THE SIGNIFICANCE OF COCOA EXPORTS IN THE ECONOMIC DEVELOPMENT OF GHANA

CENTRE FOR NEWFOUNDLAND STUDIES

TOTAL OF 10 PAGES ONLY MAY BE XEROXED

(Without Author's Permission)

EVA F. NICOL
THE SIGNIFICANCE OF COCOA EXPORTS
IN THE ECONOMIC DEVELOPMENT OF GHANA

by

EVA F. NICOL, B.A. Econ. (Dunelm), Dip. Ed.

A thesis submitted in partial fulfillment
of the requirements for the degree of

Master of Arts

Memorial University of Newfoundland

26th July, 1965
Cocoa plays a dominant role in the economy of Ghana and as a result is usually referred to as the backbone of the economy. It accounts for over two-thirds of the country's exports and is the most important source of her foreign exchange. With a population of seven million, Ghana is the world's largest single cocoa producer supplying about one-third of total world output. The crop contributes a bulk of the value of her agricultural exports and the economic prosperity of the whole nation is directly geared to the level of cocoa prices.

Ghana provides an example of an underdeveloped country which is exclusively dependent on one primary export commodity. Although she has made tremendous economic progress (relative to other countries in West Africa) since independence in 1957, like all less developed countries she is still clamouring for more. But the post-war period has brought large increases in cocoa production not only in Ghana but in other producing countries as well. In spite of the fact that world consumption has increased, stocks have accumulated and the current price level is low.

The main objectives of this research are: (1) to analyse the overall impact of cocoa in Ghana from 1900 to 1963; (2) to test the applicability of certain hypotheses such as that there is very little relationship between cocoa production in Ghana and the prices received by producers; that cocoa
exports are closely related to production; that prices in
the world market affect the demand for cocoa; (3) to analyse
the problems that this single-commodity economy has to
contend with and (4) to suggest methods by which these problems
could be overcome.

Chapter I is rather unique in the thesis. It deals
with some of the theoretical views that have been expressed
since the classical economists on the relationship between
export trade and economic development. The purpose of that
chapter is to lay a foundation for the practical analysis in
the succeeding chapters of cocoa - an agricultural export
commodity - on the economic development of a country. Chapter II
deals with the historical analysis from 1900 to 1963. The next
chapter is the core of the whole text; various contributions
of cocoa - loans, grants, education, investment, employment,
government revenue - are sketched. Chapter IV deals with the
problems from the international and national aspects. Finally,
Chapter V attempts to solve these problems from three angles -
the international, regional and national levels.

The writer has drawn from the works of others but most
of the analyses are original. Data was mainly obtained from
United Nations Publications, Reports and other publications of
the Ghana Cocoa Marketing Board, Cocoa Statistics by Bill and
Dufus Limited of London, Africa Digest and Statistical Reports
from the United States Foreign Agricultural Service. But being so far away from Ghana, the extent to which information could be obtained from the government concerned has been small. This has strongly inhibited the use of more statistical tables and figures especially in Chapter III. However, this setback was partially overcome by concentrating on those years for which data is available.
ACKNOWLEDGEMENTS

It is a pleasure to acknowledge the help obtained during the course of this study. For the opportunity of doing a degree at Memorial University of Newfoundland, I am deeply obligated to the Canadian Government for awarding me a scholarship in September 1963 and to the Government of Sierra Leone for recommending me for this scholarship.

Many people have given essential help in both writing and reading of the various drafts. Most particularly I wish to mention my supervisor, Dr. B. Singh - Assistant Professor of Economics - for his many ideas, careful criticisms and invaluable help in obtaining adequate material; Professor J.C. Mills - formerly of the United Nations Economic Commission for Africa - for the loan of U.N.E.C.A. reports and for making suggestions especially in the early stages of the thesis.

I am also indebted to the staff of McGill University Library in Montreal, for putting all their material in this field at my disposal during my visit in December 1964; to Mr. Garde and staff of the United Nations Library in New York for availing me of many United Nations and Ghana Cocoa Marketing Board Reports; to the F.A.O. in Rome, Bill and Dufus Limited of London, U.S. Department of Agriculture, for their prompt replies to my letters and supply of various publications.
There are many people whose names have not been mentioned personally but who gave considerable help in the writing of this thesis. To them I offer my sincere thanks.

I would like to emphasize that the persons and institutions mentioned above are in no way responsible for most of the views expressed.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>i</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>v</td>
</tr>
<tr>
<td>TABLE OF CONTENTS</td>
<td>vii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>viii</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>ix</td>
</tr>
<tr>
<td>I</td>
<td>EXPORTS AND THE THEORY OF ECONOMIC DEVELOPMENT</td>
</tr>
<tr>
<td>II</td>
<td>AN HISTORICAL ANALYSIS 1900-1963</td>
</tr>
<tr>
<td>III</td>
<td>THE COCOA ECONOMY OF GHANA</td>
</tr>
<tr>
<td>IV</td>
<td>PROBLEMS AND IMPLICATIONS</td>
</tr>
<tr>
<td>V</td>
<td>ATTEMPTS TO SOLVE PROBLEMS</td>
</tr>
<tr>
<td>SUMMARY AND CONCLUSIONS</td>
<td>114</td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>118</td>
</tr>
</tbody>
</table>
LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.II</td>
<td>Production Relative to Producer Price 1938-1963</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Aggregate Farmer's Receipts 1939-1960</td>
<td>27</td>
</tr>
<tr>
<td>II.II</td>
<td>Ghana's Production Relative to World Production 1900/01 - 1963/64</td>
<td>43</td>
</tr>
<tr>
<td>III.II</td>
<td>Ghana's Net Exports Relative to World Exports 1900-1963</td>
<td>53</td>
</tr>
<tr>
<td>IV.II</td>
<td>Purchases Relative to Sales Price 1951-52 - 1960-61</td>
<td>62</td>
</tr>
<tr>
<td>I.III</td>
<td>Cocoa Marketing Board. Loans and Grants</td>
<td>69</td>
</tr>
<tr>
<td>I.IV</td>
<td>Cocoa Production 1945/46 - 1963/64 World and Major Producers</td>
<td>84</td>
</tr>
<tr>
<td>II.IV</td>
<td>Cocoa Supply and Demand 1945/46 - 1963/64</td>
<td>88</td>
</tr>
</tbody>
</table>
LIST OF FIGURES

FIGURE: PAGE

1.2 Annual Variation in Producer Price 1938 - 1963 25
II.2 Ghana Production Compared to World: 1900/01 - 1932/33 44 1933/34 - 1963/64 45
III.2 Production Relative to Producer Price 1938 - 1963 50
IV.2 Ghana's Net Cocoa Exports Compared to Total World Cocoa Exports: 1900 - 1932 54 1933 - 1963 55
V.2 Ghana's Net Exports of Cocoa Relative to Net Production 1912 - 1962 58
VI.2 Purchases (or Imports) Relative to Sales Price United Kingdom 1951/52 - 1960/61 63
VII.2 Purchases (or Imports) Relative to Sales Price United States 1951/52 - 1960/61 65
I.4 Stocks in Consuming Countries 1946 - 1963 86
II.4 Cocoa Stocks as Percentage of Grindings 1946 - 1963 87
III.4 World Price of Cocoa 1946 - 1963 89
Chapter I

Exports and the Theory of Economic Development

The view that export trade is an important means of growth has always been subjected to widespread contention by economists. This can be traced even before the classical school of thought to the present emphasis on economic development.

The Classical School\(^1\) believed that countries were endowed with different factors, and as a result each country should export the commodity which was produced with a high proportion of the factor it possessed in abundance. This Law of Comparative Advantage\(^2\) justified the investment of related resources into the export industry as a means of raising productivity and the National Income.

Adam Smith belonged to this school of thought and he adduced that "trade widens the market, provides an outlet for the surplus above domestic requirements, improves division of labour, raises productivity...raises skill and dexterity of workmen, enables them to enjoy increasing returns and economic development."\(^3\) His idea has been interpreted in terms of the

---


'export-drive' which formed the basis of British nineteenth century Colonial Trade Policy. Under this system the colonies were dependent upon commodity exports for maintaining their external trade and economic relations with Britain. They were specialized producing areas with financial, industrial and managerial centres in Great Britain. Plantations were owned by their colonial masters who also controlled the total revenue obtained from the sale of the commodities. Large profits were obtained because local labour costs were very low, but the former accrued to the owners outside the colonies; what the internal factors of production obtained directly from the sale of the exports was the amount paid out to get the commodities produced. Export revenue was therefore no indication of the colonies' potential income. Thus they were not in a position to import goods except those provided by the foreigners to service the export sector or to satisfy their own consumption needs.

John Stuart Mill also had great influence in the establishment of Colonial Policy; he adduced that British trade with her colonies should not be regarded as international

---


trade, but more like that between town and country. "All trade which crosses geographical and political frontiers is not international according to the meaning of Classical Economic Theory." If it can be proved that this was the honest view of the traders some justification could be made for their policies: but at the same time, it can be argued that any trade which crosses geographical boundaries is international, and should be carried out for the ultimate gain of the countries involved.

Disadvantages of this system.

The commodities were primarily produced to meet the demand of foreign markets and the domestic sector was not affected. Indigents got low wages most of which were diverted to food and simple consumer goods, but much too small to give secondary manufacturing any large scale encouragement. On the other hand, the skilled technical labour and management from the advanced countries got high salaries, but the percentage spent on local consumption was negligible. Most of the


7 Ibid.


9 Ibid.
enterprises took the form of labour-intensive plantations requiring a large amount of cheap unskilled local labour and abundant resources. Colonial policy encouraged the production of primary products at the expense of local crafts and culture, and at the same time introduced an international division of labour whereby the poor countries had to concentrate on the production of raw materials in exchange for manufactured goods. Therefore, the people in these countries had no opportunity of learning new techniques and the fruits of technical progress were not disseminated among them. By specializing in raw material production, while the advanced countries concentrated on manufacturing no secondary rounds of economic activities were generated in the colonies. The only way in which they were affected was in the development of new wants which had very little educative effect on the economy as a whole. Even when capital investments were made, they were devoted exclusively to railways and public utilities serving only the export sector.

Advantages.

It is true that the colonies had abundant resources and cheap labour, both of which were necessary for the production of exports. At the same time it has been argued that "it is misleading to regard a colony's exports as the product of its own economic system merely because they come from inside

10 Gunnar Myrdal, Development and Under-development, as reprinted in Meier, op. cit., p. 346.
its geographical borders."11 Capital and skilled labour were indispensable to the exploitation of the resources; by providing these the British transformed the resources into a form suitable for export. Although the Mother Country acquired a lot from colonial trade, local governments obtained some revenue from export taxes; besides the presence of these foreign traders led to the building of the infra-structure in the form of harbours, railways and financial services.

Trade and economic growth.

1. As related to advanced countries:12 Whereas the system of trade discussed above may be regarded as a deterrent to economic progress in some countries, it served as a stimulant to many of the present advanced countries. In the eighteenth and nineteenth centuries "growth in the so-called regions of recent settlement in the temperate latitudes outside Europe."13 was the result of trade. "A basic inducement that caused them to develop was the tremendous expansion of Western Europe's demand for foodstuffs and raw materials which they were well suited to produce. Growth at the periphery was induced through trade by growth in the rising industrial


12 Includes Canada, Australia, New Zealand which were colonies in 18th and 19th century but are today advanced countries.

Britain was going through a process of industrialization but lacked many of the basic raw materials and food for her growing population. These countries were rich in primary commodities and had not yet embarked on largescale industrialization; so they served as export economies furnishing Britain with the required raw materials. Thus the economic growth in Britain and her neighbours was transmitted to other areas by the steady demand provided for the export commodities.

2. As related to underdeveloped countries:¹⁵ Although trade was such a direct stimulant in the past, growth in the present underdeveloped countries was not induced. In spite of the expansion of the export sector the rest of the economy was not propelled forward. Instead it resulted in dualism; this involves a sharp distinction between the peasant traditional economic system and the modern exchange sector.¹⁶ In the traditional sector there is relatively little foreign enterprise, production is small scale; whereas the modern sector depends heavily on foreign capital and techniques are advanced and highly capitalized. There is very

¹⁴ Ibid.

¹⁵ Refers to present poor countries in Asia, Africa which were British colonies in the 18th and 19th century.

little contact between the two and "the peasants were robbed of the educative and stimulating effect of direct contact"17 with the advanced sector. In cases where the indigents received high wages the 'demonstration effect'18 or appeal of new consumption goods bought by the advanced sector, affects the propensity to consume of the indigents. These "increases in consumption use up most of the increase in real income and more, and savings tend to remain relatively steady or decline."19

The export bias in underdeveloped countries' economic structure has increased their vulnerability to international economic fluctuations, especially when they depend on a narrow range of primary products. "Price fluctuations and any fall in export earnings might at any time put development programmes in jeopardy....as the foreign exchange content of investment for economic development is high for countries with little or no manufacturing industry."20 These fluctuations not only create formidable difficulties for maintaining a steady flow

---

17 H. Myint, An Interpretation of Economic Backwardness, in Agawala and Singh (eds.) Economics of Underdevelopment 1960, p. 112.
of long-term investment, but make the level of employment and real income unstable. Besides potential investors are sometimes deterred because they are afraid that a fall in export receipts would reduce internal aggregate demand for locally manufactured goods.

The encouragement of exports at the expense of the domestic sector has resulted in imbalance and a rigid production structure which makes a quick response to changes in foreign demand impossible. Local markets are small and they cannot absorb any surplus when world market becomes unfavourable. There is, therefore, a strong move in some of these countries to expand the domestic manufacturing sector, together with export trade as a means of introducing more diversification.

Although the increased productivity of industrial countries has sometimes stimulated demand for primary products from less developed countries, growth in these areas has not been initiated. This is partly because the prices of the industrial goods required by the poor countries have not fallen in spite of the increase in productivity in the advanced.\(^{21}\) Besides, whereas the poor countries have to buy capital goods from the advanced, the latter are not increasing their consumption of primary commodities to any great extent. The

---

underdeveloped countries were able to hold their own in the world markets of the nineteenth century because of the then low cost of production; today they are making less headway because they are subjected to certain conditions that limit the extent to which primary products can lead to higher levels of development.  

Apart from the relatively low demand by industrial countries, these less developed areas also have to contend with competition from the advanced. The latter are themselves efficient primary producers; as Cairncross said "every country is a primary producer and the more advanced it is, the larger.... is its output of primary produce." They (the advanced) also account for a larger share of the present expansion in world trade: for example, "in the 1950's the volume of exports from the developing countries increased at an average annual rate of 3.6 per cent per annum, as compared with a rate almost twice as high for the industrialized nations." Besides the supply price of primary commodities tend to fall more than those of intermediate and finished goods; thus whilst the

---


developing countries have to sell their exports cheaper and in smaller volume, they have to buy manufactured goods dearer and in greater volume. This point has been confirmed by the United Nations' estimates: Between 1952 and 1961, the growth of developing countries' export earnings was slower than that of the volume of exports because of the decline in the average export prices; at the same time there was an increase in the export prices of manufactured goods -- therefore their terms of trade\(^25\) declined.\(^26\)

Some economists\(^27\) are rather dubious about the possibility of a change in present conditions and predict that a reliance on export trade will not provide a solution to the problem of underdevelopment. The expansion of primary exports is highly unlikely and would not provide a sufficient basis for the continuous economic growth of these countries. Professor Schultz summed up this school of thought in the following way: "the expansion of the production of primary products is not conducive to economic development. It is, therefore....unwise for a country to stake its economic future

\(^{25}\) Relationship of import prices to export prices.

\(^{26}\) F.A.O. Commodity Review, Trade in Agricultural Commodities in U.N. Development Decade (1964, Vol. CCF64/6 (I-III)).

\(^{27}\) Such as Prebisch and Myrdal, *op. cit.*
on this class of products. 28

As a solution to this problem it has been suggested that more emphasis be put on import substitution 29 (that is an increase in the proportion of goods supplied from domestic sources which does not necessarily mean a reduction in the ratio of imports to total income), rather than export expansion because the former generates more external economics 30 and have a ready market in the domestic economy. This could provide a remedy in the long run but it would require the use of the export sector as a means of financing the manufacturing sector. Besides it is self-defeating to replace imports by domestic production at an early stage of development because imports can 'prepare the ground' for eventual industrialization by creating demand in the local economy and revealing profitable opportunities. 31 A country can only afford to dispense with imports after the domestic industry is well established. By raising the productivity of agricultural exports, incomes would rise and the gains are transmitted throughout the economy:


30 These include improved organization of local market, provision of transport facilities, and trained labour that could be used by many industries.

a basis is also provided for future industrialization through the supply of more raw materials and food products. Import substitution and manufacturing do not have to be encouraged to the detriment of export expansion because industry and a rise in agricultural productivity are complementary. A better policy is to induce balanced growth in both sectors; where the output from exports is used as inputs of other industries, development is further accelerated.

