milk factory. All these factories, except the onion plant, were intended to cater for the domestic demand and to reduce imports. On the other hand, the dehydrated onions were mainly intended for export.

Table XLVIII shows the trends in imports of both fruits and vegetables as well as dairy products during the period under review. In order to meet some of these imports and to make use of the available raw material, two factories were established at Karima in the north and Wau in the south for fruits and vegetable canning. The Karima factory

TABLE XLVIII: IMPORTS OF FRUITS AND VEGETABLES AND DAIRY PRODUCTS (IN L.S. 000'S)

Year	Fruits & Vegetables	Dairy Products
1956	611	160
1957	1,137	244
1958	460	146
1959	655	190
1960	627	125
1961	931	197
1962	916	337
1963	1,316	356
1964	1,348	621
1965	1,128	438
1966	1,327	531
1967	1,122	733
1968	1,424	554
1969	1,352	996

Source: Various "Annual Foreign Trade Statistics", (Department of Statistics, Khartoum).

started production in 1966 and its total investment cost reached L.S. 1,028,400.³⁰⁴ On the other hand, the Wau factory started operating in 1967 at an investment cost of L.S. 900,541.³⁰⁵ The maximum capacity in both the factories is the same, i.e. an annual input of 500 tons of fresh fruits and vegetables or an output of about 8 million cans of various products of fruits and vegetables.³⁰⁶ The main production line of the Karima factory is tomato processing,

304. Economic Survey, 1969 (ref. 193).

305. Ibid.

306. Ibid.

though it also cans other products, e.g. mango, citrus fruits, pulses, dates and vegetables. The Wau factory mainly processes at the moment mango, citrus fruits and pulses. Table XLIX below gives details of the output of the two factories during the last four years.

TABLE XLIX: FRUITS AND VEGETABLE CANNING PRODUCTION (IN 000'S TINS)

Season	Karima	Wau
1966/67	940	-
1967/68	2,832	427
1968/69	5,563	1,129
1969/70*	7,700	1,920

Source: Tenth Annual Report, Bank of Sudan, Khartoum, March 1970.

* estimate.

The initial problem that faced both factories was that the surpluses of raw materials were at first greatly exaggerated and that output in the respective areas was insufficient to allow economic utilisation of the available factory capacities. Thus, both factories had to operate much below their intended production. But, however, this is not to say that the projects were unsuitable or ill-conceived; the fact only emphasises again the need for proper planning before

the execution of any project. It is undoubtedly true that pre-investment surveys did not precede either of the two projects and that the agricultural part of the operation was completely neglected on the wrong assumption of the abundant availabilities of surpluses. It was only later that some effort was made to encourage the farmers to expand their production of fruits and vegetables so as to keep the flow of supplies to the factories all the year round. It is clear that the establishment of the two factories has stimulated the expansion of agricultural production in both areas. But it would have been much better if efforts to organise the agricultural side of either project had been started a bit earlier. This could have minimised, or even eliminated, the financial losses both factories are incurring at the moment. However, production in both factories has been increasing as evident from Table XLIX due to the expansion of agricultural output. But the raw material problem is not as yet solved. Although the performance at Karima has been much better compared with that at Wau, it has been mentioned that in the former 'tomato paste', for example, is being processed from concentrated tomato paste imported from abroad'.³⁰⁷ In an effort to minimise the losses of the Wau factory 'it has been agreed with the

307. Ibid.

Bulgarian Government to finance the establishment of vegetables and fruits plantation to ensure steady flow of raw materials to the factory'.³⁰⁸ However, if the programmes of the current 'Plan' are realised, total output of canned fruits and vegetables is expected to rise to 22 million cans in 1974/75; this increase will be achieved through 'installation of additional tomato lines at existing factories, better organisation of work at Wau and Karima factories, as well as the construction in 1974/75 of two tomato factories (1000 tons annual capacity) in Sennar and Shendi.'³⁰⁹ Moreover, the production of these factories will be improved by introducing new varieties, such as 'canned egg plants, papaya, etc.'³¹⁰

The onion dehydration factory was established at Kassala, in the eastern part of the country, and started operation in 1967 with an investment of L.S.728,330.³¹¹ It has a maximum capacity of 50 tons of input daily, i.e. its annual maximum capacity is an input of about 15,000 tons of fresh onions.³¹² Unlike other projects, output of this factory was mainly intended for export. Again we have an example of complete absence of pre-investment surveys.

308. Ibid.

309. Five Years Plan, Volume I (ref. 131).

310. Ibid.

311. Economic Survey, 1969 (ref. 193).

312. Ibid.

TABLE L: KASSALA ONION DEHYDRATION FACTORY
OUTPUT AND EXPORTS

Season	Input of onions*	% input utilisation of capacity	Output*	of which exports**
1966/67	4,456	29.7	173	-
1967/68	3,755	25.0	184	132.5
1968/69	3,559	23.72	214	195
1969/70	-	-	730**	-

Source: Economic Survey, 1969 (Ministry of Planning, Khartoum, December 1970).

(-) not available.

* in tons.

** composed of 500 tons of red onion, 220 tons of white onions and about 10 tons of green pepper.

Again the agricultural side was completely ignored; and as evident in Table L above, the factory operated at below 30 per cent of its capacity in the three seasons for which data is available. Lack of adequate supplies of onions is the main bottleneck; this could have been much widened had the expansion in agriculture been properly conceived. Moreover, the factory started with the production of flakes and powder of the reddish variety of onions available in the region; but, later, it was found that this particular variety is not exportable and that potential overseas buyers usually prefer a whitish type of onion which was not produced at the time.

Consequently, the rush for experimentation started, and a number of seeds were imported. Parallel to these experimentations, farmers have to be convinced that cultivation of the new type would be worthwhile. It is, therefore, not surprising that the factory has incurred a total loss of over L.S.400,000 during the period 1966/67-1968/69.³¹³ The wonder is that the factory managed to export a great part of its output during 1967/68 and 1968/69 as can be seen from Table L above. This means that the product has good potential for export. The only problem was, as stressed earlier, the absence of production and marketing surveys before the project was executed.

Finally, a milk factory was established at Babanousa in the western province of Darfur for the purpose of utilising the abundant cattle milk in the area. The factory started operating in 1968 with an investment of L.S.900,000; it is capable of processing a daily input of 50 tons of milk into various dairy products.³¹⁴ The performance of the factory so far has been far from satisfactory. Table LI shows that production is still less than 2 per cent of available capacity. The reason by now seems obvious: lack of available supplies to keep the factory operating at the full capacity level. Cattle owners in that part of the

313. Ibid.

314. Ibid.

**TABLE LI: OUTPUT OF BABANOUSA MILK
FACTORY (IN TONS)**

<u>1968/69</u>		
	<u>Quantity</u>	<u>% utilisation of capacity</u>
Powdered milk	4.6	0.5
Liquid butter	2.1	0.8
White cheese	6.0	0.9
Total	12.7	0.7

<u>1969/70</u>		
	<u>Quantity</u>	<u>% utilisation of capacity</u>
Powdered milk	10.5	1.2
Liquid butter	3.0	1.2
White cheese	3.1	0.4
Total	16.6	0.9

Source: Economic Survey, 1969 (Ministry of
Planning, Khartoum, December 1970).

country are precisely nomads always on the move for fodder and water. This basic fact seems to have been missed in the original calculations of the project. It is now that the problems, which should have been considered much earlier, are being tackled. It has been suggested that 'Ministry of Co-operation and Rural Development should undertake the boring of 12 water-wells around the factory for the purpose of establishing four co-operative pastures for the animals of the nomads. In return for this, nomads would be obliged to sell their milk produce to the factory. It has also been suggested that two special assembly stations, complete with refrigeration and transport facilities, should be attached to the factory so as to bring and preserve fresh milk from distant places to the factory.'³¹⁵

(6) Leather tanning

With a vast animal population within the country, coupled with a growing demand for footwear and leather goods, the tanning industry seems to be a very attractive target for the industrial effort. Before the 1960s, much of the tanning was carried out by small inefficient units using traditional

315. Ibid.

techniques of production and mainly catering for the domestic cottage industry. Raw hides and skins were, and still are, exported; while the country used to import processed leather and leather manufactures from abroad. Table LII shows trends of imports of leather goods during the period under review.

**TABLE LII: IMPORTS OF LEATHER GOODS AND FOOTWEAR
(IN L.S. 000'S)**

Year	Leather	Leather Manufacture	Footwear Total	of which Leather Footwear
1956	31	23	1,273	538
1957	47	45	1,928	690
1958	71	37	897	326
1959	80	17	1,199	698
1960	46	11	1,380	439
1961	23	26	1,167	338
1962	27	13	1,296	558
1963	57	87	1,168	317
1964	16	70	394	92
1965	17	111	552	317
1966	23	343	543	368
1967	21	104	396	314
1968	52	261	637	392
1969	76	336	585	417

Source: Various "Annual Foreign Trade Statistics",
(Department of Statistics, Khartoum).

It was in 1962 that the first modern tannery started production. Total investment of the project was L.S.903,260 and the factory is supposed to operate at a maximum capacity

of 6 tons of leather input per day.³¹⁶ Table LIII below gives the development of production in the tannery during the last four seasons which shows a continuous rising trend.

TABLE LIII: GOVERNMENT TANNERY PRODUCTION

Type	Unit of Measure	1966/67	1967/68	1968/9	1969/70
Upper leather	Square metres 000's	17.5	18.5	72.6	170.0
Sole leather	Kilogr. 000's	200.5	212.0	169.1	150.0
Pickled leather	Pieces 000's	326.0	297.4	326.9	690.0
Reptile leather	Pieces 000's	1.4	-	0.3	-

Source: Economic Survey, 1969 (Ministry of Planning, Khartoum, December 1970).

Beside El Girba Sugar Factory, the Government Tannery is the only other factory in the public sector that is profit-making at the moment.³¹⁷ The tannery has not only been able to meet part of the local requirements of leather but also

316. Ibid.

317. Ibid.

managed to export certain types to the overseas markets. But this is not to say that the tannery has no problems. On the contrary, it has been suggested that:

'Among the problems inhibiting increased production of the factory is the inadequate supply of the right type of leather. Most of the raw leather is supplied by the slaughtering house; however, export of raw leather reduces its flow to the tannery. Bottlenecks in some parts of the factory and obsolescence of certain machinery also tend to reduce efficiency in production.'³¹⁸

Ironically, the footwear industry was completely based on imported raw materials. In 1968/69, for example, out of 11.5 million pairs of shoes produced in the country, nearly 9.5 million pairs were rubber and plastic shoes and slippers based on imported materials.³¹⁹ The pattern of imports in Table LII shows that since 1965 the bulk of footwear imports consisted of leather shoes, particularly the high quality types. Because of shortages of imported materials, and insufficient local production of leather, only 60 per cent of the full capacity of the footwear industry is being utilised.³²⁰ Because of the inability of the present tannery to meet all leather requirements, the current 'Plan' contemplates the establishment of three more new tanneries to cater for domestic demand as well as for export.³²¹

318. Ibid.

319. Five Years Plan, Vol.I
(ref. 131).

320. Ibid.

321. Ibid.

(7) Cardboard

With a total investment of L.S.720,226, the Aroma Cardboard Factory started production in 1962.³²² The project was designed to produce 4,000 tons of cardboard annually by utilising the cotton stalks available in the Gash area. The idea was to manufacture a quality of cardboard that would meet part of the local needs and, at the same time, make use of the stalks of cotton which would otherwise be wasted. This project was a complete disaster. Because no preliminary surveys were carried out, it was discovered, after the factory was already established, that cotton stalks were, after all, not that ideal for manufacturing the particular types of cardboard planned. The factory was thus able to produce neither the specified quality nor the specified quantity of cardboard. Even if cotton stalks were the perfect raw material, it was later discovered by the authorities in charge that the Ministry of Agriculture had already started to implement long-term plans of substituting cotton production in the Gash area with castor production³²³ implying that, in any case, the factory would have no cotton stalks to work with; the whole affair indicates lack of co-ordination between government departments, an essential precondition for the success of

322. Economic Survey, 1969 (ref. 193).

323. Ibid.

any plan implementation. It is not surprising, therefore, that production of the factory never exceeded 6.6 per cent of the projected total capacity as shown in Table LIV below. The factory further accumulated losses that amounted to about L.S.600,000 which forced the government to close down in 1969 'until genuine solutions to its problems are found out.'³²⁴ No other example could better depict a situation of resource misallocation than the Aroma Factory.

TABLE LIV: OUTPUT OF AROMA CARDBOARD FACTORY

Season	Quantity in tons	Percentage of utilised capacity
1965/66	156	3.9
1966/67	247	6.2
1967/68	207	5.2
1968/69	266	6.6
Total	876	5.5

Source: Economic Survey, 1969 (Ministry of Planning, December 1970).

Other examples of resource-based industries established in the Sudan could include cement, bricks, alcoholic drinks (from dates), cigarettes (tobacco) and the planned glucose

324. Ibid.

and starch factory (from dura).³²⁵

To summarise, the process of industrialisation is a relatively recent phenomenon in the DRS. The effort seems to have only started after independence, a little over a decade ago. Although the industrial output still represents a small percentage of the national product, the process is likely to continue at a much quicker pace in the future. Because the Sudan is still in the initial stages of the industrialisation drive, the country still has the chance to learn from the mistakes of other countries and to plan its manufacturing sector on sound efficient bases. We have already mentioned examples of resource misallocation as well as of absence of proper pre-investment studies. What is needed seems to be a proper evaluation of the objectives of the industrialisation effort as well as sound criteria for the selection of the projects to be initiated.

