



**TOGETHER**  
*for a sustainable future*

## OCCASION

This publication has been made available to the public on the occasion of the 50<sup>th</sup> anniversary of the United Nations Industrial Development Organisation.



**TOGETHER**  
*for a sustainable future*

## DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as “developed”, “industrialized” and “developing” are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

## FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

## CONTACT

Please contact [publications@unido.org](mailto:publications@unido.org) for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at [www.unido.org](http://www.unido.org)

18662

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION.

INDICATIVE PROGRAMME FOR THE INTEGRATED DEVELOPMENT  
OF COCOA INDUSTRIAL SYSTEM IN GHANA

Prepared by

Oluniyi Omosaiye  
UNIDO Consultant.

72

TABLE OF CONTENTS

	<u>PAGE</u>
Table of Contents	i
List of Tables	ii
Preface	iii
INTRODUCTION	1
GOVERNMENT DEVELOPMENT OBJECTIVES	2
INSTITUTIONAL FRAMEWORK FOR THE DEVELOPMENT OF COCOA INDUSTRIAL SYSTEM	5
INDUSTRIAL PROCESSING	7
THE FUTURE	11
PROJECT CONCEPTS	11
CONSTRAINTS TO THE MISSION	13
List of References	14

LIST OF TABLES

<u>TABLE</u>		<u>PAGE</u>
1.	Cocoa Prices and Output	4
2.	Cocoa Processing Co. Ltd. (Wam) Takoradi	8
3.	Production of Cocoa Butter, Liquor and Cake	9

PREFACE

The following report is a short substantive account of the mission to study the Cocoa Agro-food Industrial System in Ghana between 26th February to 9th March 1990.

Cocoa is a major export-oriented industry and the crop is strategic in Ghana's economy. Therefore, any study of the Cocoa Industrial System must have the blessing of the Prime Minister and the Executive Council.

While waiting for authorization from Government, the Consultant conducted interviews and gathered the information presented in this report from other relevant sources.

1.

## INTRODUCTION

Cocoa farming for export is the single largest activity in Ghana and since the pre-independence period, has been the main determinant of economic growth.

Cocoa accounted for 54 per cent of Ghana's export earnings in 1987, but following the severe drought of 1983, the cocoa industries as well as logging and fishing industries found themselves in desperate straits. (1)

Most cocoa production is by peasant farmers on plots of less than 3 ha in the forest areas of the Ashanti, Brong-Ahafo, Central, Eastern, Western and Volta regions where rainfall is 101-150 cm per year. The crop year runs from July, when purchases of the smaller mid-crop begin, while main crop buying starts in November. All cocoa is sold at fixed prices to Cocoa Marketing Board, a subsidiary of Cocobod.

Production has fallen sharply since 1960 and Ghana has lost its prominent position of being the world's leading producer and now accounts for well under one fifth of world output, with an annual production averaging 250,000 tons in 1978-82 and falling to 158,000 tons in 1983-84. The fall in production has been attributed to:

- a lack of financial incentives for farmers, caused by fluctuating world cocoa prices.
- an overvalued Cedi.
- unreliable payment procedures and low producer prices.
- aging and diseased trees.
- shortages of fertilizers and vital pesticides, and
- poor transport and distribution services. (2)

The decline continued into the 1980's exacerbated by drought, bush fires (destroying about 60,000 ha or 40% of cocoa farms) and smuggling. The latter activity, mainly into Cote d'Ivoire, Togo and Burkina Fasso, led to losses of about 50,000 tons of cocoa per year.

## 2. GOVERNMENT DEVELOPMENT OBJECTIVES

Despite various attempts to diversify the economy, the manufacturing sector remained underdeveloped and heavily reliant on state subsidies and on imported raw materials and components.

The infrastructure was weak, and inadequate marketing, storage and distribution facilities encouraged the growth of a large informal sector. Since 1983 however, Ghana has entered a period of recovery, assisted by the implementation of policies for economic recovery and structural adjustment, supported by the IMF and the World Bank.

Government wishes to make exports the driving force behind the country's economy. A major focus is the development of small scale industries which will export their goods, and plans to rehabilitate existing cocoa processing industries to make them viable and profitable.

Thus the policy framework for the manufacturing sector will focus on:(3)

- (i) trade and exchange rate policy aimed at encouraging the efficient production of manufactures in which Ghana has a comparative advantage and discouraging the continued existence of inefficient enterprises;
- (ii) increasing capacity utilization in selected industry from about one-third to at least one-half, on the basis of more realistic input pricing and increased availability of inputs (imported and domestic);
- (iii) medium-term restructuring of the industrial sector as the modified policy environment leads to efficient firms dominating the various sub-sectors;
- (iv) special access to working capital funds for industrial firms to ensure that credit needs for imported inputs are adequately catered for;
- (v) engaging in a programme of rehabilitating industrial support institutions.