The processing of exports makes growth more cumulative -- there is a higher demand for local products and more income and employment is generated in the domestic economy. When it requires the building of railways and other forms of transport, supplementary industries are encouraged and the general level of economic activity is raised.32 The rise in light industries will create new demand for the products and consequently help to offset the declining demand from the developed countries.33

A country whose export earnings grow at a very fast rate is in a better position to stimulate its growth than one whose exports is faced with stagnant growth; the higher earnings tend to raise local incomes and enable the financing of development projects. Agricultural exports tend to be more

32 R.E. Baldwin, op. cit.
33 R.E. Baldwin, op. cit.
favourable to poor countries because it absorbs more of their abundant supplies of labour, and require less specialized and highly capitalized equipment; if a high proportion of indigents are employed, more money is spent locally and the money economy is widened.

Caincross\(^{34}\) pointed out that development cannot succeed without foreign equipment, foreign capital and foreign ideas. To get these the poor countries require foreign exchange which they can only obtain by exporting. Foreign markets provide outlets for primary products and help in the transformation from subsistence into money economies. "Far too much emphasis is being placed on the forces operating to limit or diminish the demand for primary produce and far too little on the constant opening up of new requirements throughout the world as the standard of living rises."\(^{35}\) He also disagreed with the view that synthetic products are slowly replacing natural products and accentuating the problem of declining world demand. According to him, synthetics are generally out to supplement the inelastic supply of primary products rather than displacing them entirely.

The stimulus from exports is certain but it depends


\(^{35}\) Ibid.
on many factors:— the growth rate of demand for it; how it affects employment, per capita incomes and investment opportunities in the domestic sector; the extent to which a larger percentage of income accrues to those with a high saving propensity, and how far the economy is protected from price fluctuations in foreign markets. There are also certain domestic factors which inhibit the extent to which growth in the export sector can be transmitted to the rest of the economy.\textsuperscript{36} Factor immobility, small local markets, social and cultural blocs,\textsuperscript{37} fragmentation of the domestic economy especially through the system of land tenure.

These are most of the things that will be considered in this thesis. An attempt has been made above to acquaint the reader with many of the controversial views on the contribution that primary agricultural exports can make to economic development. The next chapters are confined to Ghana — a former British Colonial territory\textsuperscript{38} — and the effects that an exclusive dependence on one primary commodity had not only in the past, but also in its present and future prospects of development.

\begin{flushright}
\textsuperscript{37} Such as ignorance.
\textsuperscript{38} Ghana attained independence on 6th March, 1957. Before then it was known as the Gold Coast; throughout this thesis the name "Ghana" will be used to simplify classification.\
\end{flushright}
CHAPTER II

AN HISTORICAL ANALYSIS. 1900 - 1963

Although cocoa was virtually absent in the economy of Ghana during the latter period of the nineteenth century, it slowly acquired an important role. Limitations were imposed by the lack of suitable roads but more land was increasingly brought under cultivation. During the early stages the farmers had to contend with competition from foreign firms and companies; the latter tried to introduce plantation methods and thus make use of the cheap available labour. But right from the beginning, some form of determination could be noticed among the local farmers, partly because they felt it was more profitable producing the crop themselves.

Merchant firms were responsible for the buying and shipment of export produce;\(^1\) they had various intermediaries and middlemen who bought from producers in return for a commission. The actual shippers were expatriate firms but there was "large scale African participation in the purchase and movement of export produce."\(^2\)

The Colonial Government at this time was aware of the important part they had to play especially in improving

---


\(^2\) Ibid.
the quality of the crop and ensuring reliable foreign markets. Although intervention was small, methods to control the spread of diseases were introduced. Minimum standards were set, to which all exportable cocoa had to conform. Experimental shipping were also undertaken for the delivery of the crops.

World War I.

At the outbreak of the war a collapse of cocoa prices was feared; therefore the British government undertook to purchase all the cocoa offered for sale, through a statutory export monopoly at annually fixed prices.\(^3\) Minimum buying prices were fixed at various stations throughout the producing areas. Within two years the impact of general trade dislocation in the world outside and the various restrictions imposed on shipping began to be felt. Export declined and domestic prices declined in compliance with the minimum buying prices imposed.\(^4\) Farmers began to reduce land under cultivation because of the rising maintenance costs. This was later considered a blessing in disguise because in previous years, the expanding world demand had provided a strong incentive to put more land under cultivation in the hope of raising profits. As a result of the rather discouraging state of the industry the Governor

\(^3\) P.T. Bauer, op. cit., p. 199.

\(^4\) Anyane, S. *Ghana Agriculture and Trade in Farm Products*, 1960, p. 75.
required a Special Inquiry into the marketing prospects of the crop. It was suggested that some local processing of chocolate and cocoa butter be introduced, but practically no progress was made.

Post World War I.

With the end of the war more progress was made; trial shipments of cocoa to England started and this stimulated renewed interest in farms formerly abandoned. Agencies of cocoa manufacturers in England were established and farmers were able to communicate directly with them especially in the maintenance of proper quality. The quantity produced continued to increase to meet the buoyant world demand.

Growth of the money economy.

The success of cocoa could be partly attributed to the fact that methods of production could be easily grafted to the traditions of the country. The size of the farms were not large enough to require hired labour; besides the extended system made the family network wide, with ample provision of labour for farm work.

The presence of foreign export and import firms contributed to the monetization of the economy; they acted as middlemen to transfer peasant crops to foreign buyers and to sell imported goods which provided the incentive to expand
export production. New wants were stimulated and export crops had to be increased to supply the requisite cash. The exchange economy was slowly expanded by bringing in more indigents to cocoa production. As specialization in the production for foreign markets started, the demand for food increased, thus encouraging the production of more food crops for sale.⁵ Therefore, cocoa has been declared one of the main factors responsible for the decline of the subsistence economy relatively to the market economy in Ghana.

The government also made some direct contributions towards the supremacy and dominance of this commodity in the country's economy, by the introduction of various measures. The Department of Agriculture in collaboration with the West African Cocoa Research Institute organised various campaigns to control swollen shoot -- a disease which attacks cocoa plant. These methods were demonstrated and information was made available on replanting after the removal of diseased trees. Farmers were also taught various methods for the improvement of the quality of their crops.

At the same time the new roads opened the surrounding hinterland and induced peasant farmers to divert their energies into production for sale. The importance of adequate transport

facilities to the expansion of the money economy cannot be overestimated. Whereas the limitations of transportation restricted output in the late nineteenth century, the building of railways in the current period strongly contributed to the expansion of the cocoa areas. Closely connected with this is urbanization; with the opening up of new areas in the southeast, Kumasi slowly acquired the role as chief exporter of cocoa. Today it is one of the major collecting centres for the crop.

The role of co-operatives.

An important effect of the war was the formation of co-operatives as a means of reducing the debts incurred by farmers during periods of falling prices. "...as a form of self-help among farmers in tackling their agricultural problems especially credit and marketing after the war, co-operation commanded an appeal among farmers, and even with farmers educated about this form of agricultural organization." Their aims included the introduction of more businesslike methods amongst peasants by utilizing the African's natural mode of communal working; the development of a spirit of independence, self-help

6 Kumasi is a large town in the interior of Ghana.


8 Anyane, op. cit., p. 78.
and neighbourly assistance which are essential to the maintenance of active and virile rural population.\textsuperscript{9}

Co-operatives continued to play an increasing role in the marketing of cocoa, and by the late nineteen twenties, twenty-eight out of a total of thirty-five were cocoa producers' organizations. They provided opportunities for the utilization of peasant savings thus giving a direct incentive to thrift. However, the supply of savings continued to be rather inadequate for the expansion and improvements of farms. Thus the farmers had to search for new sources of capital. Unfortunately the commercial banks then were mainly branches of British banks dealing only in long term loans which the peasants could not afford. Besides the banks discriminated against indigents by stipulating very strict rules of credit -- worthiness, which the farmers were unable to satisfy. Sometimes they obtained loans from money lenders who charged very high interest rates. This reduced the extent to which profits could be retained and kept the farmer indefinitely in debt. Invariably cocoa income was not enough to pay for the loans and crops had to be pledged.

Because of these problems the Department of Agriculture suggested the creation of co-operative banks from the combined capital of a group of societies. These came into existence in 1935 with the following functions: - To provide security for

\textsuperscript{9} Ibid., p. 151.
loans which farmers obtained from other commercial banks; to redeem farms pledged to obtain loans; to finance the cost of farm machinery and other marketing equipment. Apart from this financial assistance, the co-operatives helped to reduce the pressures of foreign middlemen in the marketing of cocoa, thus laying a strong foundation for increased participation of indigents in the future.

**The great depression and its aftermath.**

In spite of the benefits which the system of peasant enterprise conferred on the economy, it generated certain adverse effects. Most of the farms were run on private basis and the farmers made very little savings to tide them over difficult periods. The effect of this was particularly felt during the World Depression in the early nineteen thirties. By the end of 1929 the value per ton of cocoa had dropped from £50 to £41,\(^{10}\) it continued to fall rapidly and by 1931 the price per ton was only half of what it was in 1929.\(^{11}\) Naturally this seriously affected the incomes of the farmers, and since cocoa was such a vital crop, the whole economy was disrupted. In 1931 the "Gold Coast and Ashanti Cocoa Federation" was formed with the chief aim of raising price by restricting the quantity of the crop flowing into the market. Very little success was

\(^{10}\) The British pound is equivalent to $3.2 Canadian.

\(^{11}\) Anyane, *op. cit.*
achieved because most of the increased output of previous years continued to flow into the market. More land began to be withdrawn from cultivation or transferred to the production of other crops. This continued until 1933 when the end of the depression encouraged more planting.

In 1935 a Cocoa Industry Regulation Ordinance was passed in order to improve the quality of cocoa entering export trade. Inferior cocoa was prohibited and the inspection of exports at exit points was recommended. Despite the continued attention on the marketing of the crop another period of low prices was experienced between October 1937 and April 1938. As a result cocoa lost its place as the most valuable single export commodity: from a total value of sixty percent in the previous year, it deteriorated to forty-one percent.¹²

There were also certain anomalies inherent in the system of land tenure; where the land was not privately owned the tenant pledged his crops in order to obtain a temporary title over land. Since the farmers were not in a position to trade directly with exporting agencies, they had to go through many foreign middlemen. Very few attempts were made to form joint associations with local people, and even when they were formed success was virtually impossible.

¹² T. Poleman, op. cit.
World War II.

Foreign trade was disorganised and wartime shipping shortages restricted the amount of cocoa that could be sent abroad. Overseas markets were cut off (for example the cessation of trade with Germany which was an important market) and the outflow of exports was curtailed. In view of the uncertainty of foreign markets, local agents reduced their purchases. To alleviate the severity of the reduction in exports, effort was made to use more cocoa in the domestic economy. Under the supervision of the Department of Agriculture, low grade beans were used for the making of cocoa butter, soap, cocoa powder and lighting oil.

Controls were introduced by the United Kingdom government not only to restrict supplies to the enemy and secure them for herself, but also to prevent a collapse of cocoa prices in Ghana. In 1940, the West African Produce Control Board was formed for the marketing of all West African crop overseas and for the maintenance of some stability in overseas prices. It was replaced by the Agricultural Produce Control Board two years later which carried on most of the functions.

Price policy.

The Control Board, in co-operation with the Ministry

of Food in England set prices for the bulk sales of cocoa. These prices took no account of those operating in other markets—for instance, whereas the New York controlled price was £50 a ton, the British price was only about £34 a ton.\textsuperscript{14} Right from its inception the Board began to accumulate reserves by fixing producer prices at low levels relative to what they (Board) received from sales proceeds; this reduced the real incomes of cocoa producers.\textsuperscript{15} Producer prices fluctuated within a narrow range during the war.\textsuperscript{16} Between 1939 and 1944 producer price was very low, at an average of £13.5 per ton. With the end of the war, world prices rose because of an inflation in some of the advanced countries.\textsuperscript{17} This was reflected in domestic prices which reached the highest level in 1946, since the beginning of the war.

Farmer's income.

The aggregate receipts of farmers have also been subjected to fluctuations. Their real incomes declined during the war because of the fall in receipts. The bad prospects in world markets placed total income in 1940 at a low of £2.6 million.

\textsuperscript{15} Bauer, P.T., \textit{op. cit.}, p. 248.
\textsuperscript{16} See Figure 1.2.
\textsuperscript{17} Herskovits and Harwitz, \textit{op. cit.}, p. 212.
FIGURE 1-2  ANNUAL VARIATION IN PRODUCER PRICE 1938/63

POUNDS (STERLING) PER TON

1938 40 42 44 46 48 50 52 54 56 58 60 62 63

Years
<table>
<thead>
<tr>
<th>Year</th>
<th>Production Levels 000 long tons</th>
<th>Producer Price Nearest £ per ton</th>
</tr>
</thead>
<tbody>
<tr>
<td>1938</td>
<td>298</td>
<td>17</td>
</tr>
<tr>
<td>1939</td>
<td>242</td>
<td>13</td>
</tr>
<tr>
<td>1940</td>
<td>237</td>
<td>16</td>
</tr>
<tr>
<td>1941</td>
<td>251</td>
<td>13</td>
</tr>
<tr>
<td>1942</td>
<td>207</td>
<td>15</td>
</tr>
<tr>
<td>1943</td>
<td>196</td>
<td>13</td>
</tr>
<tr>
<td>1944</td>
<td>229</td>
<td>13</td>
</tr>
<tr>
<td>1945</td>
<td>209</td>
<td>22</td>
</tr>
<tr>
<td>1946</td>
<td>193</td>
<td>27</td>
</tr>
<tr>
<td>1947</td>
<td>208</td>
<td>51</td>
</tr>
<tr>
<td>1948</td>
<td>278</td>
<td>74</td>
</tr>
<tr>
<td>1949</td>
<td>249</td>
<td>121</td>
</tr>
<tr>
<td>1950</td>
<td>262</td>
<td>84</td>
</tr>
<tr>
<td>1951</td>
<td>211</td>
<td>130</td>
</tr>
<tr>
<td>1952</td>
<td>247</td>
<td>149</td>
</tr>
<tr>
<td>1953</td>
<td>223</td>
<td>140</td>
</tr>
<tr>
<td>1954</td>
<td>244</td>
<td>134</td>
</tr>
<tr>
<td>1955</td>
<td>237</td>
<td>134</td>
</tr>
<tr>
<td>1956</td>
<td>264</td>
<td>149</td>
</tr>
<tr>
<td>1957</td>
<td>207</td>
<td>149</td>
</tr>
<tr>
<td>1958</td>
<td>255</td>
<td>134</td>
</tr>
<tr>
<td>1959</td>
<td>317</td>
<td>119</td>
</tr>
<tr>
<td>1960</td>
<td>432</td>
<td>112</td>
</tr>
<tr>
<td>1961</td>
<td>410</td>
<td>112</td>
</tr>
<tr>
<td>1962</td>
<td>422</td>
<td>112</td>
</tr>
<tr>
<td>1963</td>
<td>420</td>
<td>110</td>
</tr>
</tbody>
</table>

### TABLE I.II

**AGGREGATE FARMERS' RECEIPTS**

1939-1960

<table>
<thead>
<tr>
<th>Year</th>
<th>Receipts (£M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1939</td>
<td>2.6</td>
</tr>
<tr>
<td>1940</td>
<td>2.7</td>
</tr>
<tr>
<td>1941</td>
<td>3.4</td>
</tr>
<tr>
<td>1942</td>
<td>2.4</td>
</tr>
<tr>
<td>1943</td>
<td>2.5</td>
</tr>
<tr>
<td>1944</td>
<td>5.1</td>
</tr>
<tr>
<td>1945</td>
<td>5.6</td>
</tr>
<tr>
<td>1946</td>
<td>9.8</td>
</tr>
<tr>
<td>1947</td>
<td>15.5</td>
</tr>
<tr>
<td>1948</td>
<td>33.7</td>
</tr>
<tr>
<td>1949</td>
<td>20.8</td>
</tr>
<tr>
<td>1950</td>
<td>34.2</td>
</tr>
<tr>
<td>1951</td>
<td>31.5</td>
</tr>
<tr>
<td>1952</td>
<td>32.3</td>
</tr>
<tr>
<td>1953</td>
<td>28.4</td>
</tr>
<tr>
<td>1954</td>
<td>29.6</td>
</tr>
<tr>
<td>1955</td>
<td>34.2</td>
</tr>
<tr>
<td>1956</td>
<td>39.4</td>
</tr>
<tr>
<td>1957</td>
<td>27.8</td>
</tr>
<tr>
<td>1958</td>
<td>34.4</td>
</tr>
<tr>
<td>1959</td>
<td>35.5</td>
</tr>
<tr>
<td>1960</td>
<td>38.4</td>
</tr>
</tbody>
</table>

They fluctuated around this level during the next four years but owing to relatively higher producer prices, they rose between 1945 and 1946 and by 1947 had reached £9.8 million.