The basic objective of the industrialisation policies in the DRS appears to be a drive towards IS aiming at reducing the import bill. The proposition that IS helps to reduce import spending is, of course, a very doubtful one.

325. Two cement factories, with a total capacity of 300,000 tons, are already in operation. The glucose and starch factory is planned to start operation during the current Plan Period.

Experiences of other LDC's, long engaged in such policies, have shown that it does not. This is because, as we have already mentioned, as development proceeds, the volume of imports is bound to increase. Consequently, it is very difficult to measure what the IS policies have so far achieved in the DRS. The measure of success, it could be argued, could depend on the degree to which imports fall below the levels they would have reached in the absence of IS. If that measure is accepted, then we can make use of the suggestion that, since no one can exactly know what imports might have been, the usual simplification is to assume that they could have been expected to grow at the same rate as domestic production; a measure of the import saving could, therefore, be explained by the equation $(m_1 - m_2)P$, when m_1 is the ratio of imports to domestic production at the beginning of the period considered, m_2 the ratio at the end of the period, and P the level of production in the terminal year.³²⁶ This measure is clear enough when applied to a single product, i.e. we can measure how many pairs of shoes were substituted or what the sugar industry actually saved. If that was the measure of success, the Sudan then did manage to become self-sufficient in a number of articles, e.g. cooking oils, soap, beer, confectionery,

326. Sheahan, op.cit. (ref. 257).

matches, etc., and has also succeeded in meet^{ing} a considerable portion of domestic demand in other articles, e.g. sugar, shoes, knitwear, enamelware, etc. But this seems to be the interpretation of IS in its narrow sense, i.e. measure of the increase of the ratio of domestic production of specific activities to total domestic absorption.³²⁷ It could be argued, further, that a policy that seeks to reduce the proportion of imports of a specific product (or products) could well equally increase the proportion of other products. If the production of the new article is import-biased, this could mean a higher proportion of imported supplies and equipment to domestic production, at least in the initial stages. Moreover, increases in final demand associated with increases in incomes tend to be directed disproportionately towards imports.³²⁸ The IS, in the broad sense, could, therefore, reflect the degree of reduction of imports as a whole to the gross national product.³²⁹ In that case, the above measure would not be useful to assess the impact of the policy on the economy as a whole.

Similarly, it could be argued that measures of changes in the aggregate Import/GNP ratio may hide the impact of IS policies on specific products. But the real issues seem to

327. Bruton, op.cit. (ref. 253).

328. Sheahan, op.cit.

329. Ibid.

lie beyond such exercises on measurement. The question is whether or not the growth of the economy as a whole was greater as a result of IS than it would otherwise have been. 'What is important to growth is not the amount of substitution carried out, but how much it may have added to productive capacity of the economy and how much did it cost.'³³⁰

As far as the Sudan is concerned, it could generally be argued that the industries which appear to be most promising seem to be those that are based on domestic materials, particularly agricultural produce. Firstly, the dependence on local materials would mean less spending on imported inputs. Secondly, such industries are the most likely to have strong linkages in the domestic economy which could further stimulate growth. Thirdly, most of these seem to possess a 'potential' comparative advantage that could pave the way for a future export drive. Here, it could be argued that export chances for such simple products are not bright due to the prevailing slow rate of growth of demand in the world markets. This statement might not hold good for all potential Sudanese exports, at least as far as the neighbouring region in the Middle East is concerned. What is needed is rather a comprehensive market survey to

330. Ibid.

assess the prospects of each product and the chances for its ability to compete in these markets. Besides, as Patel tells us, 'even the familiar argument that there is a greater degree of uncertainty in any assessment of chances for larger export than in an estimate of potential import-saving has, at best, a limited validity when we speak of a comparatively long period of time where mistakes are as likely to be made in estimating domestic demand and supply as in gauging foreign demand and supply.'³³¹ Finally, we should not forget that, even within the context of IS, agriculture and agro-oriented industries still offer (a) wide scope for expansion. Table LV below gives the aggregate import spending on ten selected such products which accounted for between L.S.9 millions to L.S.20 millions a year in foreign exchange during the period. On the average, the country spent on their imports about L.S.13 millions a year, i.e. about 17.8 per cent of the total import bill. We have already discussed some of these products, i.e. wheat and wheat flour, sugar, dairy products and fruits and vegetables. With its available resources, it is surprising to find that the Sudan imports meat preparations or fish products. Rice is already grown in Bahr el Ghazal province in the southern part of the country and what is needed is further

331. Patel, op.cit (ref. 249).

expansion in its production. Experiments on both tea and coffee have been promising but the potential areas of cultivation are still a scene of a deplorable internal conflict that cannot practically allow possible exploitation unless resolved.

TABLE LV: IMPORTS OF AGRICULTURAL PRODUCTS*
(IN L.S. MILLIONS)

Year	Total Imports	As percentage of total import bill
1956	10.5	23.2
1957	15.0	22.2
1958	9.4	15.7
1959	12.4	21.8
1960	9.4	14.8
1961	12.9	15.5
1962	10.5	11.6
1963	17.3	17.4
1964	20.1	21.1
1965	14.8	20.4
1966	14.8	19.0
1967	13.9	17.1
1968	16.5	18.4
1969	10.3	11.2
Average	13.4	17.8

Source: Various "Annual Foreign Trade Statistics",
(Department of Statistics, Khartoum).

*wheat, wheatflour, sugar, rice, tea, coffee, dairy products, fish and fish products, fruits and vegetables, meat preparation.

However, our above argument implicitly assumes that extensive pre-investment studies are to be carried out on which of these commodities should the country produce and what techniques of production are to be employed. The proper evaluation of each specific project seems to be a necessary precondition for a successful development drive. It is always difficult to draw a line on what is and what is not useful for growth; any possible decision taken is usually based on value judgement. However economists may differ on the course of action to be taken, the criteria should always be linked to considerations of efficiency. The choice should always rest on the contribution of any certain activity to the country's national wealth and the well-being of its people.

2.3.B. The Balance of Payments

One of the objectives of government policies throughout our period of study has, not surprisingly, been the realisation of both domestic and external equilibrium in the economy. External equilibrium necessarily means, of course, the balance of external payments. Prof. Johnson recalls that, ex ante, the balance of payments equals the

difference between the real national income (output) and real national absorption (expenditure), i.e. $B = Y - E$ when B represents the balance of payments, Y the domestic income and E the domestic absorption.³³² Consequently, a deficit of the balance of payments (BP) consists in an excess of real expenditure over real income, and the problem of correcting a deficit is to bring real national income and real national expenditure into equality. This formulation suggests that policies for correcting current account deficits can be classified into two types: those which aim at (or rely on) increasing output and those which aim at reducing expenditure.³³³ The distinction must, of course, relate to the initial impact of the policy since income and expenditure are interdependent: expenditure depends on and varies with income and income depends on and varies with expenditure (because part of the expenditure is devoted to home-produced goods). Consequently, any change in either income or expenditure will initiate multiplier changes in both.³³⁴ 'It can, however, readily be shown that, so long as an increase in income induces a smaller change in aggregate expenditure, the multiplier repercussions will not

332. Harry G. Johnson, "International Trade and Economic Growth", Studies in Pure Theory (Allen & Unwin, 1958).

333. Ibid.

334. Ibid.

be large enough to offset the impact effect of a change, so that an impact increase in output or decrease in expenditure will always improve the balance on current account.³³⁵

In order to reduce expenditure, the authorities can operate directly by way of financial policy, i.e. monetary and/or fiscal. On the other hand, to increase output, they must operate indirectly by influencing the demand for production: spending (by residents or foreigners) on domestic output must be expanded. But, of course, spending must be expanded without adding to the total level of domestic expenditure, for this would nullify any increases of output. Given the total level of spending, this in turn means that some part of the domestic and foreign expenditure must be 'switched' from foreign output to domestic output. To put it in other words, the authorities may make use of two types of policy variables: expenditure-reducing policies (monetary restrictions, budgetary policy or even direct controls) and expenditure-switching policies (devaluation, trade controls including both tariffs and subsidies and quantitative restrictions).³³⁶

After this brief theoretical introduction, let us turn now to the Sudan's BP problems. But what is a BP problem?

335. Ibid.

336. Ibid.

It has been suggested that a 'proper' BP is one that enables a country, over a range of good years and bad, to meet its payments out of its receipts from current transactions and ordinary capital inflow, without compelling it to keep economic activity below a desirable level or restrict imports merely for the purpose of avoiding a deficit in its BP: a country whose BP is not a proper one by this test has a BP problem.³³⁷ The Sudan has experienced a persistent deficit in its external accounts in eleven out of the fourteen years under review; consequently, the country had continuous BP problems which necessitated a set of corrective measures taken by the authorities. It might be appropriate to survey briefly how did the BP perform during the period and what were the policies pursued in this respect. We shall divide our discussion of the subject into two parts, depending on the source of problems the country faced and the type of policies pursued to tackle the external imbalance. Part One will deal with the first five years of our period, i.e. 1956-60, while Part Two will cover the situation during 1961-69.

Part One

The country's external account recorded a surplus

337. E.M. Bernstein, "Strategic Factors in Balance of Payments Adjustment", IMF Staff Papers, Volume V, 1956-57.

balance in three out of the five years during the period 1956-60. As shown in Table LVI, the current account showed a surplus of L.S.17.3 millions in 1956, an achievement never repeated in recent years. This favourable situation was mainly a reflection of the rise in export earnings, when cotton receipts alone increased by L.S.11.4 millions compared to the performance in 1955. It could partly be attributed to the import restrictions which were imposed since July 1955 and which, undoubtedly, kept import spending much lower than the level it could have otherwise reached. On the whole, external transactions in 1956 added L.S.13 millions to the country's foreign exchange reserves (FER), a situation that encouraged the authorities to reintroduce the OGL list for almost all items of imports in September 1956. This liberalisation of imports, coupled with the higher incomes earned in 1956 due to the good export performance and the need to rebuild inventories kept low by import controls in the previous period, led to a sharp rise in import spending in 1957, i.e. imports increased by L.S.21.5 millions. At the same time, export earnings fell drastically by L.S.20.1 millions leading to a deficit in the current account of L.S.21.6 millions. Despite the capital inflow of L.S.15.6 millions, the country had to draw L.S.6 millions from its FER to meet its foreign commitments

in 1957. The situation did not improve in the following year: because of a bad cotton crop and a fall in its world prices, the authorities resorted to import restrictions to stop the further deterioration in the BP. In April 1958 the OGL list was cancelled and import restrictions were imposed on a variety of 'inessential' commodities. In addition, custom duties were also raised to reduce further consumption of imported articles. Moreover, the authorities resorted to the restriction of the flow of credit advances by the commercial banks to the private sector: such advances increased only by L.S.0.52 million by the end of 1958 compared with an increase of L.S.4.95 millions in 1957. These expenditure-reducing policies managed to decrease imports by L.S.19.7 millions in 1958 as compared to the previous year. But, because export earnings fell by L.S.6.8 millions, the current account showed another deficit of L.S.12.8 millions. Consequently, L.S.4.4 millions had to be paid from the country's FER to balance the external account at the end of 1958.

Both 1959 and 1960 were good years as far as the BP was concerned. Due to a bumper cotton crop and strong world demand, export earnings rose by almost 52 per cent in 1959, resulting in a surplus of L.S.14 millions in the current account. In fact, the balance of external transactions in

1959 increased the country's FER by L.S.25.7 millions, a record never achieved again. As a result of the favourable overall situation, import restrictions were gradually liberalised and, by July 1960, almost all commodities were again included in the OGL list. However, to guard against excessive overstocking of imported articles, credit advances to the private sector remained under control in 1959 standing at L.S.23.9 millions by the end of the year compared with L.S.26.5 millions in 1958; but, however, these were gradually liberalised and actually increased to L.S.34.8 millions by the end of 1960. It was natural that the liberal import policy led to a 26 per cent increase in import spending in 1960. But, however, thanks to a net capital inflow of L.S.14.6 millions, the country succeeded in adding another L.S.12.2 millions to its FER.

Thus the pattern of import policy during the period was simple: no interruption with the import trade unless, as in 1957 and 1958, export earnings decline to such a level that drawings on the country's FER become necessary. In both years, export earnings declined by 28 per cent and 13 per cent respectively. In addition, due to the time lag in import spending, the high incomes of 1956 have stimulated increased imports in 1957 when, as mentioned, export receipts were already on the decline. In other words, the policy represented measures to deal with the unfavourable

fluctuations in exports. Once export earnings recovered, the authorities would immediately relax import controls and credit restrictions.³³⁸

Part Two

Since 1961, trends in the country's BP seem to reflect much more than situations which needed temporary measures to deal with unfavourable variations in export earnings from year to year. It should be remembered that the period witnessed the launching of the 'Ten Years Plan'. With it was started an accelerated programme of government spending, particularly during the first four years, i.e. 1961-64. The increased government spending has, in turn, accelerated the general economic activity which meant higher incomes and higher spending. Under such circumstances, imports are, of course, bound to increase. Despite a rising trend in the country's export earnings throughout the period, probably except 1964, the balance of trade showed a continuous deficit which ranged from L.S.1.4 millions to L.S.17.7~~3~~ millions a year; it was only in 1969 that the trade balance recorded a small surplus of L.S.2.7 millions. On the other hand, the current account showed a persistent

338. Import controls designed to protect local industries are, of course, excluded from the discussions in this section.

deficit throughout the period that ranged from L.S.10.5 millions to L.S.32.8 millions a year. Net inflow of capital was not sufficient to balance the country's external accounts leading to a continuous drain on the FER which fell from L.S.53.2 millions in 1961 to the dangerously low level of only L.S.12.7 millions representing the import requirements for less than two months. In other words, FER were declining at the average annual rate of 19.6 per cent.