Particular attention is being paid to cocoa sector policies. The cocoa producer price is being reviewed annually to ensure that an adequate incentive package is offered to farmers to encourage farm rehabilitation, replanting, and curbing smuggling.

To this extent, the Government has adopted policies to improve output.<sup>(4)</sup> First, it has undertaken an extensive rehabilitation programme with the help of the World Bank, primarily by providing farmers with hybrid seedlings to replace those lost in 1983 and also the large number of trees, an estimated 25 per cent of the total, older than 30 years. It has also sought to increase production by giving incentives to farmers in the form of higher producer prices, improved methods of payment and increased supplies of consumer goods to cocoa farming areas. Since 1981, when the producer price was C360 per 30 kg load, it has risen several times, in substantial leaps, to C1,698 for the 1985/86 season and C4,200 in May 1987. The latest increase, to C5,500 with effect from June 1988, raised the price by 16 per cent compared with the 60 per cent increase the year before. This is part of government's long term plan to reduce smuggling which is estimated at between 20,000 and 30,000 tons annually. Prices in neighbouring Cote d'Ivoire nevertheless remain about 30 per cent higher, and its CFA franc currency is convertible, in contrast to the Cedi. Additional measures to stamp out smuggling have included the stepping up of police border surveillance and experiments involving part payment of cocoa farmers in the form of packages of consumer items and agricultural inputs, priced at official levels. Back in 1982, Cocobod also ended its system of obtaining cocoa from farmers in return for "chits", which had been abused, and replaced it with payment by cheque. Problems with cashing the cheques in some areas was responsible for some farmers switching to food farming. A major road improvement now under way will concentrate on making it easier to sell and evacuate cocoa from some of the more neglected but very fertile growing areas on the border with Cote d'Ivoire.

Following the rehabilitation of cocoa plantations, output recovered to 228,000 tons in 1986/87, falling again to 188,000 tons in 1987/88. (Table 1)



Table 1

COCOA PRICES AND OUTPUT

	<u>1982/83</u>	<u>1983/84</u>	<u>1984/85</u>	<u>1985/86</u>	<u>1986/87</u>	<u>1987/88</u>
Producer price						
(C per ton)	12,000	20,000	30,000	56,600	85,000	140,000
(\$ per ton) <sup>a</sup>	4,363	5,798	849	1,047	952	952
Average London spot price						
(C per ton) <sup>b</sup>	4,989	23,292	98,952	137,860	204,157	349,820
Production ('000 tons)	178	158	175	219	228	188
Export ('000 tons)	160	148	165	188	211	219 <sup>c</sup>

a Converted at the average official exchange rate for the year in which the crop year starts

b Calendar year in which crop year starts.

c Drawing on stocks.

Source: Cocoa Marketing Board; government statements; Quarterly Digest of Statistics.

In : EIU Country Profile 1989-1990. Ghana.

### 3. INSTITUTIONAL FRAMEWORK FOR THE DEVELOPMENT OF COCOA INDUSTRIAL SYSTEM

#### 1. Ghana Cocobod

Cocobod is a government parastatal with full responsibilities for cocoa development. This includes the distribution of productivity enhancing inputs (free seedlings, fertilizer, fungicides, herbicides and pesticides), extension services, cocoa data bank, forecasting, primary production, storage, secondary processing to cocoa butter, liquor and cake, price formation, sales, marketing, distribution and exports.

All companies that participate in these activities belong to Cocobod. The board is administered by an Executive Secretary, who reports to the office of the Prime Minister.

Following allegations against Cocobod staff of large-scale misappropriation of funds, the board's functions were to be confined to activities which could not be undertaken by the private sector, including purchasing, marketing, research and development. Under the cocoa sector rehabilitation programme for 1988-93, Cocobod is continuing to dispose of its plantations and cocoa-processing factories, to reduce staffing levels, and to shed responsibilities for transportation.

#### 2. Ghana Export Promotion Council (GEPC)

The Council is responsible for non-traditional exports and downstream value added processing of traditional export commodities— in this case chocolate exports.

An export development strategy for Ghana Chocolate "The Golden Tree" has been designed. Extensive market surveys and contact promotion programmes had been undertaken in eleven ECOWAS member countries. In addition, there has been other promising enquiries received from Taiwan and Libya, either for chocolate or couverture. However, packaging and presentation were far below international standards.