Export quotas.

These operated from 1939 to 1947. Merchant firms were empowered to act as agents in the purchase and shipping of cocoa. They were allotted quotas on the basis of their previous performance (that is the amount of cocoa they normally produced before the outbreak of the war), and new entry into cocoa trade was banned. This system prevented the growth of new firms and accentuated the decline in prices.

Post World War II.\(^1^8\)

The experience gained by the West African Produce Control Board showed how controlled marketing could protect the farmer against wide price fluctuations. Therefore, after the war it was decided that a permanent organization should be formed to continue its work. In 1947 Ghana\(^1^9\) obtained its share of £13\(\frac{1}{2}\) million\(^2^0\) from the net profits of the Produce Control Board and established the Gold Coast Cocoa Marketing Board.

\(^{18}\) This covers 1946-1960.

\(^{19}\) Was still called the "Gold Coast" then.

The Cocoa Marketing Board.

During the formation of this Board certain aspects of its work were specified such as to secure the most favourable arrangement for the purchase, grading, export, and selling of Gold Coast cocoa, and to assist in the development of cocoa for the benefit and prosperity of the producers. The other functions were: to fix with the prior approval of the Cabinet, the prices to be paid to producers of cocoa at all areas during each crop year, and to ensure the maintenance of such prices; to purchase all cocoa and to assist in the operation of successful buying; (the crop was bought from the producers by individuals and firms licensed by the Board, and known as Licensed Buying Agents); to sell, export, store and ship cocoa. A subsidiary was set up in London to obtain the export from the local Board and sell in foreign markets. This system led to a significant improvement in marketing opportunities and the reduction in the effects of unstable foreign demand.

(a) Price policy.

Average annual proceeds realised by the Cocoa Board fluctuated highly because of conditions in the world market. The aftermath of the war brought new demand and this, together with the reduction in supply which war dislocation brought,
led to a rise in prices. This was rather short-lived for by the end of the 1948/49 crop year the overseas sales price was down to £G136 per ton. In the early fifties world production rose resulting from the incentive of higher prices in the previous years.

Whereas the price paid to the Cocoa Board was determined by conditions in the world market, the price received by producers in Ghana was fixed by the Board. The latter took account of the probable trend of world prices, because producer prices were fixed at a lower level than what obtained in the world market. The Board accumulated surpluses when world prices were high and subsidized the prices paid to producers during periods of low world prices. By this method it accumulated substantial reserves and established a Stabilization Fund.

The inflation that took place in the immediate post-war years led to a rise in world prices. There was also an increase in world demand, and for a while producers were faced

---


24 Producer prices exclude transportation costs of cocoa. This is covered by the Board.
with bright prospects. Prices rose and by 1949 had reached £G121 per ton, the highest attained since the beginning of the war. The next year brought a mild recession in trade; world prices fell and producers had to face a major decrease in their price relative to that of the previous year. However, by the beginning of the nineteen fifties conditions had improved, and price rose to a peak of £G149 per ton by the end of the 1951-1952 crop year. During the next few years the Board followed better policies and yearly fluctuations were considerably reduced. For instance as distinct from the late nineteen forties and early nineteen fifties price was kept at £134.4 per ton for the two crop years 1953-1954 and 1954-1955. Similarly between 1955-1956 and 1956-1957, producer price was stabilized at £G149.3 per ton. In 1958 the average world price -- of about £172 -- which was paid to the Board was less than the cost incurred by the Board of about £213; the latter subsidized the amount paid to producers and the average price at all buying points was fixed at £G134.4 per ton. During the succeeding year, the Prime Minister announced that cocoa producers had decided to accept a price of £G112 per ton over the three year period 1960-1963 as a contribution to the

---

25 See Table I.II and Figure I.2.

financing of the Second Five Year Development Plan.27

The aggregate receipts of cocoa farmers showed great increases during the early post war years.28 From a low of £5.6 million in 1945 aggregate receipts rose to £15.5 million in 1946, and by 1948 had reached £33.7 million.29 The fall in producer prices in 1949 had an adverse effect on these receipts although the decline was relatively small. During the decade 1950-1960, the highest receipts of £G39.4 million were obtained in 1956.

(b) Selling Policy.

The subsidiary company in London was able to sell increased quantities to consuming countries because of its efficient administration. Besides Ghana cocoa soon acquired a reputation for consistent quality in foreign markets, probably resulting from the introduction of improved methods of handling, checking, and inspection. Sometimes forward sales were made before the beginning of a cocoa season in order to help reduce price fluctuation. This was done between August

27 Ghana Cocoa Marketing Board at Work, op. cit., p. 5.
28 See Table 1.II.
29 Herskovits and Harwitz, op. cit.
1956 and December 1957, and prices were kept within a range of £190 and £225\textsuperscript{30} per ton. Price rose during the next crop year because of poor crops from the other producing areas. It reached a peak of £390 per ton by May 1958 but by the end of September, had fallen to £275.\textsuperscript{31} This partial decline in price was offset during the next year because of poor crops from some of the French West African territories. In spite of many fluctuations the Board was able to maintain an average sales price of £280 per ton. Output increased in 1959-60 but because of forward sales during July and August, prices were kept between £210 and £215 per ton. With the expiration of this period, price declined to an average of only £172.

During 1960 a new company was established as a subsidiary of the Board. It was known as the Cocoa Marketing Company and replaced the previous one in London for the marketing of cocoa in foreign markets.

**The Current Period.**\textsuperscript{32}

The percentage of cocoa farms to total agricultural


\textsuperscript{32} 1960-1963.
land is about 6.7; most of the country's cocoa is grown in the main high forest belt particularly in the East and Ashanti.

To a large extent the farms are operated independently comprising about five acres or less. Tenancy is not common, but some farmers operate the land with hired labour or lease part of their land out after it has been planted with cocoa. In some areas producers control holdings of sixty to a hundred acres, operated by a system of paid labour. Typically, a large proportion of the people operate family concerns part of which is devoted to the production of food crops: cocoa is grown as a subsidiary cash crop to provide themselves with the money they need to buy necessities for the family and for operating the farm.

The role of the Cocoa Marketing Board.

(a) Buying policy. Formerly firms known as Licensed Buying Agents were responsible for the buying of cocoa on behalf of the Board. More recently farmers' co-operative societies have been purchasing an increasing proportion of the crop. In 1961, the United Ghana Farmers' Council Co-operatives was formed, consisting exclusively of farmers and solely

---

33 Snider Skinner, Ghana's Agriculture and Trade in Farm Products (U.S. Department of Agriculture), p. 6.
34 Golden Harvest, op. cit., p. 9.
responsible for the buying of cocoa. The co-operatives buy on behalf of the Board and this involves many subsidiary functions: "...to purchase at all buying stations at not less than the minimum price prescribed by the Board,"... "to prepare the cocoa for delivery to the Board for export, and act as buying agents for all the cocoa bought by their component registered co-operative unions or societies." These co-operatives must be in a position to finance, store and handle the entire crop and should make their own arrangements for road transport.

The Board gives the co-operatives an annual grant or allowance of £G100,000 to cover the cost of transportation from certain specified areas to the buying points. This grant includes a margin of profit per ton for the co-operatives; at the same time producers do not suffer any deductions in their receipts to cover the cost of transport from their farms. The Council co-operatives are liable for any loss or damage except those due to circumstances beyond their control. It is likely that in the future all buying of cocoa from farmers will be taken over either by co-operatives or by other Ghanaian

36 Ghana Cocoa Marketing Board at Work, op. cit., p. 7.  
37 Ibid., p. 8.  
38 Ibid., p. 7.  
39 Such as caused by riot, civil commotion and insurrection, or by strikes, war, invasions, civil war.
(b) Selling policy. This is now entirely under a wholly-owned subsidiary of the Board in Accra. In 1961 the Cocoa Marketing Company replaced the Ghana Cocoa Marketing Company in London; the latter went into liquidation at the end of the year. The future marketing of cocoa will be conducted entirely from Ghana.\(^4\) The new company is responsible for the arrangement of shipping space and insurance against risks. Licenses are granted to buying firms in foreign countries which fulfil the following conditions:— some evidence must be produced to show that the firm is taking an active part in the cocoa trade in the consuming country (for instance membership of a recognized cocoa trade association where this exists in the country); the firm must provide Bankers' reference showing satisfactory credit to finance the delivery of at least 1,000 tons of cocoa.\(^5\)

In 1960 forward sales were made in the range of £G215 to £G210 during July and August but the average price for the crop year was only £G172.5 per ton.\(^6\) Because of the

---

op. cit.
lower average price there was a loss of over £G6 million which was transferred to the stabilization fund. In 1963, there was an upward movement in price in response to rising consumption and low stocks of many producing areas. World price recovered from the low encountered at the end of 1962 and reached an average of £G206 per ton. Recently there has been a fall in the world price: as a result the average price in 1964 was £G190 a ton.

(6) Stabilization policy. There are various aspects of this function; stable producer prices are guaranteed; a fund is accumulated for the raising of producer prices during falling world prices; profits are invested in various developmental projects.

By the end of the nineteen fifties, the Board had accumulated reserves of £G77 million of which £G45 million provided the stabilization fund. The rest was for scholarships, local development funds, and cocoa rehabilitation. By 1963 the stabilization fund stood at £G39 million. The reserves are still used to maintain a reasonable price to farmers when

---


45 *Africa Digest*, February 1965, Vol. XII, No. 4, p. 113.

46 *Golden Harvest*, op. cit., p. 22.
the world market price declines. When the Board incurs a loss by fixing a buying price which turns out to be higher relative to that at which they later sell in the world market, the loss is usually transferred to the fund. Recently, total reserves have been decreasing; whereas in the beginning of 1961 it was £G75 million, \textsuperscript{47} in 1963 it declined to £G57 million. \textsuperscript{48}

(d) Research policy. The Board gives financial assistance to the Ministry of Agriculture toward cocoa rehabilitation and the control of swollen shoot. The West African Cocoa Research Institute also receives various grants in aid of research into cocoa diseases and the cultivation of high yielding varieties. \textsuperscript{49}

(e) Producer price policy. The price of £G112 introduced in 1959 has been maintained during the succeeding years except in 1963 when it dropped to £G110. \textsuperscript{50} This takes into account the producers' voluntary contribution of £22 per ton to the current five year plan. \textsuperscript{51} From October 1961, the farmers

\textsuperscript{47} Africa Digest, February 1961, Vol. III, No. 4, p. 163.

\textsuperscript{48} Marketing Board at Work, op. cit., p. 17. This decline could be due to the increased capital expenditure of the Ghana Government largely financed by the Marketing Board.

\textsuperscript{49} Africa Digest, February 1961, op. cit., p. 163.

\textsuperscript{50} Gill and Jufus, Cocoa Statistics, London 1964, p. 19.

\textsuperscript{51} 1963/64 -- 1969/70.
contributed a further ten per cent of the price they received for cocoa by purchasing National Development Bonds - their net cash value was therefore £100 per ton. Development bonds were abolished in November 1963, but the farmers must still contribute the equivalent of these bonds to the financing of the plan. Net producer price remains unchanged at £G100 per ton.52

The Council co-operatives now pay a standard price of sixty shillings53 per load of sixty pounds to small scale farmers. "Unlike the nineteen thirties when prices fluctuated violently, the situation now is one of certainty for the farmer because he knows exactly what he is to receive each season or crop year."54

The gross earnings of farmers was £G47.3 million during the 1962-63 crop year as compared with £G45.7 million in 1961-1962; but after deducting their contribution to the Development Fund their aggregate net earning in 1962-1963 was £G42.5 million.55

53 Marketing Board at Work, op. cit., p. 12.
54 Ibid.
Role of the Government.

The government helps the farmer in many ways, especially in the control of disease. Several campaigns have been launched to bring cocoa diseases under control. Large sums of money are being spent on teaching farmers how to combat pest and subsidizing the cost of insecticides. Under the Revised Grant Payment Scheme, cash compensation is available for farmers who suffer loss by the destruction of diseased trees. The government arranges for the location and removal of these trees and provide compensation and advice to the farmers for the establishment of new farms. A cash compensation is available...for all who have trees cut out; this is obtainable at the rate of £G50 per acre paid in two instalments...£G20 per acre after the removal of the diseased trees and £G30 in three instalments of £G10 during the period before the new plantings come into bearing."

Through the Marketing Board, the government has provided money for the replanting of cocoa in areas where it has died out. This is particularly applicable to the east where farmers had previously lost their farms due to the swollen shoot disease. A subsidy of £G30 per acre is given to

56 Golden Harvest, op. cit., p. 27.
57 Ibid., p. 28.
Extension services are also provided with emphasis on the teaching of groups of cocoa farmers in their villages. The main object of this is to help them take full control of their farms through efficient husbandry and pest control. Hybrid seed gardens are also being established in co-operation with the Cocoa Research Institute in the Eastern Region, from which farmers could obtain seedlings with potential high yields at reasonable prices. It is hoped that enough of these seeds will be available for 5,000 acres to be planted this year. In 1964 2,000 acres were planted; this acreage will increase progressively to 11,000 in 1966. From 1971 an annual increase of 40,000 acres is projected.

Until five years ago the cocoa industry was threatened by swollen shoot and capsid. Through rigorous inspection and spraying organised by the Department of Agriculture (in co-operation with the West African Cocoa Research Institute), these activities have been kept under control; this is one of the greatest single factors responsible for the present increase

---

60 I.e., 1965.
61 Golden Harvest, op. cit., p. 27.
62 A small suckling insect, indigenous to the surrounding areas.
in cocoa production.63

Production Levels 1900-1963.64

The level of cocoa production at the beginning of the twentieth century was almost nil. Production increased rather slowly during the first decade but by 1910 it had reached 40,000 long tons.65 Ghana at this time was producing only sixteen percent of total world production. The next few years brought steady increases both in actual amount, and in Ghana's position relative to that of other producer countries. Except for a small decline in 1917, production increased during the duration of the first World War, and by 1918 had reached an unprecedented height of 148,000 long tons.

During the decade of the nineteen twenties production was unstable but an upward trend is clearly discernible. A high of 242,000 long tons in 1928 was the peak of the period. Ghana had now acquired an important status in the world cocoa market supplying over forty percent; in fact by 1926 Ghana held a position she has never regained -- contributing forty percent to total world production.