During the first three years of the period, i.e. 1961-63, the accelerated development spending, coupled with a liberal import policy, resulted in a cumulative reduction of the country's FER by L.S.23.3 millions, of which L.S.15.5 millions were drawn in 1963 alone. It was, however, recognised at the time that the increased government spending was the main cause of the external imbalance. Consequently, the government started to take a series of measures to reduce its expenditure and/or to increase its revenue. In September 1963 the government departments were requested to keep expenditure strictly within the limits of approved provisions and to refrain from requests for additional monies; loans to government officials for housing and the purchase of cars were restricted 'to the amounts repaid to the government in respect of loans already granted'.³³⁹ These measures

339. "Bank of Sudan Report", No. 4, March 1964, issued by the Bank of Sudan, Khartoum.

proved insufficient to cope with the situation and, consequently, more stringent measures were announced by the then Minister of Finance and Economics on the 15th December 1963, which included:³⁴⁰

1. the freezing of all unfilled posts in the government establishment.
2. An increase of one piastre per pound in the retail price of sugar to yield L.S.2.8 millions in revenue per year.
3. Increases in import, excise and consumption duties on alcoholic beverages, perfumery, toilet preparations, artificial silk goods, passenger vehicles, chinaware, glassware, iron and steel furniture and cigarettes. The increases were designed to yield L.S.1.5 millions a year.
4. The reduction in the government's ordinary expenditure by some L.S.3.5 millions.
5. The raising of the Business Profit tax and applying this tax to rents on property for the first time.
6. Introduction of personal income taxes from 1st July 1964 on total incomes of not less than L.S.1,350 a year.

340. Ibid.

The country's BP did not improve very much as a result of these financial measures. It is true that import spending fell by L.S.10 millions to L.S.87.9 millions in 1964, partly due to the severe restrictions placed on private imports particularly with regard to bank credits, i.e. bank advances to the private sector fell from L.S.59.8 millions at the end of 1963 to L.S.55.3 millions in 1964. But, at the same time, export earnings declined by L.S.15.3 millions (of which L.S.11 millions were accounted for by the fall in cotton exports); the result was a deficit of L.S.17.7 millions in the trade balance in 1964. Despite a surplus of L.S.15.5 millions in the capital account, the country had to draw a further L.S.10 millions from its FER to meet its international obligations. By the end of 1964, the country's FER fell to L.S.24.8 millions or less than 50 per cent of the level of these reserves in 1962. The main cause of the failure of the government policies to achieve equilibrium seems to be the continued expansionary spending which was further accelerated by the resort to deficit financing.

In 1965, import spending fell by about 16 per cent to L.S.74.1 millions; the decline was partly due to a reduction in the government's direct purchases from abroad (mainly due to the fall in value of sugar imports from L.S.8.7 millions in 1964 to L.S.4.9 millions in 1965 due to reduced prices

paid for these imports), and partly due to the fall in private imports. The main reason for the decline in private imports was the relatively reduced economic activity as well as the restrictions on overseas purchases and on bank credits. Advances by the commercial banks to private traders fell by 17 per cent to L.S.45.7 millions by the end of 1965. The deficit in the balance of trade was narrowed to L.S.1.4 millions but the current account showed a deficit of L.S.15 millions. Capital inflow failed to fill the gap and, consequently, a further L.S.3.9 millions were drawn from the FER.

An important development in 1965 was the amount of short-term borrowing from the Central Bank by the government.³⁴¹ Although the government experienced cash deficits in its overall budget (ordinary and development) since the first year of the 'Ten Years Plan', i.e. 1961/62, the need to borrow from the Central Bank did not arise immediately because of the ample balances which the government had accumulated in past years. When these balances were exhausted, the government could still draw on cash balances of other units of the public sector by speeding up settlements due by these units.³⁴² It was only in the last

341. "Bank of Sudan Report", No. 6, March 1966, issued by the Bank of Sudan, Khartoum.

342. Ibid.

quarter of 1964 that the Bank of Sudan agreed to grant the government temporary advances under section 57 of its Act.³⁴³ These advances were relatively small and were repaid before the end of each month; but since the end of March 1965, temporary advances appeared regularly and showed an increasingly upward trend.³⁴⁴ In other words, the government started to rely heavily on the banking system to finance its own spending.

In 1966, the trade balance worsened further showing a deficit of L.S.8.2 millions. Although export earnings increased by about 1.7 per cent to L.S.74 millions, import spending rose by about 11 per cent to L.S.82.2 millions. Most of the increase in imports has been due to private

343. Ibid. According to the stipulation of section 57 of the Bank of Sudan Act, temporary advances to the government should not exceed 15 per cent of the ordinary revenue of the government. Any amounts which the Bank may advance under this section to government boards and agencies have to be deducted from the permissible limit of the temporary advances to the central government. No interest is to be charged on these advances up to L.S.5 millions; but any amount in excess of this L.S.5 millions should bear 4.5 per cent interest per annum. The interest rate was later raised to 6.5 per cent in September 1966.

344. Ibid.

purchases.³⁴⁵ However, due to a net capital inflow of L.S.16.5 millions during the year, the total gap in the BP was narrowed and the country had to draw only L.S.0.9 million from its FER. But it is to be mentioned that the capital account embraces a new development which appeared for the first time in the country's history: since July 1966, the government started to borrow foreign exchange from commercial banks abroad to enable the country to meet its foreign commitments and to lessen the burden on the FER; this type of expensive short-term borrowing had never been resorted to before by the Sudan.³⁴⁶

Due to the continued deterioration in the country's external accounts, the Sudan succeeded in obtaining a stand-by credit of U.S. \$28.5 millions from the I.M.F. which was made available for drawing during the year September 1966/September 1967. Consequently, a 'stabilisation programme' was prepared and agreed upon by both the Sudanese authorities and the I.M.F. The main theme of the programme was a gradual reduction of both public and private borrowing

345. Increase in imports might appear surprising due to the prevailing import controls at the time. However, part of the increase could be explained by the fact that imports from countries with which the Sudan had bilateral payments arrangements, e.g. East European countries, India, U.A.R., were allowed without undue rigidity as these do not involve foreign exchange payments.

346. "Bank of Sudan Report", No. 7, March 1967, issued by Bank of Sudan, Khartoum.

from the banking system and consequently a reduction in aggregate expenditure.³⁴⁷ In September 1966, various measures were also introduced by the government to cope with the situation and which included:³⁴⁸

1. A uniform surcharge of 5 per cent on the CIF value of all imports.

2. Additional import duties on luxury goods; increases in consumption duties on tobacco and beer; increases in excise duties on petrol, cigarettes, washing and toilet soap, beer and vegetable oils; increases of most charges on governmental services; increase of the retail price of sugar by one piastre per lb.

3. Lowering of the exemption list for income tax on salaries from the annual L.S.1350 to L.S.300.

Moreover, as from July 1966, licencing and exchange control restrictions were officially applied with more severity.³⁴⁹

A 'foreign exchange budget' was prepared for the first time in the country's history with the purpose of ensuring import of essential goods, of avoiding unnecessary stockpiling of

347. Ibid. Both private and public borrowing were kept within the limits agreed upon with the I.M.F.

348. Ibid.

349. Ibid.

imported goods and to keep import spending within the country's dwindling foreign resources.³⁵⁰

The external imbalance continued in 1967. Export earnings increased by 5 per cent to L.S.77.7 millions; while imports, thanks to the restrictions, increased by only 1.3 per cent to L.S.83.3 millions.³⁵¹ Thus the deficit in the trade balance was decreased to L.S.5.6 millions by the end of the year. But, however, net capital inflow fell from L.S.16.5 millions in 1966 to only L.S.9.3 millions in 1967. The overall external situation resulted in the further withdrawal of L.S.1.6 millions from the FER. In September 1967 a second stand-by credit was obtained from the I.M.F. under the terms of which U.S.\$10 millions were made available for the Sudan during the period September 1967/September 1968. Consequently, a second 'stabilisation programme' was initiated designed to continue the gradual elimination of deficit financing; ceilings were agreed for both the private and public sector.³⁵² Furthermore, under the terms of this IMF credit, Sudan indicated that 'its

350. Ibid. It is to be noted that by the end of 1966, the country's FER stood at L.S.20 millions, i.e. about 34 per cent of the level of 1960.

351. Part of this increase, however, did not involve foreign exchange spending, i.e. purchases from countries with which the Sudan has payment agreements as well as imports of wheat from the U.S.A. under P.L.480 programme. For instance see "Bank of Sudan Report" No. 8, March 1968, Bank of Sudan, Khartoum.

352. Ibid.

import licensing policy would be applied to all countries without discrimination and would be liberalised when the balance of payments position permitted'.³⁵³

In 1968, export earnings continued the rising trend that started since 1965, i.e. these increased further by about 13 per cent to L.S.87.9 millions mainly due to the good performance of cotton sales. On the other hand, import spending rose by 16.3 per cent to L.S.96.9 millions, a record only preceded by imports in 1963 which reached L.S.97.9 millions. The main cause of the rise in import spending could be attributed to the high incomes in the economy generated by the bumper production of 1967/68 season. It is to be noted that imports in that year increased despite the several measures taken by the authorities to restrict the flow of goods from abroad.³⁵⁴ Consequently, the current account of the BP recorded a total deficit of L.S.18.8 millions

353. Ibid.

354. Such measures included a 23 per cent reduction of bank credit for import financing, the introduction of a 5 per cent advance deposit prior to franking of import licences and registration forms on most of the private imports and the raising of the cash margin for letters of credit for some imports from 40 to 60 per cent; import duty surcharge was raised to 10 per cent. See "Bank of Sudan Report", No. 9, March 1969, Bank of Sudan, Khartoum.

compared to L.S.17.5 millions in 1967. Net capital inflow was reduced to L.S.5.5 millions or about 60 per cent of the level of the previous year. The overall external transactions were balanced by a further drawing of L.S.1.8 millions from the country's FER.

A third IMF stand-by credit of U.S.\$12 millions was obtained in December 1968.³⁵⁵ Under its arrangements, further restrictions were imposed on credit expansion with respect to both private and public sectors. Here, it should be noted that, as a result of these stabilisation programmes, government's reliance on the banking system has been gradually reduced from L.S.16.4 millions in 1965/66 to L.S.10.6 millions in 1966/67 and further to only L.S.3.1 millions in 1967/68.³⁵⁶ It was hoped that by the completion of the third stabilisation programme agreed with the IMF, deficit financing would be completely eliminated and equilibrium restored within the economy. To supplement the later programme, the government introduced new revenue measures in its 1968/69 budget which included the increase of the import surcharge to 10 per cent, further increases of consumption, excise and import duties on certain selected goods, i.e. perfumes, cigarettes, etc., and higher rates of personal income and Business Profit taxes.³⁵⁷

355. Ibid.

356. Ibid.

357. Ibid.

However, the stabilisation efforts were not brought to a happy ending. As against an estimated drop in bank financing of the public sector to L.S.2 millions only by 1968/69, there was in fact an increase to L.S.21.2 (net) millions by the end of that year.³⁵⁸ The main reason for the increase seems to be the decision of the government to implement a general rise in salaries and wages of all public sector employees as from the financial year 1968/69. These rises were estimated to cost L.S.12.7 millions.³⁵⁹ However, the actual increase in government's expenditure in that year was much higher: 'The effect of the general rise in salaries and wages of all public sector employees introduced as from the beginning of 1968/69 was an increase in the Central Government current expenditure by L.S.13.7 millions during that year. However, the overall increase was much higher and is provisionally estimated at L.S.26.1 millions over actual expenditure in 1967/68'.³⁶⁰ Consequently, the outstanding balance of U.S.\$4.5 millions due from the third stand-by credit was frozen during the first quarter of 1969 'as the Sudan had violated one of the most crucial terms of

358. "Bank of Sudan Report", No.10, March 1970, Bank of Sudan, Khartoum.

359. "Bank of Sudan Report", No. 8 (ref. 354).

360. "Bank of Sudan Report", No. 10 (ref. 358).

the agreement by allowing bank credit to exceed the limits specified.³⁶¹

In 1969, import spending was decreased by about 8 per cent to L.S.89.7 millions. This decline has been mainly due to a reduction in private imports caused by a series of strict control measures.³⁶² 'In the closing days of 1968, ceilings were imposed on imports of non-essential goods including those from bilateral trading countries. In April, 1969, credit facilities for financing imports were further tightened and the Bank of Sudan directed the commercial banks not to finance, directly or indirectly, imports of non-essential commodities. Since the beginning of July, 1969, maximum ceilings were fixed for the total value of import licences and registration forms to be issued each month for all imports (other than from the U.A.R. and India where no ceilings were set except for the targets agreed upon in the trade agreements with these two countries). In addition, effective from 1 July, 1969, customs duties on certain imports were substantially increased and the general surcharge on all imports was raised from 10 to 15 per cent.'³⁶³

361. Ibid.

362. Ibid. Government direct purchases in 1969 actually rose by L.S.3.2 millions, perhaps 'partially due to a revival in investment for development following the relative stagnation in the recent years.'

