

**ICO/CFC STUDY OF
MARKETING AND TRADING POLICIES AND SYSTEMS
IN SELECTED COFFEE PRODUCING COUNTRIES**



COMMON FUND FOR COMMODITIES



INTERNATIONAL COFFEE ORGANIZATION



THE WORLD BANK

The experience gleamed from this and eight other country studies has been incorporated into an overall project review published by the Common Fund for Commodities (CFC): Study on marketing and trading policies and systems in selected coffee producing countries. Amsterdam, 2000. CFC Technical Paper No. 3.

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**ICO/CFC Study of
Marketing and Trading Policies
and Systems in Selected Coffee
Producing Countries:
GHANA COUNTRY PROFILE**

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CFS 5105
March 2000

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Executive Summary: Ghana

BACKGROUND

Prior to liberalisation, the coffee sector in Ghana was managed by the state monopoly, the Cocobod. The Cocobod was responsible for both the internal and external marketing of coffee and set marketing margins, including the grower price, annually. The Cocobod also marketed the cocoa crop, which was the major agricultural export earner, and the small volume of the coffee crop meant that a degree of cross-subsidisation between the grower price for coffee and cocoa occurred.

Growers sold coffee to the internal buying arm of the Cocobod, the Produce Buying Company (PBC). After processing, the coffee was inspected, graded and sealed by the Cocobod's Quality Control Division (QCD) at the PBC regional warehouses before being transported to one of the two ports. External marketing was undertaken by the Cocoa Marketing Company (CMC) of the Cocobod.

In April 1991, as part of the conditionality of the structural adjustment package, the Cocobod announced that the marketing of coffee, sheanuts and cashew (the "non traditional" crops) would be liberalised. In 1992, the Cocobod withdrew from the purchasing and export of coffee, it no longer set grower prices or marketing margins and the private sector was able to operate freely both in the internal and external marketing of coffee. The Cocobod continued as regulator of the industry and issuer of licences.

Under the liberalised system, the exporters (the Licensed Buying Companies (LBCs)) purchase sun-dried cherry from farmers through their intermediaries (or Commission Agents). The LBC then hulls and cleans the coffee. QCD officers in the regions inspect, grade and seal the coffee which is then transported to the port of shipment.

THE REFORMS

Following liberalisation in 1992, many new companies entered the market and by 1994, 46 companies held export licences. There had been little preparation both in raising awareness of the farmers to a liberalised system and in creating the infrastructure within which the private sector could effectively operate. There had been limited discussions with participants of the sector and many of the new entrants were inexperienced and unable to operate effectively.

Prior to the collapse in international prices in the early 1990s, Ghana's export unit values were relatively stable at around 75% to 80% of the ICO Robusta Indicator price. With grower prices fixed by the government, levels were maintained by a cross-subsidy from the cocoa sector even during the international price slump after 1989. The low international prices in the early 1990s, combined with the difficulties encountered during the transition to a liberalised market, led to a decline in grower prices immediately after liberalisation. However, from 1993/94 onwards, the grower price has typically been over 65% of the f.o.b. value.

Quality control has always remained in the hands of the Quality Control Division (QCD) of the Cocobod. Its role has not changed with liberalisation, although the ability to maintain standards was strained immediately after liberalisation. This was reflected in the deterioration of coffee quality in those first years. The reputation of Ghanaian

coffee was damaged further by some cases of exporters defaulting on their contracts. Export unit values, after falling initially, have returned to over 75% of the ICO Robusta Indicator price.

In the first years of liberalisation, LBCs extended some cash advances to farmers. However, mass "default" by farmers who sold their coffee to other buyers quickly ended this practice. Farmers have no access to credit and are poorly informed of the prevailing international market price, receiving only sporadic information via newspapers or radio.