In collaboration with the Cocoa Processing Company, Tema and with technical and financial assistance from the International Trade Centre (ITC) Geneva and Government of Norway respectively, a programme was initiated to address the packaging problem to be followed by a training programme for the quality control manager and an aggressive marketing strategy.

However, there are serious production limitations which will impede regular exports. These include:

- i. obsolescence of plant and equipment, capacity utilization is 30%.
- ii. inadequate and unreliable supply of off-shore raw materials - milk powder, sugar, foil etc.
- iii. lack of clear policy on bean supply to the factory; bean supply is controlled by an affiliate of Cocobod.
- iv. The uncertainty of the status of the factory within the structure of Cocobod.

Given the assistance provided by the ITC and Government of Norway, exports of chocolates are expected to hit a target of about \$100,000 by 1991.

However, the export target can only be achieved through rehabilitation of the factory and regular supplies of raw material requirements.

The rehabilitation of the factory is estimated at \$7m. and the main inhibiting factor is the difficulty of raising the requisite investment fund to put CPC on stream.

A £15m credit line being offered to the Export Sector of the Economy by the Standard Chartered Merchant Bank of UK is considered a possible source of funds for the rehabilitation programme at the chocolate factory of CPC.

Cocobod has decided that with effect from January 1990, CPC will operate as a self-supporting and financially autonomous business entity, to be achieved through joint-ventureship or solo operations.

### 3. Cocoa Research Institute, Ghana

The institute is involved with agronomic studies, plant physiology, seed improvement and extension services, disease and pest control. The Institute's work on fermentation studies is well known and for many years, bean quality from Ghana was used as reference to judge others. In collaboration with Animal Research Institute, animal feed was developed using cocoa husk.

### 4. Food Research Institute

The Institute's work on cocoa is limited and involves analysis and drawing up standards and quality specifications for cocoa powder, butter and chocolates in line with Ghana National Codex and International Standards. The Institute has every right to work on Cocoa but its mandate at the moment does not permit it to do so.

#### 4. INDUSTRIAL PROCESSING

The manufacturing sector in Ghana is presently dominated by three characteristics:

- i. capacity utilization continues to be low at about one third
- ii. the sector has grown to become over extended (i.e. shows excess capacity in relation to potential demand); and
- iii. in some subsectors and firms, it exhibits significant levels of inefficiency.

Emphasis is now on restructuring the sector so that it corresponds more closely to Ghana's comparative advantage and market characteristics, making it less dependent on imported inputs but more dependent on domestic resources and more export oriented.

Processing of raw cocoa beans to butter, liquor and cake is monopolised by the State, i.e. by Cocobod's three processing companies at Tema (near Accra), Wam and Taski in Takoradi.

At Cocoa Processing Company (CPC) Limited Tema, the installed capacity is a maximum of 30,000 tons raw beans and 1200 tons of chocolates. Other secondary products include pebbles and instant cocoa powder. Capacity utilization is 23% and the reasons for under utilization of capacity are:

- obsolescence of machines (operation commenced in 1965)
- lack of spare parts
- lack of transport facilities and
- irregular energy supplies.

Spiralling inflation and an overvalued Cedi have also greatly increased local costs.

The main focus at Cocoa Processing Company, Wam, Takoradi is the production of cocoa butter (Table 2 ), which is produced by the less capital and technology intensive expeller technique. The expeller technique cannot be used for the production of cocoa powder.

The record of production for the three processing companies is given in Table 3. Although most production is destined for export, demand for cocoa butter has been depressed because of the rapid introduction of cocoa butter substitutes.

Table 2

## COCOA PROCESSING CO. LTD. (WAM) TAKORADI

Ownership: Cocobod (100% shares)

	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
Capacity/annum (tons) (expeller processing)	15,000	12,500	12,500	12,600
Sales, ex-factory (value in cedis)				
- Cocoa butter	796m	1652b	21476b	
- Cocoa cake with shell	24m	20m	68m	
Plant and Machinery				
(Age). Over 20 years.				

Source: Ministry of Industries, Science and Technology  
Industrial Subsector Studies 1989.

Table 3

PRODUCTION OF COCOA BUTTER, LIQUOR & CAKE

	<u>1983</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>
Cocoa Butter (tons)	9928.0	8764.0	8818.0	3866	7674	6399
Cocoa Liquour (tons)	2776.0	2765.0	1558.0	1,163	3000	3676
Cocoa Cake (tons)	10775.0	10178.0	11321.0	4633	9178	7490

Source: Statistical Service, Quarterly Digest of Statistics 1981-1983, June 1984, p12  
Economic Survey 1981, August 1983, p74.