363. Ibid.

On the other hand, export earnings continued their upward trend and increased further by about 5 per cent to L.S.92.4 millions in 1969. We should remember that receipts from cotton exports stood at a record level in that year.³⁶⁴ Thus, for the first time since 1960, the trade balance showed a surplus, though of only L.S.2.7 millions. Net capital inflow increased to L.S.12.5 millions thanks to a cash loan of L.S.6.1 millions from Libya. However, by the end of 1969, the country's FER stood at L.S.12.7 millions, the lowest since independence.

To summarise, our brief survey seems to suggest that the main cause of the external imbalance during the period could be attributed to an excess of expenditure over real income.³⁶⁵ The main contributor to this excessive spending, or what Bernstein calls 'current inflation',³⁶⁶ is the

364. See Table XII, section 2.2.A. (p. 148).

365. 'If a country is to live within its export earnings on foreign exchange account it must keep its total expenditure within its income. In an open economy income and expenditure are not necessarily equal. An excess of expenditure over income can persist and will express itself in an external deficit so long as reserves or other means of financing it exist.' In R. Nurkse, "The Relation between Home Investment and External Balance in the light of British Experience, 1945-55", Review of Economics and Statistics, Vol. 38, No. 2, May 1956.

366. E.M. Bernstein, "Strategic Factors in Balance of Payments Adjustment", (ref. 337).

TABLE LVI: SUDAN'S BALANCE OF PAYMENTS (IN L.S. MILLION) 1956-1962

	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
Imports	48.2	69.7	54.0	49.2	61.9	77.8	86.7	97.9	87.9	74.1	82.2	83.3	96.9	89.7
Exports	71.8	51.7	44.9	68.2	64.0	61.3	79.7	85.5	70.2	72.7	74.0	77.7	87.9	92.4
Trade balance	+23.6	-18.0	- 9.1	+19.0	+ 2.1	-16.5	- 7.0	-12.4	-17.7	- 1.4	- 8.2	- 5.6	- 9.0	+ 2.7
Invisible payments	10.1	11.5	11.0	10.4	14.4	16.4	25.0	26.5	26.9	26.0	21.8	24.9	24.8	27.2
Invisible receipts	3.8	7.9	7.3	5.4	9.8	10.3	11.0	12.1	11.8	12.4	10.6	13.0	15.0	14.0
Invisible balance	- 6.3	- 3.6	- 3.7	- 5.0	- 4.6	- 6.1	-14.0	-14.4	-15.1	-13.6	-11.2	-11.9	- 9.8	-13.2
<u>Current Account Balance</u> ..	+17.3	-21.6	-12.8	+14.0	- 2.5	-22.6	-21.0	-26.8	-32.8	-15.0	-19.4	-17.5	-18.8	-10.5
Official loans and grants:														
Drawings	-	-	1.8	12.6	10.4	8.1	9.1	9.8	12.4	13.5	14.5	17.5	9.6	17.6
Repayments	-	-	-	-	0.1	1.0	2.8	2.4	2.5	1.2	1.9	2.0	4.3	5.3
Official net	-	-	1.8	12.6	10.3	7.1	6.3	7.4	9.9	12.3	12.6	15.5	5.3	12.3
Others net	- 1.2	+15.6	+ 4.3	- 4.4	+ 4.3	+11.5	+10.3	+ 8.6	+ 5.6	- 4.0	+ 3.9	- 6.2	+ 0.2	+ 0.2
<u>Capital Account Balance</u> ..	- 1.2	+15.6	+ 6.1	+ 8.2	+14.6	+18.6	+16.6	+16.0	+15.5	+ 8.3	+16.5	+ 9.3	+ 5.5	+12.5
<u>Current and Capital</u>														
<u>Account Balance</u>	+16.1	- 6.0	- 6.7	+22.2	+12.1	- 4.0	- 4.4	-10.8	-17.3	- 6.7	- 2.9	- 8.2	-13.3	+ 2.0
<u>Monetary Movements</u>	- 3.2	+ 0.2	+ 1.9	+ 3.6	-	- 1.2	+ 1.0	- 4.2	+ 7.2	+ 3.1	+ 2.1	+ 6.8	+10.9	- 5.6
<u>Errors and Omissions</u>	+ 0.1	- 0.2	+ 0.4	- 0.1	+ 0.1	+ 0.3	+ 0.5	- 0.5	+ 0.1	- 0.3	- 0.1	- 0.2	+ 0.6	- 0.3
<u>Changes in FER</u>	+13.0	- 6.0	- 4.4	+25.7	+12.2	- 4.9	- 2.9	-15.5	-10.0	- 3.9	- 0.9	- 1.6	- 1.8	- 3.9

Source: Bank of Sudan Reports, 1960-1962,

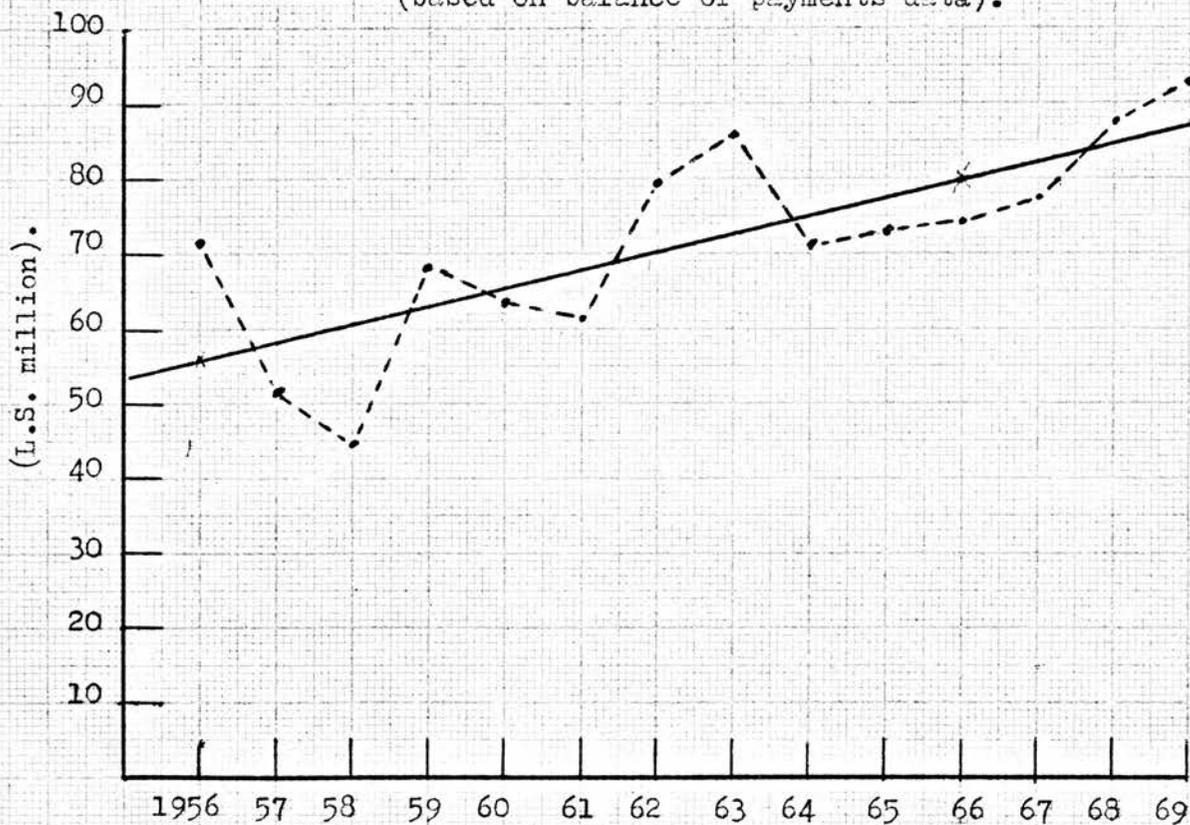
* Data on exports and imports supplied by the Department of Statistics is not identical to the figures given in the BP because of differences between the two series in valuation and timing.

1963-1969.

Chart 1.

Trends in Sudan's total exports

(based on balance of payments data).

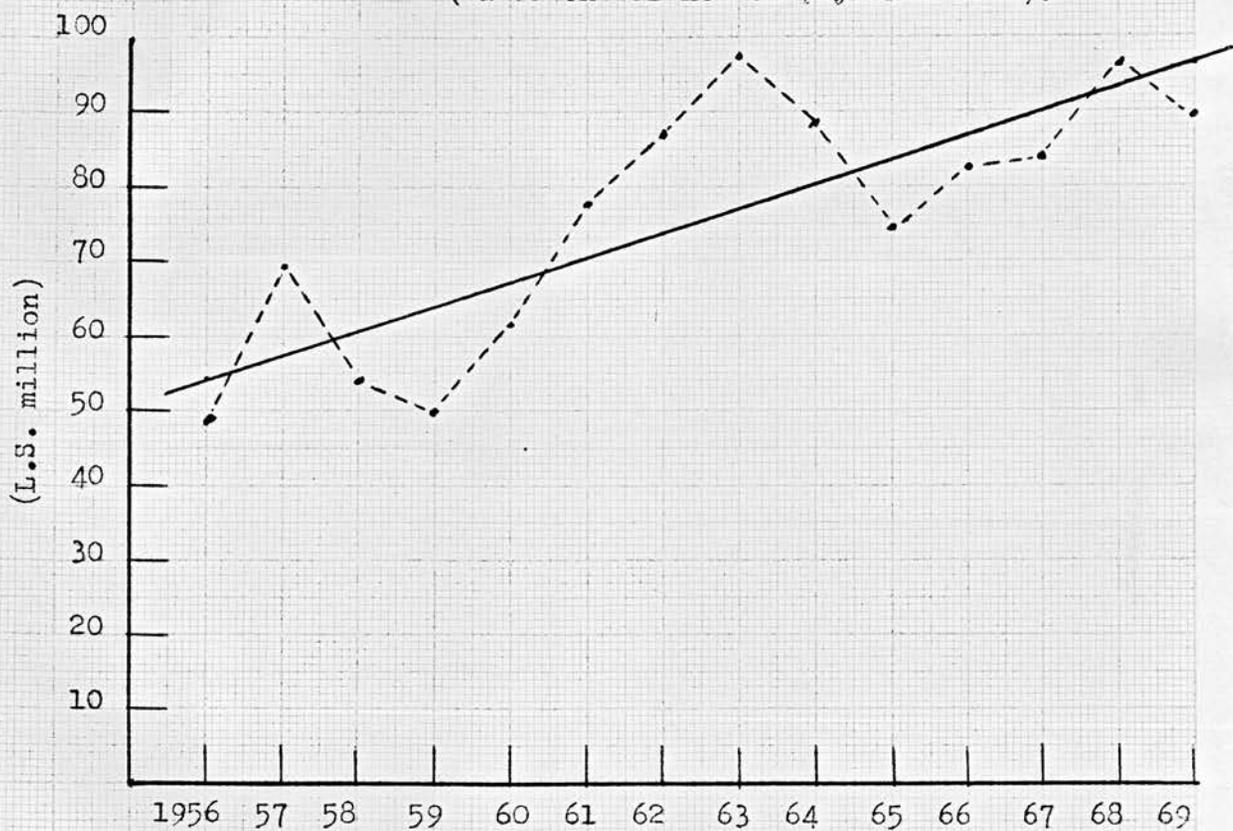


$$\hat{Y} = 71.6 + 1.2 X \quad (\text{least squares method}).$$

Chart II.

Trends in Sudan's total imports

(based on balance of payments data).



$$\hat{Y} = 75.7 + 1.6 X \quad (\text{least squares method}).$$

TABLE LVII: COMMERCIAL BANKS' ADVANCES TO PRIVATE SECTOR
(IN L.S. MILLION)

End of year	Short-Term Advances				Medium- and long- term ad- vances	T o t a l
	Exports		Imports, retail, trade, private and pro- fessional	Others		
	Cotton	Others				
1959	3.3	6.4	4.0	2.4	7.8	23.9
1960	7.7	8.2	6.3	5.1	7.5	34.8
1961	7.7	10.5	7.2	6.3	7.2	38.9
1962	8.8	11.7	10.1	9.1	6.9	46.6
1963	12.3	13.6	13.9	13.5	6.5	59.8
1964	7.9	14.5	12.5	12.9	7.5	55.3
1965	4.6	11.3	11.0	12.0	6.8	45.7
1966	7.5	11.5	9.8	12.4	8.2	49.4
1967	14.6	12.1	11.4	14.9	9.5	62.5
1968	19.1	16.8	9.3	15.9	9.7	70.8
1969	18.4	13.6	7.7	17.7	8.7	66.1

Source: various Bank of Sudan Reports

TABLE LVIII: OFFICIAL FOREIGN EXCHANGE RESERVES
(IN L.S. MILLION)

End of year	FER
1960	58.0
1961	53.2
1962	50.2
1963	34.8
1964	24.8
1965	20.9
1966	19.9
1967	18.4
1968	16.6
1969	12.7
1970*	13.7

Source: Economic Survey, 1969 (Ministry of
Planning, Khartoum, December 1970)

* at June 1970.

government itself. Table LIX below well illustrates the point we are trying to explain. The table depicts the finances of the central government during the first eight years of the 'Ten Years Plan'. It is evident that the revenue of the central government has been steadily increasing from L.S.60.3 millions in 1961/62 to L.S.114.5 millions in 1968/69, i.e. at an average rate of 9.6 per cent per annum. This increase has, of course, been obtained via the series of measures taken by the authorities during the period which we have previously outlined. On the other hand, ordinary expenditure has equally increased, rising from L.S.51.6 millions in 1961/62 to L.S.115 millions in 1968/69, i.e. at an average annual rate of 12.1 per cent. Thus, ordinary expenditure has been increasing at a much faster rate than the government's ordinary revenue. But what is the significance of this situation? The significance is that the ordinary surpluses of the government have been characterised by tremendous fluctuations superimposed upon a declining trend: in fact, as shown in Table LIX, instead of a surplus, the government ordinary budget has shown a deficit in some years. But what is the relevance of these surpluses to our subject? The government budget surpluses, i.e. ordinary revenue minus ordinary expenditure, represent the most important real sources for financing any