Financing is also a problem for most exporters. Funds raised from the domestic banking system attract a high interest rate, at around 38% in 1998, and collateral requirements are beyond most of the smaller LBCs. Due to the size of the crop and the perceived risk of investing in coffee, the domestic financial sector is reluctant to lend to the LBCs. The majority of crop financing is from own funds, although some larger LBCs are pre-financed from overseas. Recent initiatives by the World Bank and other international organisations have attempted to address the problem of crop finance but so far this has only had limited success as loan criteria remains beyond that of most LBCs.

Following liberalisation, all the price risk has been transferred to the market participants. LBCs have sought to reduce their risk by selling back-to-back. In some cases, coffee is bought and stored in warehouses until a sufficient quantity has been purchased to be marketed. This opens the LBCs up to a significant amount of price risk. However, hedging with futures contracts is considered to be too costly given the volumes involved.

Supporting Services

The Cocoa Services Division (CSD) of the Cocobod continued to supply seedlings and extension services free of charge to coffee farmers following liberalisation. However, the demand for seedlings increased to such an extent that smallholders are now purchasing seedlings on the secondary market. The CSD was due to be disbanded in January 1999 with extension services to be taken over by the Extension Services Division of the Ministry of Food and Agriculture. However, the details of the move are still to be finalised and the CSD continues to perform its former services. With the closure of the CSD, its coffee propagation units/nurseries are to be leased to the private sector. At least one of the nurseries has already been taken over by one of the plantation companies with a view to providing for its own replanting programme and for the commercial sale of cuttings.

Inputs are now being provided by the private sector. Although, with the removal of subsidies, the prices of certain items such as pesticides have increased significantly. However, input usage by coffee farmers is minimal.

Around eight plantations (previously established by the Cocobod and privatised during liberalisation of the sector) are being rehabilitated by the private sector. Although the plantations are only in their early stages of development, the potential for output is good and new interest is still being shown for plantation development. However, plantation companies are facing the same problems as the LBCs with regard to securing financing.

INTRODUCTION

Ghana is a small producer of robusta coffee. Prior to liberalisation in 1992/93, coffee marketing (both internal and external) was in the hands of a marketing board, the Cocobod. The Cocobod was also responsible for the marketing of cocoa, the major export crop, and little attention was paid to the coffee sector given the small crop size.

Liberalisation of the coffee sector in Ghana faced little resistance due to the small size of the crop and the high marketing costs faced by the Cocobod. The transition to a liberalised system was not smooth and the industry faced many difficulties in the early years of liberalisation. However, in recent years, growers have received a high proportion of the export unit value and prospects for future development of the sector are good.

This profile details the evolution of the coffee sector in Ghana. It begins with an overview of the Ghanaian coffee sector and places it within the context of the macroeconomic environment of the country. The profile details the supporting services that are provided to the farmer and how the provision of these services has changed with liberalisation. The marketing system, both before and following liberalisation, is then described and the effects of the changes to the marketing system on pricing policy, regulation, crop finance, risk management, taxation and institutions are discussed. Finally, the reforms are evaluated by examining changes to grower prices, quality and production. As eluded to in the profile, changes in production should not be viewed solely in the context of the changing marketing system but should be seen in the wider context of the movements of international prices and the country's macroeconomic situation.

OVERVIEW

Trends in Coffee Production and Exports

Production

Ghana is a small robusta producer currently producing around 50,000 bags of coffee per year. Annual coffee production peaked in the mid 1960s at an estimated 100,000 bags but declined to below 10,000 bags in the early 1980s mainly as a result of drought and bush fires in 1983 which destroyed many trees. Production recovered in the late 1980s and sizeable growth took place after liberalisation in the early 1990s prior to the international price rises in 1994. Production increased from 15,000 bags in 1989/90 to 22,000 bags in 1990/91 and has remained between 25,000 and 50,000 bags since. Cross border movements of coffee according to differences in grower prices between neighbouring countries (Togo and Côte d'Ivoire) make accurate production estimates difficult (Table 1 and Diagram 1).