64 See Table II.2 and Figure II.2.
<table>
<thead>
<tr>
<th></th>
<th>Ghana</th>
<th>World</th>
<th>Ghana’s as % of world production</th>
</tr>
</thead>
<tbody>
<tr>
<td>1900/01</td>
<td>1</td>
<td>115</td>
<td>0.9</td>
</tr>
<tr>
<td>1901/02</td>
<td>2</td>
<td>126</td>
<td>2</td>
</tr>
<tr>
<td>1902/03</td>
<td>2</td>
<td>127</td>
<td>2</td>
</tr>
<tr>
<td>1903/04</td>
<td>5</td>
<td>159</td>
<td>3</td>
</tr>
<tr>
<td>1904/05</td>
<td>5</td>
<td>149</td>
<td>3</td>
</tr>
<tr>
<td>1905/06</td>
<td>9</td>
<td>151</td>
<td>6</td>
</tr>
<tr>
<td>1906/07</td>
<td>9</td>
<td>151</td>
<td>6</td>
</tr>
<tr>
<td>1907/08</td>
<td>13</td>
<td>193</td>
<td>6</td>
</tr>
<tr>
<td>1908/09</td>
<td>20</td>
<td>209</td>
<td>9</td>
</tr>
<tr>
<td>1909/10</td>
<td>23</td>
<td>221</td>
<td>10</td>
</tr>
<tr>
<td>1910/11</td>
<td>40</td>
<td>247</td>
<td>16</td>
</tr>
<tr>
<td>1911/12</td>
<td>40</td>
<td>241</td>
<td>17</td>
</tr>
<tr>
<td>1912/13</td>
<td>47</td>
<td>258</td>
<td>18</td>
</tr>
<tr>
<td>1913/14</td>
<td>36</td>
<td>285</td>
<td>20</td>
</tr>
<tr>
<td>1914/15</td>
<td>66</td>
<td>287</td>
<td>23</td>
</tr>
<tr>
<td>1915/16</td>
<td>82</td>
<td>318</td>
<td>26</td>
</tr>
<tr>
<td>1916/17</td>
<td>86</td>
<td>347</td>
<td>25</td>
</tr>
<tr>
<td>1917/18</td>
<td>70</td>
<td>278</td>
<td>25</td>
</tr>
<tr>
<td>1918/19</td>
<td>148</td>
<td>441</td>
<td>34</td>
</tr>
<tr>
<td>1919/20</td>
<td>145</td>
<td>400</td>
<td>36</td>
</tr>
<tr>
<td>1920/21</td>
<td>116</td>
<td>366</td>
<td>32</td>
</tr>
<tr>
<td>1921/22</td>
<td>162</td>
<td>422</td>
<td>38</td>
</tr>
<tr>
<td>1922/23</td>
<td>195</td>
<td>451</td>
<td>43</td>
</tr>
<tr>
<td>1923/24</td>
<td>201</td>
<td>482</td>
<td>43</td>
</tr>
<tr>
<td>1924/25</td>
<td>211</td>
<td>486</td>
<td>43</td>
</tr>
<tr>
<td>1925/26</td>
<td>207</td>
<td>467</td>
<td>44</td>
</tr>
<tr>
<td>1926/27</td>
<td>238</td>
<td>524</td>
<td>45</td>
</tr>
<tr>
<td>1927/28</td>
<td>207</td>
<td>502</td>
<td>41</td>
</tr>
<tr>
<td>1928/29</td>
<td>242</td>
<td>545</td>
<td>44</td>
</tr>
<tr>
<td>1929/30</td>
<td>232</td>
<td>534</td>
<td>43</td>
</tr>
<tr>
<td>1930/31</td>
<td>223</td>
<td>526</td>
<td>42</td>
</tr>
<tr>
<td>1931/32</td>
<td>212</td>
<td>551</td>
<td>39</td>
</tr>
<tr>
<td>1932/33</td>
<td>256</td>
<td>620</td>
<td>41</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Ghana</th>
<th>World</th>
<th>Ghana’s as % of world production</th>
</tr>
</thead>
<tbody>
<tr>
<td>1933/34</td>
<td>220</td>
<td>583</td>
<td>38</td>
</tr>
<tr>
<td>1934/35</td>
<td>276</td>
<td>693</td>
<td>40</td>
</tr>
<tr>
<td>1935/36</td>
<td>285</td>
<td>727</td>
<td>39</td>
</tr>
<tr>
<td>1936/37</td>
<td>300</td>
<td>748</td>
<td>40</td>
</tr>
<tr>
<td>1937/38</td>
<td>390</td>
<td>727</td>
<td>33</td>
</tr>
<tr>
<td>1938/39</td>
<td>298</td>
<td>797</td>
<td>37</td>
</tr>
<tr>
<td>1939/40</td>
<td>242</td>
<td>681</td>
<td>36</td>
</tr>
<tr>
<td>1940/41</td>
<td>237</td>
<td>663</td>
<td>36</td>
</tr>
<tr>
<td>1941/42</td>
<td>251</td>
<td>669</td>
<td>38</td>
</tr>
<tr>
<td>1942/43</td>
<td>207</td>
<td>605</td>
<td>34</td>
</tr>
<tr>
<td>1943/44</td>
<td>196</td>
<td>565</td>
<td>35</td>
</tr>
<tr>
<td>1944/45</td>
<td>229</td>
<td>613</td>
<td>37</td>
</tr>
<tr>
<td>1945/46</td>
<td>209</td>
<td>651</td>
<td>32</td>
</tr>
<tr>
<td>1946/47</td>
<td>193</td>
<td>621</td>
<td>31</td>
</tr>
<tr>
<td>1947/48</td>
<td>208</td>
<td>591</td>
<td>35</td>
</tr>
<tr>
<td>1948/49</td>
<td>278</td>
<td>791</td>
<td>35</td>
</tr>
<tr>
<td>1949/50</td>
<td>249</td>
<td>754</td>
<td>33</td>
</tr>
<tr>
<td>1950/51</td>
<td>262</td>
<td>802</td>
<td>33</td>
</tr>
<tr>
<td>1951/52</td>
<td>211</td>
<td>642</td>
<td>33</td>
</tr>
<tr>
<td>1952/53</td>
<td>247</td>
<td>796</td>
<td>31</td>
</tr>
<tr>
<td>1953/54</td>
<td>223</td>
<td>774</td>
<td>29</td>
</tr>
<tr>
<td>1954/55</td>
<td>244</td>
<td>798</td>
<td>31</td>
</tr>
<tr>
<td>1955/56</td>
<td>237</td>
<td>840</td>
<td>28</td>
</tr>
<tr>
<td>1956/57</td>
<td>264</td>
<td>893</td>
<td>30</td>
</tr>
<tr>
<td>1957/58</td>
<td>207</td>
<td>767</td>
<td>27</td>
</tr>
<tr>
<td>1958/59</td>
<td>255</td>
<td>905</td>
<td>28</td>
</tr>
<tr>
<td>1959/60</td>
<td>317</td>
<td>1,040</td>
<td>31</td>
</tr>
<tr>
<td>1960/61</td>
<td>432</td>
<td>1,171</td>
<td>37</td>
</tr>
<tr>
<td>1961/62</td>
<td>410</td>
<td>1,124</td>
<td>37</td>
</tr>
<tr>
<td>1962/63</td>
<td>422</td>
<td>1,154</td>
<td>37</td>
</tr>
<tr>
<td>1963/64</td>
<td>420</td>
<td>1,237</td>
<td>34</td>
</tr>
</tbody>
</table>

Adapted from Table 1, Cocoa Statistics, op. cit., pp. 6-9.
FIGURE II-2
GHANA PRODUCTION COMPARED TO WORLD 1900/01 — 1932/33

YEARS
THOUSAND LONG TONS
0 25 75 125 175 225 275 325 375 425 475 525 575 625

WORLD
GHANA

SOURCE: Table II-II
FIGURE II.2
GHANA'S PRODUCTION COMPARED TO WORLD 1933/34 - 1963/64

THOUSAND LONG TON

1200
1100
1000
900
800
700
600
500
400
300
200

1933 - 34
1938 - 39
1942
1947 - 48
1952
1957 - 58
1962 - 63

YEARS

WORLD

GHANA

SOURCE: Table II.11
The early nineteen thirties brought the Great Depression and by 1931 production had fallen to 212,000 long tons. However, Ghana maintained her previous position producing some thirty-eight percent to forty percent of total world cocoa output. Her production expanded during the next few years but the outbreak of the Second World War changed this trend. Output fluctuated mostly in accordance with the world level and Ghana's production declined to about thirty-six percent. Because of trade dislocation production fell to 193,000 long tons by 1946, the lowest level since the early nineteen twenties.

The end of the war led to new demands and new plantings were stimulated. Post-war recovery encouraged steady increases but because of the rise in the importance of other producing areas (chiefly Nigeria - her production almost doubled from 81,000 in 1957 to 140,000 long tons in 1958), Ghana's contribution to world output declined to thirty-one per cent. The post-war trend has been upward with three distinct phases; in the first five years production was below the prewar levels except for the two years, 1948 and 1950. The annual average during this period was 237,000 long tons as compared to 273,000 for the five year period 1935 to 1940. The next phase was

---

66 See Figure II.2.

67 Cocoa Statistics, op. cit.
the fifties during which production fluctuated; however, from a low of 211,000 in 1951 there was a rise during the succeeding years until 1956. By 1959 the effects of early post-war stimulants and the intensive spraying campaigns to combat cocoa diseases began to show results. This marked the beginning of the third phase.

During 1960, Ghana's production reached a high of 432,000 long tons. Her share of world output increased from thirty-seven percent.68 In the next year production dropped by over 20,000 long tons to 410,00069 -- the lowest since the beginning of the sixties but high relative to the production figures in the nineteen fifties. World production in 1963 was 2.7 percent higher than the previous year (production increased in almost all the major producing countries, except Brazil where severe weather conditions adversely affected output, and in Nigeria where floods reduced production by almost eight percent). Ghana, the world's largest supplier, produced four hundred and twenty-two thousand, only ten thousand short of her all-time record crop of 432,000 in 1960.70

68 See Table II.II.
69 Cocoa Statistics, op. cit.
Until five or six years ago the national yield remained on the average 250,000 long tons; the many successful scientific research and positive government actions have combined to raise yields -- so that the country's production more than doubled between 1957 and 1963.\textsuperscript{71} In spite of this large increase Ghana has not regained the position she had earlier in the century. She is still the world's largest single producer, but is currently producing some thirty-five percent.

\textbf{Responsiveness of Supply to Prices Received by Cocoa Producers in Ghana.}

Response of Production to Price.

It is sometimes said that producers are more likely to reduce rather than increase production when price rises.\textsuperscript{72} One response to a high price in Ghana is extension of production in outlying regions or the entry of new producers. The response is more an expansion of acreage than the increase of current production. This is partly because cocoa has long gestation periods.\textsuperscript{73}

\textsuperscript{71} Production 1957 - 207,000; production 1962 - 422,000, Cocoa Statistics, \textit{op. cit.}

\textsuperscript{72} This is exemplified by the backward bending supply curve which usually exists in under-developed countries.

\textsuperscript{73} About five to six years.
Another view is that the existence of a stabilization fund provides an incentive to produce. Large reserves lead to stability in incomes, therefore, an incentive is given to farmers. But producers may be unaware of such funds or even dubious of their effectiveness. Production is usually small-scale and "present effort is conditioned by immediately past experience and current prospects."\textsuperscript{75} Thus expectation of stable prices in the future does not have a great influence on production.

An Empirical Analysis.\textsuperscript{76}

There is no stable relationship between price received by producers and their output. In Figure III.2 there are three areas of concentration. The first one is between 1938 and 1946. Sometimes production decreased with a small rise in price as in 1938 and 1939. On the whole production is concentrated between 200,000 and 250,000 long tons and price is about £20 or below. At the end of the war production increased and price rose to over £25.

Price rose at the end of the Second World War; thus in 1947 producer price was twice as high as in the previous year, but production did not increase at such a fantastic rate.

\textsuperscript{75} P.T. Bauer, \textit{op. cit.}, p. 425.
\textsuperscript{76} See Figure III.2.
Figure III. 2 PRODUCTION RELATIVE TO
PRODUCER PRICE, 1938 - 1963

SOURCE:
Table I - II
Both price and production rose again in 1948 but at a proportionately smaller rate. The highest producer price level during the forties was attained in 1949.

The next period of concentration is during the fifties. The highest price was attained in 1952; price fluctuated within a narrow range of £130 to £149 for the six years, 1951 to 1958. Similarly production levels varied within a limited range of 200,000 to 225,000 long tons. The third area of concentration is from 1959 to 1963. Production increased from 317,000 to 420,000 but producer price remained stable. This is of particular relevance for the three years 1960 to 1962, during which time the policy of compulsory bond purchase by cocoa producers was introduced.

Different conclusions can be drawn from this analysis. There is a short-term (annual) variation in both production levels and producer price but there is no definite relationship between the two. In short, one cannot conclude that a rise in price in one year leads to an increase in production in the succeeding year.77

It is also difficult to discern a definite long-term

---
77 This is probably because cocoa takes six years to mature. An increase in price in one year may not stimulate more plantings in the succeeding year.
relationship between price and production. From 1947 to 1951 producer price almost tripled\textsuperscript{78} but production levels remained almost constant.\textsuperscript{79} The three areas of concentration show that prices in every decade are relatively stable but with little relationship to those of the previous decade. This is attributable to the operation of the Cocoa Marketing Board. They fix producer price and one year's price may be conditioned by that of the previous year. Production levels are also stable during each decade because of the length of time required for a cocoa plant to reach maturity. Since 1960 production levels have attained the highest since the beginning of the century (this is due to the various measures to combat the occurrence of swollen shoot and other diseases), but producer price has fallen because of the policies of the Marketing Board.

\textbf{Export Levels 1900-1963}\textsuperscript{80}

From a meagre two percent of total world cocoa exports in 1902 Ghana's position rose almost progressively to twenty percent in 1913. The First World War resulted in higher demand and in 1919 a record high of 176,000 long tons was exported. In the beginning of the next decade there was a fall

\textsuperscript{78} £51 and £130 respectively.
\textsuperscript{79} 208,000 and 211,000 long tons respectively.
\textsuperscript{80} See Table III.II and Figure IV.2.
TABLE III.

GHANA'S NET EXPORTS OF RAW COCOA RELATIVE TO WORLD
(Thousand Long Tons)
1900 - 1963