TABLE LIX: CENTRAL GOVERNMENT OVERALL BUDGET (IN L.S. MILLION)

Financial Year	Ordinary Revenue	Ordinary Expenditure	Ordinary Surplus	Development Spending	Foreign Loans	Reliance on Banking System
1961/62	60.3	51.6	+ 8.7	31.1	-	-
1962/63	74.5	58.5	+16.0	36.6	8.7	6.5
1963/64	78.6	60.8	+17.8	42.1	15.8	19.0
1964/65	73.7	63.0	+10.7	30.6	13.8	21.3
1965/66	75.1	72.8	+ 2.3	29.3	17.5	16.4
1966/67	81.8	82.4	- 0.6	23.0	14.2	10.6
1967/68	98.3	88.9	+ 9.4	29.7	16.0	3.1
1968/69*	114.5	115.0	- 0.5	-	6.6	21.1

Source: Bank of Sudan Reports (Khartoum) Nos. 5 (March 1965), 9 (March 1969) and 10 (March 1970)

* provisional actual.

development effort. In fact they approximate the official savings that could finance the development investments. Thus the more these savings are, the more will the government be able to finance its planned projects from its own sources. It is quite clear from Table LIX that the development spending was not in any way related to these surpluses. We have, of course, mentioned before that, at least in the first three years of the Plan, the government was able to finance its development expenditure from its previously accumulated resources. In addition, foreign aid was planned to finance part of the planned investment. However, when the accumulated sources were exhausted, and when the intended foreign aid failed to flow, the government, as already outlined, resorted to reliance on the banking system. The logical measure to take in the circumstances was that the government should have attempted to reduce its own current expenditure³⁶⁷, or at least to slow its growth

367. Current or ordinary expenditure does not usually include development projects as such, though, in some cases, may cater for activities that are related to development. To quote an example, the ordinary expenditure for the financial year 1967/68 was divided as follows:

Personnel:	LS.34.9 millions.
Services:	50.9 millions.
Extraordinary:	<u>3.1</u> millions.
	<u>88.9</u> millions.

'Extraordinary' might include some activities related to the development plan. (Figures quoted from Bank of Sudan Report, No. 9, March 1969).

rate. But the facts show that it did neither. Had the government oriented its own finances towards development spending, the expenditure-reducing policies, already described, might have succeeded in restoring equilibrium. But we have already mentioned that at the time when the IMF 'stabilisation programmes' were improving the situation, the government ironically increased its expenditure by generously raising the salaries of all its employees, i.e. the majority of the wage-earners in the country.³⁶⁸

However, it should be pointed out that the 'current inflation' that characterised the period did not in fact result in any spectacular upward trend in domestic prices, thereby affecting the movement of exports.³⁶⁹ Table LX shows the cost of living indices for two categories, i.e. the lower-salaried Sudanese and the higher-salaried Sudanese

368. Another factor to mention is that the pattern of investment in the Plan concentrated too much on the economic infrastructure to the neglect of directly productive projects. The 'Roseiris Dam Project', for instance, considered to be the most important in the Plan, was completed in 1966 at the cost of LS.38 millions but, due to faulty planning, the complementary irrigation system has not as yet been finished. The result is that the project has still not started production.

369. In any case, prices do not seem to be a major factor for the Sudanese cotton exports, as already discussed. The continuous downward trend in cotton prices has already been noted.

during the 1960s. During the whole decade, i.e. 1960-69, cost of living increased by an average annual rate of 3.3 per cent for the former group and 3.7 per cent for the latter.

TABLE LX: COST OF LIVING INDICES
(JAN. 1951 = 100)

Year	Lower-salaried Sudanese	Higher-salaried Sudanese
1960	144.7	144.9
1961	157.4	157.4
1962	160.0	159.3
1963	167.5	163.3
1964	174.0	168.7
1965	169.8	165.7
1966	172.7	167.5
1967	191.7	179.9
1968	172.5	170.6
1969	194.2	200.9

Source: Economic Survey, 1969 (Ministry of Planning, Khartoum, December 1970).

In fact, the rates of growth were still lower if we consider the first eight years of the decade separately, i.e. in 1960-68, the growth rate for the lower-salaried was 2.2 per cent while it was 2.1 per cent for the higher-salaried. These increases could, by any standards, be considered as moderate. But why has the excessive spending not been reflected in higher prices? The explanation is ~~that~~ simply

that Nurkse's 'escape valve of consumable imports' was not severely shut off.³⁷⁰ Despite the policies of import control pursued during the period, sufficient quantities to satisfy the domestic demand were generally allowed. The whole exercise seems to have been aimed at avoiding overstocking of goods as well as decreasing non-essentials as much as possible in an effort to protect the BP. But there was no indication of any serious shortages of consumer goods throughout the period. This situation could be explained by two factors: firstly, most of the essential goods, including consumer goods, are not available in the domestic market, and, consequently, there is no way of 'switching' demand to local production. Secondly, it has already been noted that a large part of the government's revenue depends on import duties; this means that the government cannot keep imports banned too drastically or too long lest it drain its own coffers.

Thus we can argue that although, at least in theory, the measures initiated to deal with the BP problems were sound,³⁷¹ their effective implementation was much reduced by the government's own expansionary spending. But what about

370. See Chapter One, section 1.10.

371. i.e. deflationary policies to deal with a situation of excessive spending.

the 'luxury imports' argument?³⁷² We have already noted that the official policies throughout the period were aimed at reducing such inessential imports. It might be appropriate to close this section by finding out how successful these policies had been in this regard. But, first, what do we mean by inessential imports? It has been suggested that a number of imports can be defined as 'avoidable or less essential, such as tobacco, cars, perfumery and alcohol'.³⁷³ In other words, these represent 'these imports which could be restricted without depressing essential subsistence consumption'.³⁷⁴ In Table LXI below, an attempt was made to calculate the Sudan's import spending on these inessential commodities during the 1960s. There is no indication to convince us that these imports were drastically reduced during the period. On the average, the country spent about L.S.3.6 millions a year, i.e. an average of about 4 per cent of total import spending. The largest items in this category of imports appear to be beverages and tobacco (mostly cigarettes) and passenger cars. The two items together accounted for an average of 71 per

372. For full details of the argument see Chapter One, section 1.10.

373. Malcolm Levitt, "How much Aid is really needed", Moorgate and Wall Street, Autumn 1966.

374. Ibid.

cent of total import spending on inessential goods.³⁷⁵

There might be a case here for, at least, reducing such imports provided, of course, that such a policy is supplemented by conscious measures to raise savings.³⁷⁶ One tends to agree with the suggestion that 'a conscious environment of austerity is as vital to economic progress in less developed countries as some evidence of the fact that such progress is worth while. And where status-conscious consumption is involved, a situation where the lure of imported commodities is less prevalent (as in early Japan) would make for greater growth potential. While it may be difficult to strike a precise balance in matters such as these, a correct balance is certainly not struck by a policy of free imports.'³⁷⁷

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375. While most of the items in Table LXI are usually imported under a 'quota' system, there has not been any sort of restriction on the import of either cigarettes or passenger cars. However, the present Government has imposed recently prohibitive tariffs on the import of passenger cars.
376. There are already cases of IS industries catering for inessential goods, e.g. perfumery, air-conditioners, refrigerators, etc. See Chapter One, section 1.10.
377. I.G. Patel, "Trade and Payments Policy for a Developing Economy" (ref. 249).

TABLE LXI: IMPORTS OF INESSENTIAL GOODS (IN L.S. 000's)

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
Beverages and tobacco	900	1,072	1,057	1,502	1,426	1,210	966	951	1,109	1,131
Perfumes, cosmetics and essential oils	196	281	275	640	606	599	680	752	776	646
Domestic electrical equipment	75*	267*	162*	304	357	281	208	193	339	239
Passenger cars**	1,856	1,533	1,754	1,572	1,434	713	1,161	1,012	1,585	1,514
Watches and clocks	48	71	96	106	71	70	74	117	40	9
Musical instruments***	38	39	62	58	69	54	36	42	62	42
Cameras, photographic and cinematographic supplies ...	53	100	111	143	172	95	158	147	98	169
Non-electrical refrigerators..	16	20	19	28	27	2	8	17	3	6
Air-conditioners .....	..	..	..	25	28	4	19	9	3	14
Total	3,182	3,383	3,536	4,378	4,190	3,028	3,310	3,240	4,015	3,770
% of total imports ..	4.9	4.1	3.8	4.4	4.4	4.1	4.2	3.9	4.4	4.1

Source: various Annual Foreign Trade Statistics issued by the Department of Statistics, Khartoum

* REFRIGERATORS ONLY: OTHERWISE INCLUDES ALL HOUSEHOLD ELECTRICAL APPLIANCES.

** EXCLUDING TRUCKS AND COMMERCIAL VEHICLES.

*** INCLUDING GRAMOPHONES, RECORD PLAYERS, TAPE-RECORDERS, RECORDS, ETC.

2.4. Foreign Trade Relations

Our study has so far implied that a major part of the Sudan's foreign trade has always been, and is still being, conducted with the industrialised countries of Western Europe. As Table LXII shows, during the 1960s, these countries purchased between 44.6 per cent and 53.9 per cent of the total exports of the Sudan; on the other hand, according to Table LXIII, they supplied between 41.9 per cent and 51.2 per cent of the Sudanese requirements of imported goods. On the average, the Western European countries accounted for 48.7 per cent of the Sudan's total exports and 46.6 per cent of its total imports during the decade. Among countries of the region, the E.E.C. is not only the major market for the Sudan in Western Europe but it is also the most important trade partner in the world. Let us remember that the E.E.C. is the most important outlet for Sudanese exports, i.e. an average of 32.1 per cent of the country's total exports was absorbed by the E.E.C. during the 1960s. In other words, almost a third of the Sudanese commodities are shipped to the Community each year on the average. In addition, the E.E.C. supplied an average of 19.3 per cent of the Sudanese total imports per year during the period.

The United Kingdom has traditionally been the main

market for the Sudanese trade; but, however, since 1961, the share of British purchases in the total exports of the Sudan has been continuously declining, i.e. it declined from 26 per cent in 1960 to only 5.6 per cent in 1968 and stood at 6.7 per cent by the end of the decade. During the 1960s as a whole, the U.K. imported an average of 12.4 per cent of the country's total sales abroad annually. It might not be necessary to repeat that the decline of exports to the U.K. has been mainly due to that country's sharp decline in Sudanese cotton consumption. The picture seems to be different when we consider the trend in Sudanese imports from the U.K. The British market is still the largest single supplier of Sudanese requirements from abroad, surpassed only in 1968 and 1969 by the countries of the E.E.C. as a group. On the average the U.K. supplied 23.6 per cent of the Sudan's total imports during the 1960s. It is to be noted that the bulk of imports from the U.K., as well as from the E.E.C., comprises machinery and transport equipment. It could, therefore, be argued that the British dominance seems to reflect the long association with the Sudanese market, the familiarity with the British products, the availability of spare parts and service and, not to forget, the occasional credits supplied under the E.C.G.D.

TABLE LXII: SUDAN'S MAIN CUSTOMERS' PERCENTAGE SHARES OF TOTAL EXPORTS

Countries	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	Average 1960-69
<u>West Europe:</u>											
E.E.C.	22.0	29.3	25.3	30.9	35.7	34.6	36.4	37.3	36.3	32.6	32.1
U.K.	26.0	19.1	18.0	12.7	11.3	9.4	7.3	7.8	5.6	6.7	12.4
others	5.9	4.5	5.3	3.6	3.9	4.3	4.6	1.1	3.4	5.3	4.2
sub-total:	53.9	52.9	48.6	47.2	50.9	48.3	48.3	46.2	45.3	44.6	48.7
U.S.A.	3.2	2.8	2.8	3.7	3.1	3.7	3.1	6.2	3.3	3.4	3.5
Japan	2.5	4.2	3.7	7.0	7.3	3.7	6.1	7.6	8.5	8.6	5.9
<u>Socialist Countries:</u>											
China	5.1	2.3	4.0	5.6	2.5	7.6	5.4	3.6	5.6	7.4	4.9
U.S.S.R.	3.2	5.5	4.6	6.9	2.6	6.3	3.6	4.3	5.5	4.5	4.7
others	7.4	5.1	7.3	8.6	8.6	8.2	7.3	3.8	9.6	8.6	7.5
sub-total:	15.7	12.9	15.9	21.1	13.7	22.1	16.3	11.7	20.7	20.5	17.1
India	10.3	9.8	15.4	8.4	9.2	9.4	10.5	9.0	9.7	12.2	10.4
U.A.R.	4.8	4.6	4.9	3.8	1.9	3.1	3.4	3.9	3.3	3.7	3.7
others	9.6	12.8	8.7	8.8	13.9	9.7	12.3	15.4	9.2	7.0	10.7
<u>Totals:</u>	100	100	100	100	100	100	100	100	100	100	100

Source: Bank of Sudan Report No. 10 (March 1970)

Chart III

Percentage share of E.E.C., U.K. and Socialist Countries
in Sudan's total exports.