Alkalised powder, which is favoured in European markets is not preferentially produced in Ghana. Cocobod has embarked on rehabilitation programmes at the cocoa processing companies at Wam and Taski.

Production of final consumer cocoa based food products is undertaken by Allied Foods, a wholly owned subsidiary of Cadbury Schweppes. Bournvita (a cocoa based beverage) and drinking chocolate are the primary products while chocolate spread is a secondary product. Consumption of cocoa powder is only 198 tons per annum or 24% of materials of domestic origin. Nestle Ghana Limited, owned by Nestle S.A Swiss (45% of shares) produces Milo (a cocoa based beverage) and chokolim, consuming only 207 tons of cocoa powder annually, amounting to 54% of materials of domestic origin.

Thus, it is evident that cocoa powder consumption by these companies is extremely low (4%) or a total of 400 tons from an annual powder production of 10,000 tons.

The problems facing these companies are low demand (products of uncompetitive high prices), lack of funds to finance imports, lack of domestic raw materials and irregular supply of energy. Export efforts are also constrained by higher uncompetitive prices in foreign markets.

## 5. THE FUTURE

A new dynamic orientation is needed if cocoa processing industries in Ghana are to succeed:

- i. processed powder must be in the alkalised form which is needed by most European markets.
- ii domestic consumption of cocoa products must increase. At the moment the use of cocoa products is very low indeed. Processing companies must develop cocoa based food products which meet consumer acceptability at affordable prices.

Since existing plants are not producing at maximum capacity, the question being asked is whether to rehabilitate or scrap existing plants. State monopoly in processing must obviously change in favour of private enterprise. There is the need to set up more medium scale processing industries in cocoa bean producing areas to stimulate production apart from generating employment.

## 6. PROJECT CONCEPTS

Given the support from the GEPC, and the privatization of CPC, immense opportunities abound in the following projects, identified and agreed with GEPC:

- export market development for chocolates in Europe.
- technical assistance on the selection of cost-effective equipment and machinery for the rehabilitation of the chocolate factory at TEMA, a unit of CPC.
- by-products utilization; Alata (native soap) production from cocoa husk. Alata soap is a special soap with a smoothening effect which is popular along the West Coast of Africa. Its production is an all women affair.
- development of a strong market base at ECOWAS (Economic Community of West African States), and promotion of producer and processor co-operation thus establishing strong interlinkages within the ECOWAS subregion.



Other projects include:

- technical assistance in product development and marketing to stimulate local consumption of cocoa-based food products e.g. cocoa wine, cocoa bread, cocoa biscuits and cake. The Food Research Institute, Accra will be the counterpart institution.
- techno-economic feasibility studies on the establishment of medium scale (10,000 tons beans) cocoa processing industry in cocoa bean producing areas of Ghana.

7.

CONSTRAINTS TO THE MISSION

The Consultant arrived in Ghana amidst Ghana Investment Promotion Conference which lasted from 26-28 February 1990.

The main objective of the conference was to stimulate private direct investment in Ghana by making potential foreign investors more aware of the many opportunities available in the country and also by making Ghanaian officials more aware of problems and bottlenecks which prospective investors perceive as negative factors so that they may be dealt with.

Following directives from the Secretary of Industry, it was necessary to obtain special clearance from Cocobod before proceeding to study the Cocoa Industrial System in Ghana. In the interim, work had begun to obtain relevant information about the system.

Authorization to study Cocoa Agro-Food Industrial System in Ghana was finally denied by Cocobod after consultations with the Executive Council in view of:

- a. the strategic nature of cocoa in the country's economy.
- b. the fact that the World Bank loan taken to rehabilitate the cocoa plantation had not yielded any fruit, before the world price of cocoa dipped as a result of which Ghana lost 95m USD in 1989 and may lose up to 200m USD in 1990.

To this end, Government is unhappy about the sad state of earnings from cocoa, the international economic monetary order generally, and needed more time to reflect on the situation.

**List of References**

- (1) Agriculture, Forestry and Fishing. In: Economic Intelligence Unit Country Profile. Ghana. 1989-1990.
- (2) Paul Hackett 1989. Economy, Ghana. In: Africa South of the Sahara. 18th Edition, Europe Publications Limited.
- (3) Republic of Ghana. Progress of the Economic Recovery Programme 1984-1986 and Policy Framework 1986-1988. Accra, Ghana October 1985.
- (4) Ibid, as in (1).