<table>
<thead>
<tr>
<th>Year</th>
<th>Ghana</th>
<th>World</th>
<th>Ghana's as % of world cocoa exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>1900</td>
<td>1</td>
<td>95</td>
<td>1</td>
</tr>
<tr>
<td>1901</td>
<td>1</td>
<td>107</td>
<td>.9</td>
</tr>
<tr>
<td>1902</td>
<td>2</td>
<td>119</td>
<td>2</td>
</tr>
<tr>
<td>1903</td>
<td>2</td>
<td>120</td>
<td>2</td>
</tr>
<tr>
<td>1904</td>
<td>5</td>
<td>152</td>
<td>3</td>
</tr>
<tr>
<td>1905</td>
<td>5</td>
<td>141</td>
<td>4</td>
</tr>
<tr>
<td>1906</td>
<td>9</td>
<td>144</td>
<td>6</td>
</tr>
<tr>
<td>1907</td>
<td>9</td>
<td>143</td>
<td>6</td>
</tr>
<tr>
<td>1908</td>
<td>13</td>
<td>187</td>
<td>7</td>
</tr>
<tr>
<td>1909</td>
<td>20</td>
<td>202</td>
<td>10</td>
</tr>
<tr>
<td>1910</td>
<td>23</td>
<td>214</td>
<td>11</td>
</tr>
<tr>
<td>1911</td>
<td>40</td>
<td>236</td>
<td>17</td>
</tr>
<tr>
<td>1912</td>
<td>39</td>
<td>234</td>
<td>17</td>
</tr>
<tr>
<td>1913</td>
<td>51</td>
<td>250</td>
<td>20</td>
</tr>
<tr>
<td>1914</td>
<td>53</td>
<td>276</td>
<td>19</td>
</tr>
<tr>
<td>1915</td>
<td>77</td>
<td>287</td>
<td>27</td>
</tr>
<tr>
<td>1916</td>
<td>72</td>
<td>290</td>
<td>25</td>
</tr>
<tr>
<td>1917</td>
<td>91</td>
<td>340</td>
<td>27</td>
</tr>
<tr>
<td>1918</td>
<td>66</td>
<td>265</td>
<td>25</td>
</tr>
<tr>
<td>1919</td>
<td>176</td>
<td>467</td>
<td>38</td>
</tr>
<tr>
<td>1920</td>
<td>125</td>
<td>366</td>
<td>34</td>
</tr>
<tr>
<td>1921</td>
<td>133</td>
<td>383</td>
<td>35</td>
</tr>
<tr>
<td>1922</td>
<td>159</td>
<td>401</td>
<td>40</td>
</tr>
<tr>
<td>1923</td>
<td>198</td>
<td>450</td>
<td>44</td>
</tr>
<tr>
<td>1924</td>
<td>223</td>
<td>498</td>
<td>45</td>
</tr>
<tr>
<td>1925</td>
<td>218</td>
<td>494</td>
<td>44</td>
</tr>
<tr>
<td>1926</td>
<td>231</td>
<td>472</td>
<td>49</td>
</tr>
<tr>
<td>1927</td>
<td>210</td>
<td>486</td>
<td>43</td>
</tr>
<tr>
<td>1928</td>
<td>225</td>
<td>513</td>
<td>44</td>
</tr>
<tr>
<td>1929</td>
<td>238</td>
<td>535</td>
<td>45</td>
</tr>
<tr>
<td>1930</td>
<td>191</td>
<td>471</td>
<td>40</td>
</tr>
<tr>
<td>1931</td>
<td>244</td>
<td>547</td>
<td>45</td>
</tr>
<tr>
<td>1932</td>
<td>234</td>
<td>565</td>
<td>41</td>
</tr>
<tr>
<td>1933</td>
<td>236</td>
<td>573</td>
<td>41</td>
</tr>
<tr>
<td>1934</td>
<td>230</td>
<td>596</td>
<td>39</td>
</tr>
<tr>
<td>1935</td>
<td>269</td>
<td>680</td>
<td>39</td>
</tr>
<tr>
<td>1936</td>
<td>311</td>
<td>712</td>
<td>44</td>
</tr>
<tr>
<td>1937</td>
<td>236</td>
<td>646</td>
<td>37</td>
</tr>
<tr>
<td>1938</td>
<td>263</td>
<td>723</td>
<td>36</td>
</tr>
<tr>
<td>1939</td>
<td>281</td>
<td>743</td>
<td>38</td>
</tr>
<tr>
<td>1940</td>
<td>224</td>
<td>604</td>
<td>37</td>
</tr>
<tr>
<td>1941</td>
<td>219</td>
<td>617</td>
<td>36</td>
</tr>
<tr>
<td>1942</td>
<td>124</td>
<td>390</td>
<td>32</td>
</tr>
<tr>
<td>1943</td>
<td>187</td>
<td>525</td>
<td>36</td>
</tr>
<tr>
<td>1944</td>
<td>202</td>
<td>528</td>
<td>38</td>
</tr>
<tr>
<td>1945</td>
<td>232</td>
<td>546</td>
<td>43</td>
</tr>
<tr>
<td>1946</td>
<td>236</td>
<td>630</td>
<td>38</td>
</tr>
<tr>
<td>1947</td>
<td>180</td>
<td>571</td>
<td>32</td>
</tr>
<tr>
<td>1948</td>
<td>214</td>
<td>582</td>
<td>37</td>
</tr>
<tr>
<td>1949</td>
<td>264</td>
<td>712</td>
<td>37</td>
</tr>
<tr>
<td>1950</td>
<td>267</td>
<td>731</td>
<td>37</td>
</tr>
<tr>
<td>1951</td>
<td>230</td>
<td>665</td>
<td>35</td>
</tr>
<tr>
<td>1952</td>
<td>212</td>
<td>610</td>
<td>35</td>
</tr>
<tr>
<td>1953</td>
<td>237</td>
<td>721</td>
<td>33</td>
</tr>
<tr>
<td>1954</td>
<td>214</td>
<td>683</td>
<td>31</td>
</tr>
<tr>
<td>1955</td>
<td>206</td>
<td>688</td>
<td>30</td>
</tr>
<tr>
<td>1956</td>
<td>234</td>
<td>751</td>
<td>31</td>
</tr>
<tr>
<td>1957</td>
<td>260</td>
<td>775</td>
<td>34</td>
</tr>
<tr>
<td>1958</td>
<td>197</td>
<td>629</td>
<td>31</td>
</tr>
<tr>
<td>1959</td>
<td>250</td>
<td>737</td>
<td>34</td>
</tr>
<tr>
<td>1960</td>
<td>303</td>
<td>882</td>
<td>34</td>
</tr>
<tr>
<td>1961</td>
<td>405</td>
<td>999</td>
<td>41</td>
</tr>
<tr>
<td>1962</td>
<td>421</td>
<td>1,020</td>
<td>41</td>
</tr>
<tr>
<td>1963</td>
<td>405</td>
<td>1,021</td>
<td>40</td>
</tr>
</tbody>
</table>

Source: Adapted from Table II, Cocoa Statistics, op. cit. pp. 10-12.
Figure IV.2: Ghana's net cocoa exports compared to total world cocoa exports 1900-1932

Source: Table III.2
FIGURE IV·2 GHANA'S NET COCOA EXPORTS COMPARED TO TOTAL WORLD COCOA EXPORTS 1933-1963

THOUSAND LONG TONS

1933 38 43 48 53 58 63

Years SOURCE: Table III, II
in cocoa exports mainly the result of a decline in production. From 1922 there was an increase in both the quantity of cocoa exported and in Ghana's relative position. Whereas total world exports fell in 1926, Ghana's cocoa exports rose to 231,000 supplying almost half (forty-nine percent) of the total world cocoa exports. This position was lost during the next four years.

Cocoa exports from Ghana fluctuated during the nineteen thirties but it is worthy to note that -- like most of the earlier and latter periods -- these changes are to a great extent in line with those of the world total. Export levels were maintained about 200,000 during the first three years of the Second World War but by 1942 the impact of various war restrictions began to be felt. In that year, Ghana's exports reached a trough of 124,000 some thirty-two per cent of the total world figure.

With the end of the War imminent, more cocoa flowed into the world market and by 1945, Ghana was contributing forty-three per cent of world export. This percentage is the highest attained in the current post war period. Fluctuations continued during the nineteen-fifties within a range of 200,000

---

81 See Figure IV.2.
and 260,000 long tons. Her percentage also varied annually although it never went below a minimum of thirty percent.

The rise in production in 1960 resulted in a corresponding rise in exports. Over 400,000 tons flowed into the world market; this level was attained during the succeeding years. By 1963 Ghana was supplying forty percent of the world cocoa export; it would be interesting to watch whether the 1926 percentage (forty-nine) will be obtained in the near future.

**Relationship of Cocoa Export to Production.**

Cocoa exports have generally maintained a close relationship to production levels. During the first ten years of the century all cocoa produced was exported. From 1912 production has sometimes exceeded exports resulting in the accumulation of stocks. Invariably periods of excess production have been followed by under-production so that stocks have tended to even out. One of the largest carryovers was in 1942, when out of the 207,000 long tons produced only 124,000 was exported. Stocks were also left over between 1954 and 1956 but these were dispensed with during the next few years when the export figure was greater than that of production. Between 1959 and 1961 production and exports increased but not in the same proportion. Stocks of over

---

82 See Figure V.2.
FIGURE V.2 GHANA'S NET EXPORTS OF COCOA RELATIVE TO NET PRODUCTION 1912—1962

SOURCE: Table II·II
Table III·II
sixty thousand were retained in 1959; this amount was doubled during the next year when accumulated stocks were over 120,000. Production fell by 22,000 from 1960 to 1961 but the accumulated stocks from the previous years compensated for this decline and as a result exports rose by 102,000 long tons. In 1961 both exports and production were almost at par; since then cocoa exports have almost coincided with production (like some years in the past, notably 1927 and 1950). This is encouraging especially when account is taken of the rapid rate in which Ghana's production has expanded.

Direction of Export.

The countries which accounted for the bulk of cocoa purchases during the first half of the century were Western Germany, United States, United Kingdom, and the Netherlands. In the nineteen-fifties Western Germany took an annual average of about twenty-five percent, United States twenty-one percent, United Kingdom sixteen and the Netherlands sixteen. The annual percentage bought by these countries during the second half of this decade (nineteen fifties) are closely related to these in the first half. Thus, in 1959, Western Germany bought twenty-five percent, United States twenty-three, United Kingdom twenty and the Netherlands thirteen percent. Other minor buyers included Italy, Australia, Sweden, Norway, Russia, 

83 Ghana Export Figures provided by U.S. Foreign Agriculture Department.
France and Ireland.

United States is still one of the largest buyers absorbing some twenty-four percent of cocoa exports from Ghana, in 1962 their purchases increased to thirty-two percent but since then the previous figure has been maintained. Western Germany and the Netherlands are also large buyers absorbing about eighteen and fifteen percent respectively. The United Kingdom has been reducing her purchases since the late nineteen fifties -- for instance, whereas in 1958 she bought 17.9 percent, in 1959 she absorbed 15.3 percent and by 1962 her percentage had declined to twelve. The demand in Soviet Union is comparatively small, about four percent, but it is likely that the rising standards of living together with the large and increasing population, will make it a potential market. Increasing prospects are prevalent in other centrally planned economies especially Poland and Czechoslovakia. Italy and Australia are also increasing their intake of cocoa.

Relationship of Purchases to Price.

The Food and Agricultural Organisation maintains

84 U.S. Foreign Agriculture Department, op. cit.
85 That is an average of twenty-four percent.
87 Ibid.
that prices have a greater influence on the demand for cocoa than income. The price elasticity for cocoa grindings reflects that of the final demand for chocolate and other products, and on the extent to which cocoa can be substituted by other ingredients -- such as nuts -- in chocolate.88 "This is of considerable importance because it affects the percentage of cocoa used per unit of final chocolate product."89 The level of consumption is also affected by advertising, dietary control and the reduction in the proportion of children in total population in some countries.90

An empirical analysis91 has been made but it does not support the view the demand is closely related to price. Since the analysis is confined to two major buyers of Ghana cocoa -- the United Kingdom and United States -- it is doubtful whether there is enough evidence to justify a generalization on the basis of their results.

United Kingdom.

For the first three years import increased with every fall in price. In 1952 price fell by £25 and purchases

---

89 Ibid.
90 In most developed countries, a large percentage of chocolate product is consumed by young people.
### TABLE IV.II

**PURCHASES RELATIVE TO SALES PRICE**

**1951/52 - 1960/61**

<table>
<thead>
<tr>
<th></th>
<th>United Kingdom</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>tons</td>
<td>£ per ton</td>
</tr>
<tr>
<td>1951/52</td>
<td>53,383</td>
<td>286</td>
</tr>
<tr>
<td>1952/53</td>
<td>63,081</td>
<td>261</td>
</tr>
<tr>
<td>1953/54</td>
<td>64,216</td>
<td>246</td>
</tr>
<tr>
<td>1954/55</td>
<td>63,015</td>
<td>374</td>
</tr>
<tr>
<td>1955/56</td>
<td>39,565</td>
<td>332</td>
</tr>
<tr>
<td>1956/57</td>
<td>46,289</td>
<td>229</td>
</tr>
<tr>
<td>1957/58</td>
<td>37,149</td>
<td>206</td>
</tr>
<tr>
<td>1958/59</td>
<td>39,379</td>
<td>317</td>
</tr>
<tr>
<td>1959/60</td>
<td>36,673</td>
<td>293</td>
</tr>
<tr>
<td>1960/61</td>
<td>53,333&lt;sup&gt;1&lt;/sup&gt;</td>
<td>234&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

---

2. Cocoa Statistics, p. 35.
3. Ibid.
Figure VI.2 PURCHASES (OR IMPORTS) RELATIVE TO SALES PRICE (U.K.) 1951/52-1960/61

Purchases nearest '000 tons

Source: Table IV-11
rose by 9,698 tons relative to those of the previous year. Similarly price declined by £26 during 1953 but imports increased by only 1,135 tons. Although there was a twenty-five percent decline in price in both periods the increase in purchases were not of the same percentage. Thus even though a fall in price may raise demand, the increase is arbitrary and bears no relationship to the percentage fall in price.

Both price and imports fluctuated during the succeeding years. The 1954 price was the highest during the period but purchases remained the same as in 1952 when price was thirty percent lower. Account should also be taken of 1957 and 1958; price rose by £111 but purchases increased by only a small amount. It can also be seen that a fall in price does not always induce increased cocoa imports. Price was lowest in 1957 but quantity purchased was also the lowest.

United States.

From 1951 to 1953 purchases declined with every fall in price. Between 1953 and 1954 price rose almost twice as high while imports increased by only a very small amount -- 3,906 million pounds. In 1956 price was lowest in the decade but purchases were even less than 1954, when sales price soared. However, in 1960 price was low and imports the highest in the period. Whether there was a causal relationship between this low price and high imports is difficult to determine.
FIGURE VII-2 PURCHASES (OR IMPORTS) RELATIVE TO SALES
PRICE, UNITED STATES, 1951/52 — 1960/61

SOURCE: TABLE IV 11
Thus the short run reaction of both the United States and the United Kingdom to changes in the selling price of cocoa is purely arbitrary. A fall in price does not always increase demand; a rise in price may not reduce demand.

The record high of import price in both the United Kingdom and the United States in 1954 was due to the bumper cocoa price operating in the world market.
CHAPTER III

THE COCOA ECONOMY OF GHANA

Introduction.

The earnings from cocoa is the main driving force in Ghana's economy, both directly through projects in local areas and indirectly through central government expenditure.\(^1\) The crop plays a very dominant role in the economy accounting for 94.7 percent of total agricultural exports and 61.2 percent of the total value of all exports.\(^2\)

Food Prices.

These are closely related to the price paid to producers of cocoa. On the whole, economic prosperity or depression is geared to whether cocoa prices are high or low. "Indeed...in many parts of the country cocoa price is used as a yardstick -- other prices being adjusted immediately following the announcement of the price to be paid by the Cocoa Marketing Board."\(^3\) Also the majority of farmers grow most of their own food: when cocoa prices are favourable they reduce the acreage of their land in food production -- thus increasing the size of cocoa farms -- and instead buy food with

\(^2\) This was in 1962. U.S. Department of Agriculture Statistics on Ghana exports.
\(^3\) Thomas J. Poleman, op. cit., p. 123.
cash. This helps to extend the cash economy but the resulting demand for food is sometimes so high as to impose a strain on supply; as a result Ghana imports much more food in relation to population than the rest of West Africa. 4

Loans.

Farmers. During the early operation period of the Cocoa Marketing Board, a subsidiary local company known as the Cocoa Purchasing Company was responsible for the granting of loans to farmers. But credits were grossly mismanaged, records were incomplete and loans were not supported by written agreements; repayment of interest was in arrears and most of the farmers were unaware of the extent of their indebtedness because they were not given any statement of accounts. As a result, some new companies were formed during the nineteen fifties through which loans were channelled.

The co-operatives also served as better media because, being comprised of the farmers themselves, it was easier to ensure the repayment of loans. In 1960 a total of £G1,498,096 were made to farmers through various co-operatives. 5 Similarly

4 U.S. Department of Agriculture, Notes on the Agricultural Economies of the Countries in Africa, II, F.A.S. M - 64 (September 1959), p. 31. With a population of 7.5 M. Ghana's food imports is fourteen percent of total imports -- on the other hand, Nigeria, with over 34½ M. is almost self sufficient in food.

5 See Table I.III.
TABLE I.III

COCOA MARKETING BOARD: LOANS AND GRANTS

A. RURAL DEVELOPMENT GRANTS 1957-1958. £G

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cocoa Growing Areas</td>
<td>349,407</td>
</tr>
<tr>
<td>Non Cocoa Growing Areas</td>
<td>116,469</td>
</tr>
<tr>
<td>Roads</td>
<td>73,000</td>
</tr>
<tr>
<td>Technical Improvement</td>
<td>234,124</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>773,010</strong></td>
</tr>
</tbody>
</table>

B. LOANS TO GOVERNMENT FOR DEVELOPMENT £G

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1951</td>
<td>1,567,857</td>
</tr>
<tr>
<td>1952</td>
<td>2,198,105</td>
</tr>
<tr>
<td>1953</td>
<td>5,552,285</td>
</tr>
<tr>
<td>1954</td>
<td>9,286,484</td>
</tr>
<tr>
<td>1955</td>
<td>11,293,005</td>
</tr>
<tr>
<td>1956</td>
<td>16,820,612</td>
</tr>
<tr>
<td>1957</td>
<td>16,535,594</td>
</tr>
<tr>
<td>1958</td>
<td>15,730,007</td>
</tr>
<tr>
<td>1959</td>
<td>26,503,224</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>105,497,174</strong></td>
</tr>
</tbody>
</table>

C. OTHER TYPES OF LOANS 1960/61 £G

<table>
<thead>
<tr>
<th>Organization</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ghana Farmers' Marketing Co-operatives</td>
<td>388,067</td>
</tr>
<tr>
<td>Agricultural Producers' Co-operatives</td>
<td>158,848</td>
</tr>
<tr>
<td>Ghana Co-operatives Marketing Association</td>
<td>111,181</td>
</tr>
<tr>
<td>Ghana Education Trust</td>
<td>840,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,498,096</strong></td>
</tr>
</tbody>
</table>

Note: Figures from Annual Reports of the Marketing Board
in 1961 loans to the value of £G270,027 were made to farmers through the Agricultural Producers' Co-operatives and Co-operatives Marketing Association.6

Government. Annual loans are made to the Central Government for various developmental projects. It can be seen from Table I.III that these have increased considerably since 1951. This clearly demonstrates the strong financial contribution that cocoa is making to the development of Ghana.