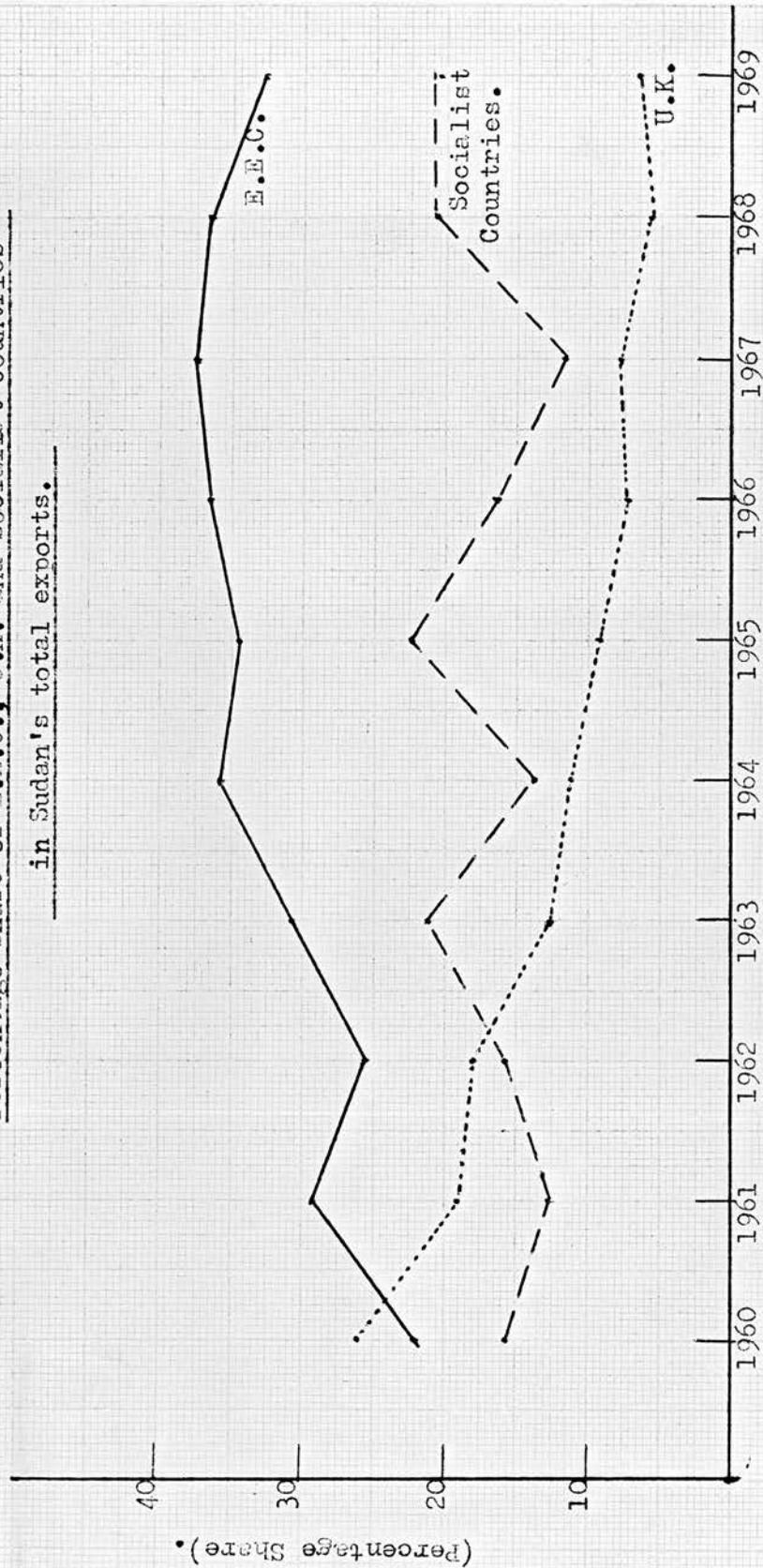


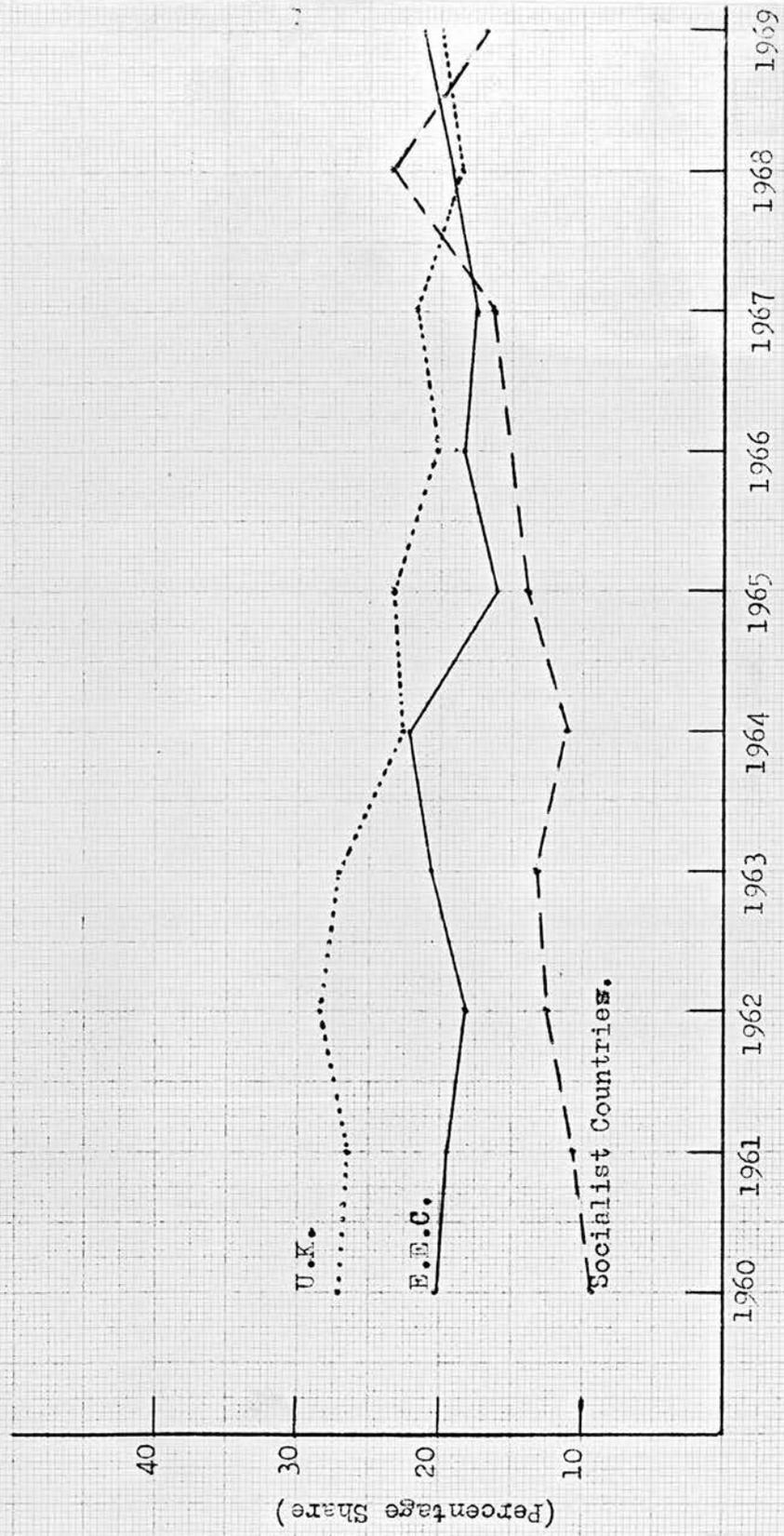
TABLE LXIII: SUDAN'S MAIN SUPPLIERS' PERCENTAGE SHARES OF TOTAL IMPORTS

Countries	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	Average 1960-69
<u>West Europe:</u>											
E.E.C.	20.3	19.8	18.2	20.6	22.4	16.1	18.4	17.5	19.2	21.3	19.3
U.K.	27.2	26.6	28.5	27.3	22.9	23.3	20.6	21.9	19.0	20.0	23.6
others	3.7	4.4	2.9	4.3	4.3	4.3	3.5	3.4	3.7	4.6	3.7
sub-total:	51.2	50.8	49.6	52.2	49.6	43.7	42.5	42.8	41.9	45.9	46.6
<u>U.S.A.</u>											
U.S.A.	2.9	6.1	5.5	5.3	6.8	6.4	7.5	8.7	2.1	3.0	5.4
Japan	2.3	5.8	5.8	5.9	7.1	9.3	7.8	6.2	9.2	8.5	6.7
<u>Socialist Countries:</u>											
China	1.1	2.0	1.5	1.5	2.5	3.1	6.6	8.0	7.4	5.5	3.9
U.S.S.R.	3.6	3.7	3.3	4.4	1.4	3.4	4.6	1.5	8.0	4.9	3.8
others	4.7	4.8	7.6	7.0	7.3	7.4	7.6	6.6	8.0	6.6	6.7
sub-total:	9.4	10.5	12.4	12.9	11.2	13.9	18.8	16.1	23.4	17.0	14.4
<u>India</u>											
India	12.0	9.5	8.4	6.2	5.9	5.6	10.8	10.6	11.8	10.0	9.6
U.A.R.	8.4	6.6	6.2	3.2	4.8	3.6	3.6	4.4	4.1	4.4	4.9
others	13.8	10.7	12.1	14.3	14.6	17.5	9.0	11.2	7.5	11.2	12.4
<u>Totals:</u>	100	100	100	100	100	100	100	100	100	100	100

Source: Bank of Sudan Report No. 10 (March 1970)

Chart IV

Percentage share of E.E.C., U.K. and Socialist Countries
in Sudan's total imports.



programme to finance part of these purchases.³⁷⁸

A smaller share of the Sudanese foreign trade is being conducted with the U.S.A. and Japan. The two countries accounted for an average share of 3.5 per cent and 5.9 per cent respectively of the Sudan's total exports during the 1960s. During the same period, the average share of the U.S.A. in Sudan's total imports was 5.4 per cent while that of Japan was 6.7 per cent. The American purchases from the Sudan are dominated by gum arabic; while, on the other hand, imports from that country have, in most of the years in the 1960s, been inflated by the tied aid granted under the P.L.480 programmes. It is to be noted that American share in the Sudanese total imports declined from 8.7 per cent in 1967 to 2.1 per cent in 1968 and 3.0 per cent in 1969 due to the cancellation of the aid programmes due to the suspension of diplomatic relations between the two countries. Japan's share in the total exports of the Sudan rose sharply from only 2.5 per cent in 1960 to 8.6 per cent

378. However, British machinery and equipment have been facing a growing challenge from the E.E.C. and Japan. In addition, similar credits were provided by some of these countries for the financing of such imports, e.g. West Germany, Italy, Netherlands, as well as the Socialist countries. For instance, the equipment for the two sugar factories was supplied through suppliers' credit from West Germany.

in 1969. In absolute terms, exports to Japan increased from L.S.1.8 millions in 1960 to L.S.8.1 millions in 1969, i.e. an increase by more than four-folds.³⁷⁹ It will be recalled that Japan has provided an increasing outlet for Sudanese products, i.e. cotton and sesame. The share of Japan in the country's total imports also rose from just 2.3 per cent in 1960 to 8.5 per cent in 1969.

Sudanese exports to India are dominated by ELS cottons. We have already mentioned the importance of the Indian market for Sudanese cotton. During the 1960s, India's share in total exports from the Sudan ranged from 8.4 per cent to 15.4 per cent while its share in total imports was between 8.4 per cent and 12 per cent. On the average, the Indian market absorbed 10.4 per cent of total Sudanese exports and supplied 9.6 per cent of the Sudanese requirements of imports per year during the decade. However, since 1965, trade between India and the Sudan has been governed by a bilateral trade agreement designed to further promote commodity exchanges between the two countries.

The share of the Egyptian market in total Sudanese trade has averaged 3.7 per cent of exports and 4.9 per cent of imports. However, irrespective of volume of exchanges,

379. Figures obtained from records of the Department of Statistics, Khartoum.

that market is of special importance to the Sudan due to the fact that it is the only major outlet for livestock, in particular camels, which constitute the main source of income in certain regions of the country. In recent years, the U.A.R. is also offering an expanding market for vegetable oils, especially cottonseed oil. Sugar and textiles dominate the Sudanese imports from the U.A.R.

The most important change in the pattern of the Sudan's foreign trade relations in recent years has been the emergence of the socialist countries as major suppliers and customers. Before 1955, the Sudan's trade with this group of countries was negligible; however, as a result of a series of bilateral trade and payment agreements concluded by the Sudan with each individual country of the group, the volume of trade has spectacularly expanded during the last decade and half. The share of the socialist countries in the total Sudanese exports rose from only 5.7 per cent in 1957 to 15.7 per cent in 1960. By 1968, almost a fifth of Sudan's exports were shipped to these countries. In absolute terms, exports to the socialist countries increased from only L.S.2.9 millions in 1957 to L.S.17.3 millions in 1969, i.e. at an annual average rate of 16.1 per cent.³⁸⁰

380. Figures obtained from records of the Department of Statistics, Khartoum.

Their share in the country's total imports also increased from 3.7 per cent in 1957 to 17.0 per cent in 1969, i.e. from L.S.2.5 millions in 1957 to L.S.15.9 millions in 1969. It would, therefore, be interesting to discuss the role of such bilateral arrangements in expanding trade exchanges. We shall specifically concentrate our discussion on the benefits that might have accrued to the Sudan from such arrangements with the socialist countries. To begin with, it should be mentioned that, since 1955, the Sudan has concluded bilateral arrangements with the following countries of the socialist group:³⁸¹

1. Hungary (1955, amended 1963).
2. German Democratic Republic (1955, amended 1967).
3. Czechoslovakia (1955, amended 1962).
4. Poland (1955, amended 1963).
5. U.S.S.R. (1959, amended 1961).
6. China (1962).
7. Bulgaria (1962).
8. Rumania (1961).
9. Yugoslavia (1955, amended 1961).