The big increase in 1959 as compared to the previous year is entirely attributable to the provision of the Second Development Plan.7 In order to facilitate the financing of this plan, an act was passed empowering the government to borrow up to a total of £G25 million from the Board. By January 1961 over £G16 million of this amount had been paid to the government.8

Rural Development Grants.

Apart from the annual payments made to the central Government, grants were also given for the development of rural areas.

In the past, these funds were allocated for local development in both cocoa-growing and non-cocoa-growing areas but with the former having a relatively higher proportion. Under the supervision of the Ministries of Health and Social Welfare, new health centres and other forms of community development (roads, bridges, post offices and village halls) were financed. In 1960 grants totalling about £G3,000,000 were contributed towards local development projects. These grants were forwarded through the Regional Committees, and used for projects of direct benefit to cocoa farmers.

Recently a Farmers' Hall has been completed in Accra at the expense of the Board. More funds are now being used in many parts of the country. In 1963 over £G500,000 was granted to the new hospital built in memory of, and named after the man who introduced cocoa into Ghana -- Tetteh Quarshie. Apart from this £G800,000 is being spent on the construction of health centres all over the country.

**Education.**

Scholarships were provided especially for children of cocoa farmers not only for entry into local secondary schools

---

10 Different areas had different committees.
but also for education in overseas universities. By 1958
the number of these scholarships was on the increase. Apart
from the £2.5 million set aside for the provision of secondary
school buildings, some two hundred and eighty scholarships
were awarded in the cocoa-growing areas as compared to one
hundred and eighty in the non-cocoa-growing areas. At the
same time more students were financed in the pursuance of
agricultural courses in Western Germany, United Kingdom,
Canada, and United States, to help reduce the dependence on
foreign experts for technical knowledge. An annual grant
ranging between £G70,000 and £G80,000 was paid towards the
endowment fund of the Agricultural Department of the University
College of Ghana.

Since 1959 over three thousand scholarships -- of
various types -- have been awarded directly by the Board and
some eight hundred through the Ghana Educational Trust.
Throughout the years the Board has invested over £G7,000,000
from the proceeds of cocoa in the capital fund which provides
the finance for the scholarship schemes. Apart from the annual
scholarships to young people and endowment to the Faculty of

13 Now the University of Ghana.
14 Africa Digest, February 1961, op. cit.
Agriculture of the University of Ghana, the Board also paid the sum of £G2.5 million to the Ghana Educational trust for the building of secondary schools in the country.\textsuperscript{15} About forty-three such schools are now in operation. They are mainly confined to the rural towns to encourage children to continue their education in their native areas.

**Investment and Capital Formation.**

An increase in the earnings of cocoa farmers can stimulate investment in two main ways: the farmers directly invest in small processing enterprises which provide employment opportunities for more people; an increase in cocoa productivity leads to a rise in the capacity to earn and to save, thus providing more funds that could be diverted into investment.\textsuperscript{16}

Ghanaians are extremely conscious of the important role that cocoa occupies in their economy. "The money to finance all the revolutionary advances that have been made in the modernization of Ghana has come almost exclusively from agriculture. Within agriculture, the cocoa farmers have been the real heroes of this achievement. Of the total revenue of £G700,000,000 earned from the export of cocoa in the period

\textsuperscript{15} Cocoa Marketing Board at Work, op. cit. p. 163.

\textsuperscript{16} Ghana Seven Year Development Plan 1963-64 -- 1969-70, op. cit., p. 50.
1951 to 1961, the cocoa farmers have received £G420,000,000 while the remaining £G280,000,000 has gone to maintain the public services, to finance development, and to build up the external reserves of Ghana.  

Proceeds from cocoa and government expenditure are the principal factors determining the level of income and of investment. A large proportion of government revenue is obtained from cocoa. As the most important export commodity cocoa provides the major source of foreign exchange needed to purchase capital equipment from abroad. More than ninety-four percent\(^{18}\) of total development funds accrue either directly\(^{19}\) or indirectly\(^{20}\) from cocoa earnings. Thus both the volume of investment and the success of development programmes depend on conditions in the world market for cocoa. "The small scale cocoa farmer with his hoe and cutlass has virtually created Ghana as she is today."\(^{21}\)

**Employment.**

Cocoa farming accounts for a large percentage of

---

\(^{17}\) Ibid., p. 53.


\(^{19}\) Local development grants.

\(^{20}\) Export duties.

\(^{21}\) *Seven Year Development Plan*, op. cit., p. 54.
total employment. Out of a population of seven and a half million, "over one million people are engaged directly or indirectly in cocoa production, three hundred thousand of whom are actual farmers."\textsuperscript{22} The rapid growth of the urban population is also due to the prosperity of the cocoa industry.\textsuperscript{23}

**Cocoa Duties.**

Taxes are important in Ghana; since cocoa is exported through the Marketing Board, administration of the tax is very simple and it yields large sums of revenue.\textsuperscript{24} The export duty on cocoa has been highly productive of revenue.\textsuperscript{25} For instance in 1960 to 1961 out of a total revenue from cocoa sales of £G76,331,965 some £G15,482,806 was paid to the Government for export and local duty.\textsuperscript{26} The export duty is a rather complicated one which varies with the prices of cocoa; the sum of £G100 a ton is deducted from the price and the government takes as duty one half of the excess above this\textsuperscript{27} up to a price of £G260. Any excess over £G260 is entirely

\textsuperscript{22} Africa Digest, February 1963, op. cit., p. 144.
\textsuperscript{23} Seven Year Development Plan, op. cit. p. 54.
\textsuperscript{24} John Due, Taxation and Economic Development in Tropical Africa (Cambridge, Mass.: 1963), pp. 97-98.
\textsuperscript{25} Ibid.
\textsuperscript{26} That is about 1/5 of receipts. Marketing Board Report, 1960/61, op. cit. p. 15.
\textsuperscript{27} That is £G100.
taken over by the government. The effect of this tax is to reduce the net income of cocoa producers thus they are in a sense a form of income tax.\textsuperscript{28} This duty has several advantages: in years when the world price of cocoa is high the government can obtain large amounts of tax revenue to finance economic development, and "at the same time cushion the economy from the inflationary effects of the sharp rise in incomes of the producers, not accompanied by an increase in domestic output of consumption goods."\textsuperscript{29} Since the levy is based on gross price "it is argued that they have less effect in restricting production than would income taxes imposed upon the net earnings\textsuperscript{30} of producers.

This form of tax has been objected to on various grounds; because they are directly related to output and apply to both small and large producers, they retard economic growth by reducing the output of the crop.\textsuperscript{31} The tax is also regarded as inequitable since it affects the small marginal farmer between subsistence and market farming, in the same

\textsuperscript{28} John Due, op. cit. p. 161.
\textsuperscript{29} Ibid.
\textsuperscript{30} Ibid.
\textsuperscript{31} Through lowering the incentive to produce. See P.T. Bauer and B.S. Yamey, The Economics of Underdeveloped Countries, (Chicago 1957), p. 198.
proportion as the large scale producer. Besides revenue from this duty is highly unstable and may have a serious effect on the success of development projects.\textsuperscript{32}

However, the share of cocoa duties in total revenue has been declining during the past few years. Whereas in 1958 to 1959 cocoa duties yielded £25.1 million, or over 37.5 percent of total revenues, in 1962 to 1963 its contribution declined to £12.5 million or about 14.8 percent of total revenue.\textsuperscript{33} This fifty percent fall could be partly attributed to the new moves which are being taken by the government to increase import duties as a source of revenue.\textsuperscript{34}

Conclusion.

It can be seen from the above that there is no exaggeration in the statement that cocoa is the mainstay of the economy of Ghana. In concluding, it is worth reviewing some of the diverse roles that this single crop performs: as the largest export commodity cocoa is the most important source of foreign exchange; some twenty to twenty-five percent of males in working age\textsuperscript{35} are engaged in various forms of

\textsuperscript{32} John Due, \textit{op. cit.}


\textsuperscript{34} The contribution of import duties more than doubled from £16.1M in 1958/59 to £33.7M in 1962/63 and now provides forty percent of total revenue. This is due to the decision of the government to restrict imports.

\textsuperscript{35} 15 to 60 years.
cocoa production -- they grow the crop with such an enthusiasm that it is difficult to interest them in other crops; the revenue derived from cocoa exports is contributing to various undertakings such as harbours, hospitals, universities and first class roads; it is also one of the most important domestic sources for the finance of development plans. Thus the rate of Ghana's economic development is closely tied to the rate of cocoa production and on the extent to which other countries can absorb cocoa products. But a heavy dependence on a single crop is a weakness especially when exports of the crop constitute a great bulk of total output as is the case with Ghana. This defect has given rise to various problems most of which will be considered in the next chapter.
Introduction.

It is generally maintained that the prices of primary agricultural commodities are more susceptible to variations than those of industrial products. This is because "they are subjected to irregularities in export supply and import demand arising out of crop fluctuations, and oscillations in demand arising out of changing expectations...."¹ Supply is affected by climatic factors and fluctuates irrespective of demand. The individual farmer plans on the basis of price in the past and therefore takes no account of current changes in demand. Thus a fall in a farmers' receipts may induce him to increase acreage in order to obtain the previous level of income. Even though he can control acreage he cannot influence the yield per acre.² At the same time, income is low because of internal problems like fragmentation of holdings, disease, the policies of the Marketing Board and excess stocks of cocoa in the world market. The latter problem results in low and fluctuating world price. Since the whole economy revolves around the commodity, changes in the world price leads to disruption in the balance of payments. This is further aggravated by the barriers imposed by importing countries on the inflow of cocoa.

¹ International Monetary Fund, Fund Policies and Procedures in Relation to the Compensatory Financing of Commodity Fluctuations, (Fund Staff Papers, November 1960), p. 12.
² This is largely affected by climatic changes.
International Aspects.

Fluctuations in Export Earnings: In recent years the world cocoa market has experienced large price fluctuations resulting from variations in the volume of production. Because of the nature of the market and the crop, excessive output leads to surpluses and price falls. This is followed by production cuts, a world shortage and a rise in prices. As a result there is a continuous imbalance between production and consumption.

In the short run supply is inelastic mainly because the long gestation periods preclude the farmer from adjusting tree plantings to short run changes in demand. A fall in price in one year does not lead to a reduction in supply in the following year, but only in a subsequent period when a glut in the market may prevail. This accentuates the fall in price. On the other hand, total world supply is price elastic in the long run so that a rise in price stimulates more plantings; but because of the long gestation periods, the new plantings do not come into bearing until after six years, during when market conditions might have changed. "At the same time it is difficult to anticipate future output from plantings which are not always reported in official statistics." Thus the producer


is subjected to a high degree of uncertainty as regards the physical volume of production.\(^5\)

The import demand for cocoa is price inelastic, that is a fall in price does not lead in an increase in consumption. Any increase in world supply would result in a more than proportionate fall in world prices and in a reduction of total export receipts of producing countries.\(^6\) For example between 1953 to 1955, a period of high prices, and 1959 to 1961, a period of low prices, the volume of cocoa exports from developing countries increased by twenty-seven percent, while the earnings derived from these exports declined by twelve percent.\(^7\) Cocoa had a relatively high income elasticity of demand in consuming countries in the past but it appears that demand has almost reached saturation point in some of these countries. The low price inelasticity of import demand and high long-term elasticity of supply\(^8\) in response to rising prices results in fluctuations in the incomes earned from cocoa exports relative to those earned from other sectors of the economy. This results in instability in the external purchasing power and in domestic expenditure especially investment.\(^9\)

\(^7\) *Ibid.*
\(^8\) Refers to world supply.
\(^9\) I.M.F. Staff Papers, *op. cit.*
Barriers to Trade: At the moment confectionary manufacturers in importing countries are demonstrating a resistance to high cocoa prices by a widespread resort to substitutes. Allied to this is the fact that cocoa imports into developed countries are restricted by import duties. This is particularly applicable to the developed centrally planned economies. The average consumption of cocoa products in Russia and Eastern Europe combined is three hundred grams per person as compared to two thousand grams per head in North Western Europe; the main reason for this is the high tariffs and internal taxes which lead to high internal prices. In Western Europe fiscal charges are levied at retail levels ranging from one to forty percent of retail price. The elimination of all duties and taxes in this area might increase consumption by about five thousand tons a year. According to estimates made by the Food and Agricultural Organisation, if all trade restrictions on cocoa operating in 1960 were abolished by 1970, the total world import will rise by approximately 4.5 percent.

Trade barriers also exist between developing countries themselves; because of balance of payments difficulties, many of

11 Ibid., pp. 1-48.
these countries pursue policies of import substitution; besides most of them lie in the same geographical region, produce virtually the same products and can therefore not engage in large-scale trading contracts with each other. For instance, Nigeria which could have been a large potential market for Ghana cocoa is also a major producer. In fact Ghana conducts only two to three percent of export trade with other African countries; the bulk of this is orientated towards other West African countries like Nigeria and Ivory Coast which are large-scale cocoa producers. Similarly, other underdeveloped countries in the West Indies and Latin America do not import cocoa products because they are producers themselves — although to a small extent. Apart from this competition with each other, import into low-income countries is also restricted by cultural factors. Chocolate and other products from cocoa are considered luxuries and do not fall into the consumption pattern of people in poor countries.

Excessive Supply: One of the biggest threats facing all cocoa producers is overproduction. With the gradual perfection of production methods, better control of diseases and pests, extension of planted areas and the maturation of


13 Cocoa consumption develops only after per capita income is above £50 or $150.
<table>
<thead>
<tr>
<th>Year</th>
<th>World</th>
<th>Cameroun Republic</th>
<th>Ghana</th>
<th>Guinea</th>
<th>Ivory Coast</th>
<th>Nigeria</th>
<th>Brazil</th>
<th>Ecuador</th>
<th>Dominican Republic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1945/46</td>
<td>651</td>
<td>34</td>
<td>209</td>
<td>17</td>
<td>28</td>
<td>103</td>
<td>138</td>
<td>17</td>
<td>25</td>
</tr>
<tr>
<td>1946/47</td>
<td>621</td>
<td>34</td>
<td>193</td>
<td>13</td>
<td>35</td>
<td>111</td>
<td>103</td>
<td>16</td>
<td>31</td>
</tr>
<tr>
<td>1947/48</td>
<td>591</td>
<td>44</td>
<td>208</td>
<td>16</td>
<td>30</td>
<td>75</td>
<td>83</td>
<td>16</td>
<td>28</td>
</tr>
<tr>
<td>1948/49</td>
<td>781</td>
<td>45</td>
<td>278</td>
<td>13</td>
<td>47</td>
<td>109</td>
<td>143</td>
<td>20</td>
<td>26</td>
</tr>
<tr>
<td>1949/50</td>
<td>754</td>
<td>41</td>
<td>248</td>
<td>17</td>
<td>52</td>
<td>99</td>
<td>147</td>
<td>21</td>
<td>32</td>
</tr>
<tr>
<td>1950/51</td>
<td>802</td>
<td>47</td>
<td>262</td>
<td>14</td>
<td>56</td>
<td>110</td>
<td>153</td>
<td>32</td>
<td>31</td>
</tr>
<tr>
<td>1951/52</td>
<td>642</td>
<td>54</td>
<td>211</td>
<td>15</td>
<td>44</td>
<td>108</td>
<td>55</td>
<td>24</td>
<td>31</td>
</tr>
<tr>
<td>1952/53</td>
<td>796</td>
<td>53</td>
<td>247</td>
<td>16</td>
<td>60</td>
<td>109</td>
<td>140</td>
<td>29</td>
<td>36</td>
</tr>
<tr>
<td>1953/54</td>
<td>774</td>
<td>53</td>
<td>223</td>
<td>17</td>
<td>52</td>
<td>97</td>
<td>163</td>
<td>26</td>
<td>32</td>
</tr>
<tr>
<td>1954/55</td>
<td>798</td>
<td>55</td>
<td>244</td>
<td>21</td>
<td>65</td>
<td>89</td>
<td>139</td>
<td>33</td>
<td>34</td>
</tr>
<tr>
<td>1955/56</td>
<td>840</td>
<td>53</td>
<td>237</td>
<td>19</td>
<td>70</td>
<td>114</td>
<td>168</td>
<td>32</td>
<td>28</td>
</tr>
<tr>
<td>1956/57</td>
<td>893</td>
<td>59</td>
<td>264</td>
<td>23</td>
<td>71</td>
<td>134</td>
<td>158</td>
<td>32</td>
<td>35</td>
</tr>
<tr>
<td>1957/58</td>
<td>767</td>
<td>64</td>
<td>207</td>
<td>21</td>
<td>45</td>
<td>81</td>
<td>160</td>
<td>31</td>
<td>35</td>
</tr>
<tr>
<td>1958/59</td>
<td>905</td>
<td>59</td>
<td>255</td>
<td>22</td>
<td>55</td>
<td>140</td>
<td>171</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td>1959/60</td>
<td>1,040</td>
<td>63</td>
<td>317</td>
<td>27</td>
<td>61</td>
<td>155</td>
<td>196</td>
<td>34</td>
<td>42</td>
</tr>
<tr>
<td>1960/61</td>
<td>1,171</td>
<td>70</td>
<td>432</td>
<td>25</td>
<td>95</td>
<td>195</td>
<td>120</td>
<td>41</td>
<td>37</td>
</tr>
<tr>
<td>1961/62</td>
<td>1,124</td>
<td>75</td>
<td>410</td>
<td>26</td>
<td>83</td>
<td>191</td>
<td>114</td>
<td>37</td>
<td>35</td>
</tr>
<tr>
<td>1962/63</td>
<td>1,154</td>
<td>76</td>
<td>422</td>
<td>31</td>
<td>101</td>
<td>176</td>
<td>109</td>
<td>37</td>
<td>40</td>
</tr>
<tr>
<td>1963/64</td>
<td>1,237</td>
<td>88</td>
<td>420</td>
<td>33</td>
<td>97</td>
<td>220</td>
<td>127</td>
<td>38</td>
<td>45</td>
</tr>
</tbody>
</table>

1 Adapted from Table I, Cocoa Statistics, op. cit., p. 9.
earlier plantings, world production has increased substantially. ¹⁴ From 651,000 long tons in 1945 to 1946 world production has increased progressively and in 1963 stood at over 1,237,000 long tons. ¹⁵ It is worth noting that this increase can be entirely attributed to Ghana and Nigeria. Whereas in 1945 to 1946 these two countries produced 209,000 and 103,000 long tons respectively, in 1963 to 1964 their production had almost doubled to 420,000 tons (for Ghana) and 220,000 (for Nigeria). ¹⁶ Brazil, which in 1945 to 1946 was the second largest producer contributing 138,000 long tons, has maintained a rather stable production level. ¹⁷ The production of Ivory Coast ¹⁸ has been fluctuating, but the 1963 to 1964 output of 97,000 long tons has more than tripled the 1945 to 1946 production level of 28,000 long tons.

World production has increased ten to fifteen percent outstripping the increase in consumption. Prices of cocoa in the world market have declined and stocks are accumulating. ¹⁹

---

¹⁵ See Table I.IV.
¹⁷ Brazil's production in 1963/64 was 127,000.
¹⁸ The fourth largest producer.
¹⁹ See Figures I.4, II.4 and III.4.
FIGURE 1.4  STOCKS IN CONSUMING COUNTRIES
1946 — 1963

THOUSAND LONG TONS

YEARS

1946  '47  '48  '49  '50  '51  '52  '53  '54  '55  '56  '57  '58  '59  '60  '61  '62  '63
FIGURE II·4

COCOA STOCKS AS PERCENTAGE OF
GRINDINGS 1946—1963
<table>
<thead>
<tr>
<th>Year</th>
<th>World Production</th>
<th>World Grindings</th>
<th>Cumulative Surplus/Deficit</th>
<th>World Stocks</th>
<th>Stocks as % of grindings</th>
<th>World Price as % of cents per lb.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1945/46</td>
<td>651</td>
<td>666</td>
<td>-22</td>
<td>221</td>
<td>33.2</td>
<td>10</td>
</tr>
<tr>
<td>1946/47</td>
<td>621</td>
<td>648</td>
<td>-55</td>
<td>190</td>
<td>29.4</td>
<td>25</td>
</tr>
<tr>
<td>1947/48</td>
<td>591</td>
<td>612</td>
<td>-82</td>
<td>189</td>
<td>30.9</td>
<td>35</td>
</tr>
<tr>
<td>1948/49</td>
<td>781</td>
<td>708</td>
<td>-17</td>
<td>210</td>
<td>29.7</td>
<td>20</td>
</tr>
<tr>
<td>1949/50</td>
<td>754</td>
<td>782</td>
<td>-53</td>
<td>228</td>
<td>29.1</td>
<td>25</td>
</tr>
<tr>
<td>1950/51</td>
<td>802</td>
<td>750</td>
<td>-9</td>
<td>215</td>
<td>28.6</td>
<td>32</td>
</tr>
<tr>
<td>1951/52</td>
<td>642</td>
<td>719</td>
<td>-92</td>
<td>192</td>
<td>26.7</td>
<td>31</td>
</tr>
<tr>
<td>1952/53</td>
<td>796</td>
<td>798</td>
<td>-102</td>
<td>192</td>
<td>24.0</td>
<td>30</td>
</tr>
<tr>
<td>1953/54</td>
<td>774</td>
<td>730</td>
<td>-66</td>
<td>235</td>
<td>32.2</td>
<td>49</td>
</tr>
<tr>
<td>1954/55</td>
<td>798</td>
<td>720</td>
<td>4</td>
<td>282</td>
<td>39.2</td>
<td>37</td>
</tr>
<tr>
<td>1955/56</td>
<td>840</td>
<td>821</td>
<td>15</td>
<td>282</td>
<td>34.3</td>
<td>26</td>
</tr>
<tr>
<td>1956/57</td>
<td>893</td>
<td>909</td>
<td>-10</td>
<td>273</td>
<td>30.0</td>
<td>26</td>
</tr>
<tr>
<td>1957/58</td>
<td>767</td>
<td>839</td>
<td>-90</td>
<td>213</td>
<td>25.4</td>
<td>39</td>
</tr>
<tr>
<td>1958/59</td>
<td>905</td>
<td>860</td>
<td>-54</td>
<td>235</td>
<td>27.4</td>
<td>34</td>
</tr>
<tr>
<td>1959/60</td>
<td>1,040</td>
<td>920</td>
<td>56</td>
<td>324</td>
<td>35.2</td>
<td>26</td>
</tr>
<tr>
<td>1960/61</td>
<td>1,171</td>
<td>1,017</td>
<td>198</td>
<td>425</td>
<td>41.7</td>
<td>21</td>
</tr>
<tr>
<td>1961/62</td>
<td>1,124</td>
<td>1,089</td>
<td>222</td>
<td>494</td>
<td>45.4</td>
<td>21</td>
</tr>
<tr>
<td>1962/63</td>
<td>1,154</td>
<td>1,138</td>
<td>226</td>
<td>519</td>
<td>45.6</td>
<td>21</td>
</tr>
<tr>
<td>1963/64</td>
<td>1,237</td>
<td>1,211</td>
<td>240</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Adjusted from Table 5, Cocoa Statistics, *op. cit.*, p. 15.
FIGURE III.4 WORLD PRICE OF COCOA
1946 - 1963

CENTS PER LB.

YEARS
In 1963 to 1964, the estimated stocks in consuming countries was 518,500 long tons which is more than twice as much as in the immediate post war years.\textsuperscript{20} Earlier in the year,\textsuperscript{21} leading cocoa manufacturing buyers in Britain reported that they have enough stocks to last six months.\textsuperscript{22} Producing countries are now aware that if a stop is not put to the constant accumulation of stock, continued low prices threaten their economies.

**National Aspects.**

Disease: The yield from trees is still reduced by the incidence of disease. Destruction and damage is caused by swollen shoot, which is more serious in Ghana than elsewhere; there are also capsid bugs throughout the cocoa growing areas which affect the ability of the trees to produce good quality fruit. "Unless remedy is found in time for the swollen shoot menace, the cocoa industry in Ghana runs the risk of utter destruction."\textsuperscript{23}

Fragmented Holdings: The acreage of individual farms are very small: farming techniques are poor and confined to traditional methods; this leads to low productivity per acre.\textsuperscript{24}

\textsuperscript{20} Total stocks in 1945/46 was 221,300 long tons, see Table II. IV.
\textsuperscript{21} 1965.
\textsuperscript{22} Africa Digest, April 1965, Vol. XII, No. 5, pp. 139-140.
\textsuperscript{23} Marketing Board at Work, \textit{op. cit.}, p. 48.
\textsuperscript{24} Ghana Government, Seven Year Plan, \textit{op. cit.}. 
Threat of Excess Supplies: The continued growth in production due to increases in total acreage devoted to cocoa farming, may be partly responsible for the decline in prices in recent years. "As a result of price falls, the 1960 export of a third of a million tons, was valued at over four percent less than that of the 1959 export of only a quarter of a million tons." An attempt was made to destroy large stocks of cocoa in Ghana earlier in the year, but a more stringent measure of control over continued cocoa planting is imperative if the present accumulation of stocks in consuming countries is to be reduced.

However, attempts to curtail the production of cocoa may not be very successful in the short run because of the immobility among cocoa farmers into other occupations. The tendency to overspecialize in cocoa, makes it impossible for them to get adapted to alternative lines of production.

Inadequate Transport Facilities: After the crop is harvested the farmer has to convey the beans to the buying agents in the towns and villages. Although all towns in the cocoa growing areas are connected by road, the farms are generally far away and farmers cannot easily get to the buying areas. Sometimes transportation from the remote villages to

the railway stations or to the big towns is so slow that the beans start to decay.

**Fluctuations in Balance of Payments:** Ghana's exclusive dependence on cocoa for sixty percent of her export earnings makes her susceptible to fluctuations in the world price of cocoa. Although the quantity of exports have increased, Ghana's revenue has been declining because the price of cocoa has fallen by forty-two percent over the past five years. This instability in her balance of payments is one of the main factors inhibiting Ghana's economic development. The external balance of the economy -- which determines the international strength of her currency -- is so narrowly based on cocoa, that any fall in cocoa prices puts a strain on the whole economy. For the past seven years, fluctuations in cocoa prices, coupled with Ghana's expansionist policy has resulted in a decline in her foreign reserves. In 1956 as one of the most prosperous West African countries, Ghana's reserves were £G200 million, now they are only £25 million.

In the current period, Ghana is suffering from a continuing budget deficit and foreign exchange shortage. This is accentuated by the fact that cocoa has not been bringing

---

26 Africa Digest, December 1963, *op. cit.*

27 Africa Digest, February 1965, *op. cit.*
any foreign exchange. The reason for this is that no sales have been made since last October in compliance with a decision of the Cocoa Production Alliance.28

Restriction of Government Expenditure: Taxable capacity is low in the country because of the low level of economic activity. Therefore other sources of government revenues -- chief of which is cocoa -- have to provide most of the public services. The market behavior of cocoa determines the capacity of the government to finance development programmes.29 The inability to predict the level of cocoa earnings, precludes the government from a sound execution of development plans.

Limitations on Imports: Because of the growing standard of living there has been an increase in the demand for manufactured goods; since they cannot be supplied by the domestic economy, resort has to be made to other countries. Reductions in export earnings make it impossible to pay for the purchases of goods and services from abroad. Fluctuations in cocoa earnings necessitate adjustments in imports, in order to balance

---

28 Consists of Ghana, Nigeria, Brazil, The Ivory Coast, Cameroons, Togo. Members decided to sell no cocoa until the world price goes up to a minimum of £190 a ton. Africa Digest, April 1965, op. cit.

29 Ghana Seven Year Plan, op. cit.
the international account. Ghana's present unfavourable external position has resulted in stringent policies especially of consumer imports. Already massive shortages in the economy are tending to reduce the standard of living.\textsuperscript{30}

**Adverse Effects of Board's Stabilization Policy:**
The use of a policy of stabilization may not always have the best results in the whole economy. Sometimes stabilization of prices may destabilize incomes, or stabilization of incomes may decrease per capita incomes. Thus it is maintained that price fluctuations due to changes in supply may serve to stabilize producer incomes and any attempt to stabilize prices in such conditions is to remove the compensatory factor and to destabilize incomes.\textsuperscript{31}

Bauer gives three criteria for a stabilization policy; firstly, it should operate for a definite period in order to prevent the unending accumulation of reserves; secondly, the concept must be distinguished from other aims of public policy such as compulsory saving and the raising of revenue; thirdly, it should not neglect the role of prices in directing resources into production in accordance with changes in supply and demand.\textsuperscript{32}

\textsuperscript{30} Africa Digest, February 1965, \textit{op. cit.}

\textsuperscript{31} P.T. Bauer, \textit{op. cit.}, p. 272.

\textsuperscript{32} Ibid.
The Cocoa Marketing Board adhered to some of these criteria during the early stages of its operation but the need to provide more funds for the country's development has reduced the extent of success of its stabilization policy.

Destabilization of Producers' Incomes: The desire to accumulate surpluses results in income destabilization. It is possible that the payment of world prices to producers would have resulted in more stable and higher producer incomes.34

Fall in Terms of Trade of Cocoa Producers: The latter are compelled to sell their produce at prices lower than those operating in the world market, but have to spend their incomes (derived from cocoa) on consumption goods at current market prices. Thus their terms of trade is lower relative to other income recipients in the country. For instance producer price has been maintained at £G112 for four years while the prices of import goods have been rising.

Reduction of private savings: Although the surpluses of the Board raise the total supply of savings, the

33 Although this would reduce government revenue considerably.

34 Ibid., p. 300.
payment of low prices reduce the flow of private savings. This retards the development of the habit of individual saving and the growth of personal savings. However, Ghana is a socialist country and the large scale centralization of savings is in compliance with her political ambitions.

Incidence of 'Burden of Development': At the current period only part of the expenditure from the accumulated surpluses benefit the producers directly. A large percentage of their earnings provide funds for prestige expenditure of the government. The Board has now divided the total surpluses into various funds and only part of the total is available for price stabilization.

---

36 Ibid., p. 325.
International Aspects.

Introduction. The fluctuations in cocoa prices and the need to maximize the foreign exchange earnings of producing countries has been the subject of international conferences for quite a long time. The view has been expressed that fluctuations in the prices of primary commodities are beneficial rather than harmful to the rate of economic development. When world prices fluctuate, the incomes of producers are occasionally high, and as a result more capital could be accumulated than when they are stable and more evenly distributed. However, price levels in the international level are often misleading and producers cannot adjust output to demand especially in the short run. Some international scheme is necessary to eliminate these fluctuations. The aim of international schemes should not be to entirely remove all the variations in export incomes. This is because in the long run continued falling prices may reflect a change in taste, thus requiring a reallocation of resources.\(^1\) Any solution should not completely eliminate the impact of these changes in demand.

Quotas. Theoretically they lead to a misallocation of resources because they protect inefficient producers and

\(^1\) Baranyai and Mills, op. cit.
and keep supply at a low level. But quotas are advantageous practically because they prevent the accumulation of stocks, require no financing and do not need continuous operating decisions. Until recently very little provision has been made for the curtailment of cocoa production by the allocation of quotas. It is believed that an export quota scheme may not be workable because climatic conditions make it impossible for cocoa to be stored in producing countries.

Compensatory Financing: This includes automatic compensation to underdeveloped countries for part of a decline in their export incomes. These schemes are organised by the International Monetary Fund and could have an effect on long run problems like the deterioration in terms of trade of underdeveloped countries. During the past few years, the view has been widely expressed that the Fund's lending policy did not provide sufficient income for primary exporting countries to overcome the declining export prices.

A new policy was introduced by the Fund in March 1963 under which underdeveloped countries could obtain larger

---


3 Producing countries lie in the tropical zone with high temperatures.

loans. This policy allows any qualifying member (that is one suffering from declining export receipts) to draw an equivalent to twenty-five percent of its quota.\(^5\) To satisfy for this the member must prove to the fund that the fall in export receipts is temporary and due to circumstances beyond its control. The country should also co-operate with the Fund in finding suitable remedies for the balance of payments difficulties.

Because of the lack of adequate data, it is not easy to say whether or not Ghana has benefited from previous policies of the Fund; but she may be able to obtain some help under the new scheme provided the necessity is convincing.

**Buffer Pools:**\(^6\) International Buffer stocks can be created to buy cocoa when its price tends to fall and to sell when the price rises. The agency accumulates stocks in depressions and reduces them in booms; price fluctuations are kept within a narrow range which is determined in advance.

Various problems restrict the applicability of buffer pools to cocoa which originates from poor countries. It is an expensive scheme which the producer countries cannot afford to operate; the consumer countries may not be willing to participate

---

\(^5\) This is three-quarters of its own currency and one-quarter of gold or U.S. dollars.