Before attempting to assess the value of such bilateral arrangements, it might be appropriate to outline the general features of the main clauses of the trade agreements signed by the Sudan. Most of these agreements generally include the following arrangements:

381. All information concerning these trade agreements have been collected from the records of the Ministry of Economics, Commerce & Supply (formerly Ministry of Commerce and Supply).

(1) All agreements emphasise, explicitly or implicitly, the principle of 'balanced trade', i.e. the two contracting parties would endeavour to balance trade exchanges between them during the duration of the agreement.

(2) A list of specified goods of exchange between the two countries is usually attached to the agreement. However, such a list is always described as 'indicative but not exhaustive' implying that other goods not mentioned could be added easily to the list with the approval of the two parties. Usually no fixed amounts of goods to be exchanged is mentioned specifically in the original agreement; but annual 'trade protocols', indicating fixed amounts of goods to be exchanged during a period, are negotiated and signed in accordance with the provisions of the original bilateral agreement. It is further to be stressed that amounts involving trade exchanges, agreed in 'trade protocols', are only 'targets' which each partner is expected to make an effort to reach; they do not amount to firm commitments to purchase but have to be translated into binding contracts.

(3) All agreements include a clause that specifies that goods to be exchanged are to be established on the basis of the world prices prevailing in the principal markets for the respective goods.

(4) Equally, all agreements stipulate that re-export to third countries of goods originating in either contracting party shall not be made without the prior consent of the competent authorities of the country of origin of the relevant goods.

(5) All agreements, except that with the U.S.S.R., are valid for a period of one year and are automatically renewable for successive periods of one year unless terminated by three months' notice given in writing by either contracting party before the expiry date. The original trade agreement with the U.S.S.R., signed in 1959, conformed to this pattern but was replaced in 1961 by a 'long-term agreement' with a duration of three years, though could equally be terminated by a three months' notice.

(6) Periodical meetings between officials of each of the 'payment and/or trade agreements' countries and those of the Sudan are held from time to time to review the progress of the working of the bilateral arrangement as well as to solve any possible obstacle hindering the smooth flow of trade. In some agreements, particularly those with India and the United Arab Republic, specific clauses call for the creation of joint committees which meet regularly on

an annual basis to supervise the functioning of the arrangement.

(7) Generally, the bilateral agreements concluded by the Sudan include either of two modes of payments:

(a) Five agreements specify that payments for the goods to be exchanged under the bilateral arrangements are to be made in Pounds Sterling or in any other convertible currency accepted by both parties. These include agreements with the U.S.S.R., China, Bulgaria, Rumania and Yugoslavia. That means that each contracting party would pay for its purchases from the other in a convertible currency; but, with the agreed-upon 'principle of balanced trade' the payments and receipts of each contracting party are expected to cancel each other at the end of the year. The only exception to this general mode of payment was a 'special' agreement signed with the U.S.S.R. in November 1969 in which it was agreed that, during the period December 1969/April 1970, 60,000 tons of cotton were to be delivered from the Sudan to the U.S.S.R. with the payment of 20 per cent of its value in freely convertible currency (for the amount of up to L.S.3 millions), and 80 per cent in deliveries from the U.S.S.R. to the Sudan of goods in the range and value specified in an annex attached to this agreement.³⁸²

382. "Bank of Sudan Report", No. 10 (ref. 358).

(b) The second mode of payment provides for the opening of reciprocal accounts with the central banks of both countries. No transfer of funds take place, but credits and debits have to balance during the period of the agreement. Such payment arrangements exist with Czechoslovakia, Hungary, Poland and the Democratic Republic of Germany (as well as India and the U.A.R.). Consequently, the Bank of Sudan opens and maintains on its books an interest-bearing³⁸³ clearing account expressed in Pounds Sudanese as a unit of account.³⁸⁴ 'Swing' credits are usually available to permit some overdrafts, i.e. the account with a specific trade partner may show a debit or credit balance up to a certain value agreed upon, i.e. in the case of Czechoslovakia, Hungary and the Democratic Republic of Germany the swing credit is L.S.200,000 for each; while, in the case of Poland, it is £200,000 as the clearing account is expressed in Pounds Sterling. An excess over the swing limit is to be settled in Sterling or any other acceptable currency within a month of such claim. Upon termination of the bilateral arrangement, the balance is

383. The Indo-Sudanese account does not bear any interest.

384. Sometimes the account is expressed in Pounds Sterling, e.g. Poland, U.A.R. and India.

to be settled in goods within six months and thereafter in convertible currency.³⁸⁵

But the important issue seems to be whether or not these bilateral arrangements were indeed beneficial to the Sudan. At the outset, it could generally be argued that the tremendous expansion of exports to the socialist countries, following the conclusion of such agreements, might be a good indicator of their beneficial effects. But, however, this statement needs further clarification in the light of the numerous disadvantages usually attributed to bilateral trade as compared to a multilateral system of free trade.

Firstly, it could be argued that such bilateral agreements might have resulted in a trade diversion to the disadvantage of the Sudan. On the one hand, the proposition would mean that the country might have been forced to divert a proportion of its exports from the traditional free currency markets in order to honour its commitments under

385. In the case of the agreement with India, balances on the clearing account at the end of each accounting period (usually a year) are to be settled in an acceptable convertible currency provided that the creditor country has fulfilled the total import target specified. If, however, the creditor party has not reached that target, the balance is to be reduced by an amount equal to the difference between the total import target and the actual value of goods imported by the creditor. The difference will then be carried to the following accounting period.

such bilateral arrangements. In other words, such a situation would mean loss of foreign exchange earnings which could have otherwise been obtained and which could have been used by the country to import its requirements freely from the world markets, thus securing the best terms with respect to either prices or qualities. As far as the Sudan is concerned, this proposition does not seem to be supported by the available facts, i.e. no diversions in exports have actually taken place. On the contrary, the socialist countries have provided new outlets for the disposal of surplus commodities which the country is just unable to sell in the traditional markets. We have already discussed the cotton carry-over problem that faces the country even when sales to the so-called bilateral agreements' countries are taken into account. Consequently, far from resulting in a trade diversion, these bilateral arrangements have actually solved part of the cotton stocks' problem. Because the socialist countries conduct their foreign trade mainly on bilateral basis and because they generally offer potentially promising markets for some Sudanese products, these bilateral arrangements could turn^{out} to be effective instruments for export promotion. It has been suggested that 'the growing desire on the part of the Soviet Union and other allied countries to develop trade with the outside world presents

a valuable opportunity to the developing (as well as the developed) countries. It is as if a new continent had suddenly been discovered, a continent not virgin and unexploited but with a well-developed economic structure.³⁸⁶ On the other hand, there is no evidence to suggest that exports to socialist countries fetched lower prices than could otherwise be obtained. The fact of the matter is that bilateral partners obtain their requirements from the Sudanese markets on very competitive terms with other potential customers; in other words, there was no special arrangement during the period under study that would guarantee any favoured treatment for these countries. Export transactions were solely carried out by the private sector which was free to sell anywhere in the world, and consequently, the free competition between all potential

386. I.G. Patel, "Trade and Payments Policy for a Developing Economy" (ref. 249).

The 'export promotion' argument is mainly linked to trade with socialist countries with which the whole discussion is chiefly concerned. It could be argued, for instance, that the trade agreement with India, a long-established market for Sudanese cottons, might help that country to keep the tempo of its imports of cotton, in view of its foreign exchange problems, rather than open a new outlet to the Sudan. The same argument could be applied to the trade agreement with the U.A.R.

buyers has not been prejudiced.³⁸⁷

Secondly, it could also be contended that bilateral agreements might have forced the Sudan to import goods which were not needed, which were of inferior quality or at higher costs than what could otherwise have been obtained from elsewhere. Again, the experience of the Sudan does not vindicate this contention. Irrespective of the bilateral arrangements, imports from the socialist countries were only bought when their prices and qualities were competitive. The pattern of imports from these countries could well illustrate this point: more concentration is evident in items such as sugar, cotton textiles, fertilizers, cement and footwear in which they were able to compete successfully rather than items like machinery and transport equipment where the Western traditional sources were more

387. 'But the general policy of socialist countries is now to use world quotations for deliveries of commodities. The unit value indices computed for the U.S.S.R. imports from developing countries show an average price increase of three per cent for 1960 to 1965 which compares with a similar increase in world markets. The special price quotations, therefore, do not seem to affect much the average terms of trade of developing countries'. In Jean Royer, "Trade between Planned Economies and the Developing World", Journal of World Trade Law, Volume I, No. 5, September/October 1967.

competitive.³⁸⁸ Tables LXIV and LXV show the sources of supply of machinery and transport equipment during the 1960s. In an item like cotton textiles, for instance, the socialist countries increased their share of the Sudanese market from only 7.8 per cent of total imports in 1956 to almost 50 per cent by 1969.³⁸⁹ Thus, there is no evidence to suggest that the Sudan paid higher prices for its imports from these countries.³⁹⁰ Besides the specific

388. Of course, this is not to suggest in any way that all imports of machinery and equipment from the socialist countries are not competitive. In many instances, quotations from these countries were very competitive in terms of world prices and performance. In addition to the price and quality factors, the well established market (i.e. familiarity, servicing, spare parts, etc.) for Western products might have hindered the expansion of imports of these items from the socialist countries. But such obstacles are being gradually removed. Moreover, the attraction of easy credits might increase imports of more of such items from the socialist countries.

389. In absolute terms, figures of the Department of Statistics, Khartoum, show that imports of cotton textiles from the socialist countries increased from LS.438,000 in 1956 to LS.4,671,000 in 1969.

390. As far as the Sudanese experience shows, the only incident of overpricing on record concerns dealings with India and not the socialist countries. In 1969, the attention of the Indian authorities was drawn to the fact that the Tea Traders' Association in India has virtually set a floor price for tea destined for the Sudan and which was higher than the ruling quotations. However, the 'unfortunate' incident was immediately rectified.

clauses in each bilateral agreement that ensures competitive prices for the two-ways trade, in actual practice, 'the normal vigilance of trading partners and the desire to establish enduring and mutually profitable trading relations will ensure that fears about unreasonable pricing and trade diversion do not materialise'.³⁹¹ The problem seems to be not that the Sudan was forced to buy goods that are over-priced or unwanted but, on the contrary, pursuant to the 'balanced trade principle' the socialist countries appear to be reluctant to expand their purchases from the Sudan due to the inability to sell more of their goods in return.

It could further be argued that the payment arrangements involved in such bilateral agreements might result in a situation where the Sudan finds itself accumulating huge surpluses in the respective 'clearing accounts' which could be used nowhere except in the market of the other partner of the agreement; such a situation might force the Sudan to divert part of its imports to such markets irrespective of the competitiveness criteria. Of course, such an argument could only be tested with regard to countries with which the Sudan has 'clearing accounts', e.g. Czechoslovakia, Hungary, Poland, German Democratic Republic, India and the U.A.R. It is irrelevant in the case of countries where

391. I.G. Patel, op.cit. (ref. 249).

payments for goods exchanged under the bilateral arrangements are made in convertible currencies, e.g. China and the U.S.S.R. With regard to the 'clearing accounts' of the four socialist countries, the records show that, at the end of 1969, the Sudan had a net liability of only LS.200,000.³⁹² In fact, the general pattern shows that the socialist countries always strive to balance their trade in accordance with the wordings of the respective agreements. However, during the period 1957-69, trade with the socialist countries as a group has resulted in a net surplus of about LS.4 millions in the Sudan's favour.³⁹³ Thus, as far as the Sudanese experience is concerned, the contention seems to be a hypothetical one.

392. "Bank of Sudan Report", No. 10 (ref. 358). The Sudan has accumulated a surplus in the clearing accounts with Democratic Republic of Germany (LS.113,000) and Poland (LS.127,000) but a deficit in the clearing accounts with Czechoslovakia (LS.439,000) and Hungary (LS.1,000). After four years of operation, i.e. 1965-69, the clearing account for trade with India showed a net deficit of LS.930,000.

393. During 1957-69, figures of the Department of Statistics show that the aggregate exports from the Sudan to the socialist countries amounted to LS.135,847,000 while aggregate imports from these countries amounted to LS.131,804,000.