\(^6\) H.C. Wallich, *op. cit.*
because they might ultimately be putting prices up against themselves. There is also the difficulty of agreeing on the price below which the scheme would start to operate. Besides its effectiveness depends on the restriction of the volume of production and the allocation of production quotas, both of which cannot be easily done. One problem that is sometimes overlooked is the feasibility of accumulating such stocks in producing countries.7

Cocoa Groups: The possibilities for a workable international cocoa agreement is quite strong on the supply side. The three major producers -- Ghana, Nigeria and Brazil -- account for two-thirds of the world production; and are affected by any decline in world prices. It should be easy for them to co-operate for various stabilization measures, provided the importing countries could demonstrate a readiness to support such schemes.

In 1956 the Food and Agricultural Organisation8 Committee on Commodity Problems established a Cocoa Study Group9 to enquire into and provide suggestions for the problems facing

7 Climatic conditions preclude this as was mentioned earlier in the chapter.
8 F.A.O. Commodity Survey, op. cit., pp. 11-64.
9 This included the three major producers Ghana, Nigeria and Brazil and three consuming countries, France, United Kingdom and the Netherlands.
cocoa. This group recommended the improvement of statistics, the use of quality standards, and the exchange of information on the supply-demand outlook. This stimulated discussions among governments of developed countries on the reduction of tariffs and duties. The Group also agreed on a draft International Cocoa Agreement which was designed to keep prices "within a definite range by means of international regulation of exports or sales."10

In 1961 another draft agreement was made which included a suggestion for the formation of an International Cocoa Fund financed by exporting countries. Its responsibilities included "to widen consumption and to assist producing countries in the cost of holding surplus stocks."11 Quotas could be given to exporting countries according to the requirements of importing countries. "If cocoa prices fall below a certain level and remain there for a fortnight, each exporting country would be allowed a fixed percentage of its basic quota. Further price declines would bring further quota restrictions."12 This agreement was opposed by the International Cocoa Trades Federation13 on the grounds that the prospects of cocoa are

10 Ibid., pp. 11-65.
12 Ibid.
13 France, Western Germany, Netherlands, United Kingdom and U.S.A.
generally bright and that there is no need for immediate action.

A United Nations Cocoa Conference was called in 1963 but had little success because of the differences of opinion among producing and consuming countries. This prevented the conference from agreeing on the minimum level below which prices would not be allowed to fall even in the years of excess production.

As was mentioned in the previous chapter the major producers have established a Producers' Alliance which discusses marketing and other economic problems. So far its policies have been flexible but the Alliance is determined to prevent a disastrous fall in prices and foreign exchange earnings of members. In 1964 the Alliance drew up a draft agreement because of the failure of the Geneva Conference earlier in the year to provide a solution to the international problems of cocoa. The agreement sought to regulate the market for cocoa by a strict control of supplies reaching the world market. The technical committee of the Alliance based its work on the realisation that the supply of cocoa is increasing far more than consumption. It was agreed that export quotas should be given to producers so as to prevent the continuing depression

of cocoa prices. The agreement came into existence this year.15

Measures to Increase Consumption: Cocoa consumption could be stimulated by international promotional campaigns. This does not fall in line with the activities of the Food and Agricultural Organization; but, it could be done by the Cocoa Producers' Alliance. The snag is that on the one hand, advertising is expensive and would require either heavier taxes on cocoa exports or the curtailment of the amount of cocoa proceeds available for domestic use; on the other hand, if this leads to higher international prices world consumption may decrease instead of increase.

Promotion activities could be extended to developing countries in Asia, Latin America, and the low-consumption countries in Europe. Governments of developed countries could contribute to an expansion of consumption by the removal of import duties and internal taxes on cocoa and cocoa products. In the Far East and Latin America the income elasticities of demand for cocoa are high and it is likely that the removal of restrictions on imports could greatly stimulate consumption. "The greatest possibilities for expanding consumption exist in Russia and in the Eastern European centrally planned economies."

15 Ghana Seven Year Development Plan, 1963/64 to 1969/70, op. cit., p. 10.
an increase in per capita consumption in these areas to three-quarters of the average of Western Europe would raise imports by about 250,000 tons.⁴ This would mean an increase in export earnings of cocoa producing countries of at least £60.7M.

Regional Aspects.

Introduction: The prevalent trend in modern times towards regional economic integration⁷ together with the increasing consciousness of pan-Africanism are forcing African countries⁸ to consider their trading problems as a group. These problems are more severe for Africa than for other underdeveloped areas -- especially the degree of fluctuation -- because African primary exports consist of agricultural products with short-run inelastic supply.⁹ Therefore, it has been suggested that African countries can benefit more from the stabilization of their export earnings than from the aid provided by advanced countries.


---

17 E.g., Latin America Free Trade Area; European Economic Community.
18 Excluding the Union of South Africa.
a resolution for "deliberate and positive moves towards regional integration."\(^{20}\) A common market might provide a much wider export market by encouraging a reduction of tariffs among countries. This would make advertising easier and stimulate more cocoa consumption among African countries. Once this market exists chocolate manufacturing could be encouraged on a minor scale in order to reduce the constant excess supplies of cocoa beans flowing into the world market. Such an integration can prevent a deterioration in the terms of trade of African cocoa exporters. Since a large percentage of the world's supply of cocoa comes from Africa, a restriction in the supply of exports from these countries can strengthen trade negotiations with consumers. They could also exercise monopolistic power to affect the terms of trade by raising cocoa duties with the outside world. In fact, a group of United Nations\(^{21}\) experts have stated that economic co-operation of African countries is not likely to be successful except with a commodity like cocoa for which they are the world's major producers.

A major difficulty inhibiting this integration is that of political and administrative feasibility. African countries are newly independent and conscious of their national

\(^{20}\) Ibid.

\(^{21}\) Ibid.
governments and political sovereignty. This is more so of Ghana, which, as the first colony in 'Black Africa' to attain independence, is very much aware of its unique political set-up.\textsuperscript{22} It is debatable whether these countries will be willing to sacrifice part of their political sovereignty which this integration demands. Allied to this problem is the fact that African countries have different trading systems and economic ties with countries outside. An integration cannot be confined to agricultural exports alone, it has to apply to industries, transport and the overall development of resources, this would require some co-ordination of national planning.\textsuperscript{23}

Even if the market comes into existence, restrictive measures can encourage retaliation by other countries especially those supplying African countries with manufactured goods. This is of particular significance in Africa where foreign trade is very large relative to regional trade: about two-thirds of trade is conducted with Western Europe and only one-tenth with each other;\textsuperscript{24} similarly in 1961 Intra-African trade was only 4.3 percent of total African exports.\textsuperscript{25} The

\textsuperscript{22} Ghana is a socialist state with a new political philosophy - Nkrumaism.


\textsuperscript{24} F.A.O. Commodity Review, \textit{op. cit.}, pp. 11-12.

gain from a common market under present conditions are limited. Unless there are manufactured goods which could enter trade, mere widening of the market would be of small economic significance.

An African Stabilization Fund. 26

In August 1962 an African meeting on commodity stabilization was held at Lagos, Nigeria and delegates stressed the necessity for international action to provide compensatory financing for fluctuations in their export proceeds. They suggested the formation of a compensatory financing scheme for African countries, as distinct from the rest of the world. If the scheme comes into existence, participants would contribute a fixed percentage of their total export proceeds to the fund. An automatic compensation of a fixed percentage of a fall in export receipts 27 would be paid out to members. The fund would protect against any short-term decline of export proceeds and partly against medium term declines, but not against long-term price falls.

It was suggested that the scheme should initially

---


27 Measured on the basis of a moving average of proceeds in the three preceding years.
include producers of cocoa and other agricultural commodities since they are the most vulnerable. Further, compensation should not be complete because that would encourage "deliberate efforts to manipulate exports in such a way as to create a claim for benefit." Partial stabilization would make a contribution to economic development, but regular annual payments of nearly one percent of total export into the fund, might be too high a financial burden for most of the countries. The initial capital contribution of about £30 million would be a strain on the countries' balance of payments. However, bigger industrial countries could obtain associate membership and channel all aid to African countries through this fund.

National Aspects.

Control of Disease: More emphasis could be placed on raising the yield per acre by better control of weeds and pests, more regular harvesting and the use of fertilizers. There is still a lot of scope for the Government to undertake mass spraying of trees; this will decrease the occurrence of swollen shoot disease and capsid bugs.

Better Transport Facilities: Already Ghana has a

---

28 Ibid.

29 Ibid.
good road network and public transport system, but these are confined to the large cities. More buses and railways should be provided especially between the remote farm areas and the buying agents.

Control of Production: It is difficult to get this done but attempts could be made to prevent any increase in cocoa acreage. Such land could be diverted to alternative uses and prevent the uneconomic accumulation of cocoa stocks. At the end of 1964 five hundred tons of cocoa were burnt by the Chairman of the Cocoa Marketing Board to ease the pressure of excess supplies in the world markets.\(^3\)\(^0\)

Reduction of Fragmented Holdings: Farmers should be encouraged to combine small scattered farms into larger units. The Ghana government recognise the need for this and even suggested that the possibility of adapting cocoa into estate culture should be explored.\(^3\)\(^1\) Larger farms would facilitate the use of trained agricultural supervisors beyond the means of small scale farmers.

Modern Statistical Machinery: An efficient machinery

\(^{30}\) Africa Digest, February 1965, Vol. XII, No. 4, p. 113.

\(^{31}\) Ghana Government, Seven Year Development Plan, \textit{op. cit.}\n
for the collection of statistics is imperative especially for a control of production. Such a device would facilitate the keeping of records on existing planting and the maintenance of some balance between expected production and expected demand.

**Widening of Markets:** Ghana is making bilateral trading agreements\(^{32}\) to help in enlarging markets for cocoa in centrally planned countries. One such agreement is with Russia which is presently buying cocoa in increasing quantities. Attempts should be made to extend these agreements to other countries. More contracts could be signed in advance or arrangements made for forward sales. Members of the European Economic Community should be approached to reduce their heavy taxes on cocoa and cocoa products.

**Diversification:** If the gains from trade are to be improved diversification is necessary in both the agricultural and the industrial sectors. In the past, farmers have neglected oil palm, rubber and coffee because they entail greater physical exertion in production as compared to cocoa. More stimulants should be given for the production of these crops in order to mitigate the effects of fluctuations in cocoa proceeds on the balance of payments. Domestic food

---

production should be increased to absorb some of the disguised unemployed cocoa producers, and to reduce the dependence on imported food. This would economise on badly needed foreign exchange.

The Ghana Government is aware of the role that improvements in agriculture can play in facilitating industrialization. In the Seven Year Plan\(^{33}\) it was stated that the rate of growth in agriculture, will condition the growth of the whole economy in the future. At the same time, some degree of industrialization is necessary for the encouragement of better agricultural products and for a general rise in living standards. "As Ghana enjoys a comparative advantage in agricultural production, the attempts at industrialization should be aimed at bettering this advantage."\(^{34}\) It is hoped that the Volta River Project would transform and strengthen the economy by producing power for processing large reserves of bauxite. This will provide an additional source of revenue.

Manufacturing: In comparing the relative profitability of agriculture and manufacturing, both current and expected future prices are to be taken into account. The current world

\(^{33}\) Ghana Government, Seven Year Plan, op. cit.

price of cocoa is low and with the present accumulation of stocks,\textsuperscript{35} it is doubtful whether price will rise in the future.\textsuperscript{36} Therefore manufacturing should be encouraged. However, the prospect of cheap manufacturing depends on the availability of raw materials; this setback could be overcome by the introduction of small industries making use of the available agricultural products, thus providing demand for the domestic raw materials. Small scale manufacturing for the home market should be encouraged but not given too large a priority because of the small domestic market.

Cocoa Processing: According to the Seven Year Plan the tonnage of cocoa exports are expected to rise by thirty-five percent. It is doubtful whether world demand would rise by such a percentage. As a result the need for cocoa processing in Ghana has been given constant attention. The government hopes that in the not too distant future the country should transform from an exporter of raw cocoa beans, to a manufacturer of cocoa products.

Cocoa processing involves two principal industries.\textsuperscript{37}

\textsuperscript{35} See Figures I.4 and II.4.

\textsuperscript{36} Although cocoa producers are presently holding back supplies to raise price.

\textsuperscript{37} W. Arthur Lewis, \textit{op. cit.}, p. 4.
Firstly the manufacture of chocolate during which process the whole of the cocoa bean is used. The second industry involves separating the bean into butter and cake -- the former is sold to chocolate manufactures and theobromine is extracted from the cake.

The prospects of the first method are not too bright because Ghana lacks power\(^{38}\) and would have to compete with the developed manufacturing countries. The second method is within Ghana's scope but a limitation is imposed by the requirement of large supplies of water at a temperature of 57°F. A small amount of cocoa butter is being produced at the moment but more of this could be done.

Diversification is basic for a solution of most of the problems, but it is a long run solution which requires a lot of inspiration and guidance from the government.

\(^{38}\) The successful operation of the Volta River Project will reduce the severity of this problem.
SUMMARY AND CONCLUSIONS

There is a lot of truth in the assertion that cocoa is the backbone of the economy of Ghana. The revenue derived from this commodity has contributed to many forms of development such as hospitals, roads and other local services. Since its inception in 1947 the Cocoa Marketing Board has accumulated surpluses which has provided financial resources for the government.

It has been shown (1) that there is no definite short-term relationship between producer price and production levels. Thus a decrease in price in one year cannot necessarily result in a decrease in production in the next year. The same is true of a long-term relationship. Although cocoa has long gestation periods, high current price does not always stimulate new plantings which would raise future production levels. (2) That generally cocoa exports have been closely related to production levels. Sometimes stocks were left over but they never created a very serious problem. (3) Although the Food and Agricultural Organisation maintains that the price elasticity of demand for cocoa is high, empirical analysis does not substantiate this view. However, the analysis was confined to two major buyers -- United Kingdom and the United States of America -- which does not provide enough evidence for a generalization based on the results.
As was stressed throughout the text a high dependence on a single crop is a weakness, especially when exports constitute a great bulk of total output as is the case with Ghana. The country's preoccupation with cocoa planting makes her dependent on imported food. The rate of development is closely tied to the demand for cocoa in foreign markets; the same is true of her foreign exchange earnings which are vital for the acquisition of capital imports. Ghana is currently on the brink of an economic crisis with a large deficit in her balance of payments. This has necessitated restrictions on many consumer imports resulting in a high cost of living. A common view in international circles is that Ghana is now reaping the fruits of an over-ambitious development programme. The current deficit is being widened by the fact that in compliance with an agreement of all cocoa producers, she has not been selling any cocoa in the world market since October 1964. World cocoa producers have realised that the rapid increase in cocoa production since the late nineteen fifties has not been accompanied by a corresponding increase in demand; therefore, stocks are high in consuming countries and world price is low.

It is difficult to predict what the future prospects of cocoa will be because like all agricultural commodities too many factors -- beyond the scope of this thesis -- have to be
taken into account. But Ghana can help herself by stimulating diversification. More efforts to encourage the export of other agricultural commodities to provide more sources of foreign exchange are important. Small scale manufacturing for the home market and the growth of food products should be stimulated to economise on badly needed foreign exchange. Apart from providing more consumer goods and more sources of revenue for the government diversification would help in overcoming the threat of overproduction. New opportunities will be available for the use of some of the human and land resources now concentrated in cocoa production, thus making the economy broad-based.

However, international factors limit the number of national measures that could be taken and the extent to which such policies can be successful. Internal regulation of prices can only result in stabilization. Ghana is not satisfied with stable prices alone, she wants higher cocoa prices. This end can only be attained by international action especially when the current threat of continual low prices is taken into account. Commodity agreements are necessary in order to improve the prospects of cocoa. The problem lies on the part of consumer countries; buyers are reluctant to enter into international action which would affect them adversely. In the long run consumer countries will have to
be more co-operative; at the same time national action to secure new customers and to control the volume of production is imperative.
Books


B. Ghana Publications


C. Journal Articles


**D. Miscellaneous**


Africa Publications Trust, "Ghana, the Economic Crisis," *Africa Digest*, Vol. XII, No. 5, pp. 139-141.


E. United Nations Publications


APPENDIX

Some essential corrections of syntax.

1) P.iii last line 'are' for 'is' ('data are')
2) P.17 - First line on page - 'ordered' for 'acquired' would be more appropriate.
3) P.76 - Second paragraph first sentence 'it' for 'they'.
4) P.112 - Second paragraph "the tonnage of cocoa exports is expected to rise" ......

N. Hurwitz
Head, Dept. of Economics