TABLE LXIV: IMPORTS OF VEHICLES AND TRANSPORT EQUIPMENT (VALUE IN L.S. 000's)

Source	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
West Europe:										
E.E.C.	1,388	2,142	2,701	3,388	2,488	1,476	1,619	986	1,259	2,358
U.K.	5,669	6,397	8,902	5,976	4,195	3,590	3,787	4,069	4,899	5,928
others	25	39	43	31	41	61	74	140	96	128
U.S.A.	813	1,823	1,623	860	925	394	406	325	376	306
sub-total:	7,895	10,401	13,269	10,255	7,719	5,521	5,886	5,520	6,630	8,720
Japan	35	45	67	114	588	285	269	553	957	775
India	-	-	-	2	57	11	52	72	157	184
Socialist Countries:										
U.S.S.R.	16	8	38	139	97	15	100	86	227	1,177
China	-	-	-	4	5	6	14	21	26	26
other soc.	9	50	1,399	111	61	42	111	55	104	34
sub-total:	25	58	1,437	254	163	63	225	162	357	1,237
Others	526	669	1,467	1,996	638	39	33	816	97	291
Totals:	8,481	11,173	16,240	12,621	9,165	5,919	6,465	7,123	8,198	11,207

Source: Economic Survey, 1969 (Ministry of Planning, Khartoum, December 1970)

TABLE LXV: IMPORTS OF MACHINERY AND APPLIANCES (VALUE IN L.S. 000'S)

Source	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
<u>West Europe:</u>										
E.E.C.	1,894	3,681	2,522	4,750	5,109	1,575	1,634	1,664	1,977	3,015
U.K.	3,294	6,032	5,673	6,151	5,616	4,447	4,534	4,685	3,510	3,795
others	557	374	296	161	161	330	246	707	278	622
U.S.A.	400	2,218	887	1,929	1,512	1,101	1,300	930	795	1,120
sub-total:	6,145	12,305	9,378	12,991	12,398	7,453	7,714	7,986	6,560	8,552
Japan	21	391	133	377	551	589	684	446	928	975
India	-	-	-	57	79	82	82	169	165	191
<u>Socialist Countries:</u>										
U.S.S.R.	97	72	31	104	123	325	241	132	108	376
China	-	-	-	11	24	51	275	227	211	264
other soc.	183	415	315	290	321	695	1,032	242	417	425
sub-total:	280	487	346	405	468	1,071	1,548	601	736	1,065
Others	441	958	643	450	784	87	384	521	1,031	800
<u>Totals:</u>	<u>6,887</u>	<u>14,141</u>	<u>10,500</u>	<u>14,280</u>	<u>14,280</u>	<u>9,282</u>	<u>10,412</u>	<u>9,723</u>	<u>9,420</u>	<u>11,583</u>

Source: Economic Survey, 1969 (Ministry of Planning, Khartoum, December 1970)

Thus it can be argued that the Sudan did benefit from the bilateral arrangements concluded with the socialist countries, at least during the period under review.

'In time, when the Soviet Union and allied countries trade with the rest of the world on a general rather than selective basis, as at present, it may well be that strictly bilateral trading will appear superfluous and even unduly complex. But in the meantime, profitable and growing bilateral trade with the state-trading countries cannot be eschewed by the developing countries on purely hypothetical grounds.'³⁹⁴

394. I.G. Patel, op.cit. (ref. 249).

CHAPTER THREE

Chapter Three

CONCLUSION

But has the Sudan gained from trade? Before answering this final question, let us recall that, in any economy, one or more sectors serve as a prime mover, driving the rest of the economy forward; so long as it advances, the rest advance. If it stops, the rest stop.³⁹⁵ The prime mover, or leading sector or sectors, influences the rest of the economy in four basic ways. Firstly, it buys their goods and services for use in producing or selling its own, e.g. transport, intermediate products, distribution, banking, port facilities. Secondly, the income it earns serves to provide an expanding market for other sectors, e.g. industrial goods, services, entertainment. Thirdly, it generates savings and taxes which can be used to develop other goods and services including the government services. Fourthly, it may serve as a base for expanding output of other industries which use it as raw material. If the prime mover is pushing ahead rapidly, everything else in the economy 'will fall into place';

395. A.W. Lewis, "Reflections on Nigeria's Economic Growth", (Development Centre, OECD, Paris, 1967).

but, if there is no prime mover, the effort to develop will be frustrated.³⁹⁶

It cannot be denied that the agricultural export sector has historically been the main driving force in the Sudanese economy. It has stimulated the creation and expansion of the whole modern network in the economy. It has made possible the financing of a wide range of imports, including capital goods for expansion of the country's productive capacity. The agricultural export sector has provided much of the taxes (directly or indirectly via imports) that have financed the government's services and development spending. It has generated the incomes that created increased markets for other sectors. It has provided the larger share of domestic capital that financed industrialisation. If the economy is to continue expanding, then the agricultural export sector, the prime mover, must also expand. But if this sector is unable to expand, then the economy has to search for another prime mover if ever the development effort is to be pursued.

But, what are the chances for a rapid expansion of the Sudanese export sector? We have already discussed the various problems that hinder the rapid growth of the Sudan's

396. Ibid.

exports in the world markets. Our study has attempted to outline the various factors that determine the world consumption of ELS cotton, the main foreign exchange earner of the country. Attention has been drawn to the strong competition this crop faces, not only from the man-made fibres, but also from other varieties of cotton. During the period of our study, i.e. 1956-69, export earnings from cotton increased at the low average rate of only 1.4 per cent per annum, reflecting a relatively slow growth of demand for it in the world markets. We have also examined the trends of consumption of the traditional vegetable oils in the world markets, in particular the largest importing area of Western Europe, and discussed the implications of the recent challenge represented by the growing use of soya beans and sunflower, mainly supplied by the United States and the Soviet Union respectively. On the whole, we have emphasised the slow growth rates that characterised the Sudanese exports in recent years. Between 1956 and 1969, exports increased from LS.66.8 millions to LS.86.2 millions, i.e. at the average annual rate of only 2 per cent. In comparison, imports increased from LS.45.2 millions to LS.92.5 millions during the same period, i.e. at the higher average rate of 5.6 per cent per annum. Thus, we have earlier argued that this slow growth

rate in the country's capacity to import could well prejudice the development effort and upset the whole drive towards structural transformation of the economy.

Nevertheless, we have equally noted that the Sudan appears to have to depend on the export of these few primary commodities for earning the foreign exchange required to finance its required imports of both consumer as well as expansion goods. Consequently, we have attempted to explore the available possibilities of expanding the country's export earnings within the existing structure. Cotton exports, for instance, will probably continue to expand in the traditional markets of Western Europe, though at a slower rate and at reduced prices. On the other hand, the socialist countries and India might offer relatively expanding outlets for the Sudanese cottons, at least for the near future. Despite the obstacles facing the groundnut trade, the Sudan, being a relatively small producer, might still have the chance to expand its share of world exports without affecting the international trade in this commodity. As the world's leading exporter of sesame and gum arabic, it could be argued that the Sudan has the opportunity to influence the market and to attempt to pursue active sales policies. We have also mentioned the possible outlets for Sudanese vegetable oils in the neighbouring Middle East. We have

noted the opportunities that castor seed could offer to diversify the country's export list. In addition, we have emphasised the possibilities of utilising the neglected animal sector. What is needed seems to be a serious export drive to exhaust all possible avenues of expansion and to make the maximum possible of the country's available exportable commodities.

On the other hand, the industrial sector is still small and cannot provide, at least for the time being, a powerful engine for the country's growth. But it provides a second line of defence, a potential prime mover that could supplement the export sector and provide a new driving force that will push the economy further in the path of growth. This could be achieved if, of course, the industrialisation strategy is well conceived on the basis of the efficiency criteria and the proper integration of the manufacturing sector with the rest of the economy which it is supposed to drive forward. However, we should remember that a blind drive in creating industries, void of purpose and direction and without consideration to the ultimate contribution of such enterprises to the overall economic growth of the country, could well turn out to be a brake, rather than a driving force, to the development effort. Consequently, we have mentioned examples of industries,

established in the Sudan, that have superimposed an 'alien' structure on the economy unlikely to speed up the process of economic growth. We have further indicated a number of cases where the complete absence of pre-investment studies and feasibility surveys have resulted in enormous losses and misallocation of the already meagre resources.

But this is not to suggest that the industrial effort should be abandoned or relaxed. On the contrary, if the structure of the economy is to be diversified, the industrial drive must be intensified. Nevertheless, we have emphasised the importance of proper appraisal of projects before implementation. We have argued for the need to select those industries that could well be integrated with the rest of the economy and that could create linkages with other sectors, thus further stimulating expansion in the domestic economic activities. In its present stage of economic development, we have suggested that it might be appropriate for the Sudan to concentrate on the type of industries that are resource-oriented. Because the future of the country's economic development seems to be linked with the utilisation of the abundant potential agricultural land, the agro-oriented industries appear to offer an ideal launching pad for the industrial effort.

But, of course, it should not be forgotten that even the industrialisation drive depends, to a great extent, on the performance of the export sector. Even if savings for financing the industrial sector are realised, these cannot be translated into machinery and equipment without the necessary foreign exchange to be supplied by exports. Not only that, but the fact that these savings themselves depend on the performance of the export sector makes its role indeed important.

Thus, the development effort must necessarily entail the expansion of the agricultural sector. This expansion would provide increased output of agricultural commodities, now being imported, for the domestic market. It would equally pave the way for an intensified export drive that will embrace, not only cotton, but also other promising exportables. In addition, in order to expedite the process of diversification of the country's economic activities, the industrial sector must also continue to expand. If the selection of the agro-oriented enterprises is pursued, the expansion of the industrial sector would further stimulate the growth of the agricultural sector. The expansion of both sectors would undoubtedly pull the stagnant subsistence food sector into the market economy, thus paving the way for further growth.

It is, of course, realised that the numerous problems that face primary exports would probably continue. The need to diversify the economic activities of the country is indeed urgent. If development is to proceed at an accelerated pace, foreign aid should supplement the country's export earnings. But we should remember that foreign aid, even if available, would meet but a small ratio of the required development funds. The major share would naturally be borne by the country itself. Thus, on the home front, at least, a serious effort should be made towards export promotion. More importantly, the country should make the maximum possible use of its export earnings in favour of economic growth. This would mean less consumption and more savings. It would mean the maximum utilisation of the returns of the agricultural export sector for development. After all, whatever arguments we present, this sector seems to be the only prime mover the country has at the moment.

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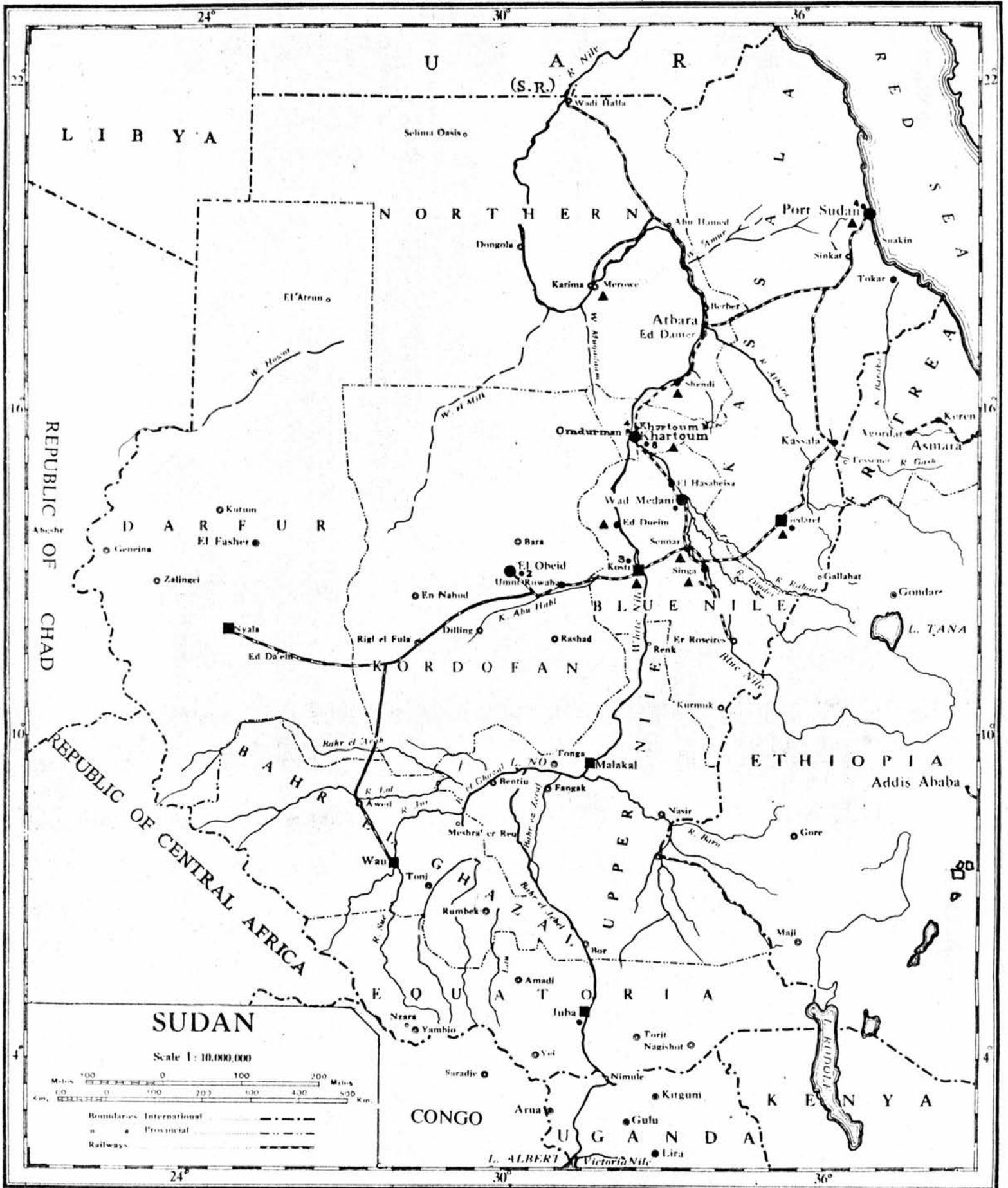
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BANK OF SUDAN AND OTHER BANKS OFFICES IN THE SUDAN



KEY

- Existing Branches - Bank of Sudan.....●
- Proposed " " " ".....■
- Branches of Commercial Banks.....○
- " " The Agricultural Bank of The Sudan.....▲