Table 1: Ghana — Coffee Production, Trade ('000 bags) and Prices (US c/lb)

CROP YEAR	Production ('000 bags)	Exports ('000 bags)	Grower Prices (c/lb)	Export Unit Values (c/lb)
1960s (average)	73			
1970s (average)	52			
1979/80	21	8		
1980/81	25	31	58	83
1981/82	17	20	137	81
1982/83	9	8	137	90
1983/84	8	12	33	108
1984/85	8	7	39	105
1985/86	10	9	43	119
1986/87	12	11	36	90
1987/88	9	10	40	70
1988/89	10	6	38	63
1989/90	15	11	36	41
1990/91	22	15	34	37
1991/92	30	26	32	50
1992/93	25	41	22	40
1993/94	32	46	40	53
1994/95	50	93	77	100
1995/96	38	35	70	94
1996/97	48	8	26	48
1997/98	44	71	45	51
1998/99f	50			

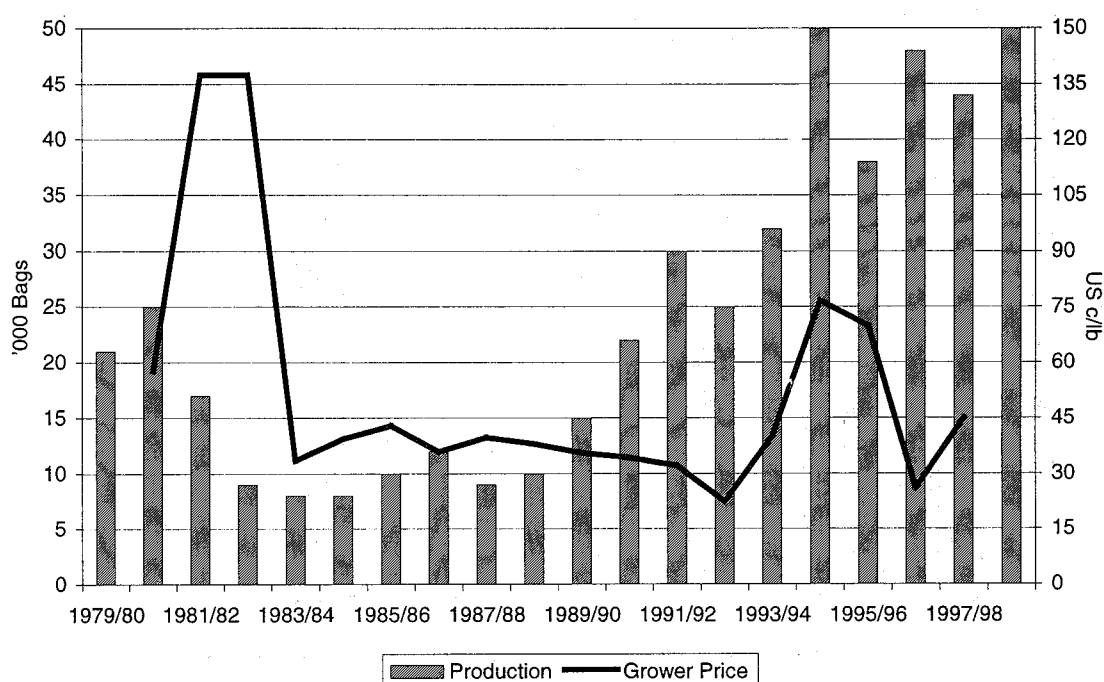
Note: Data until 1990/91 from the ICO. Subsequent data from the Cocobod of Ghana.

Source: USDA, ICO, Cocobod and LMC

Robusta coffee is grown in the same areas as cocoa in Ghana although not inter-cropped. Coffee production is on a much smaller scale than cocoa as farmers have tended to favour cocoa, the more financially attractive and less labour intensive crop. Low production is also the result of low yields due to inferior planting material and low intensity of farming. Coffee holdings are spread throughout the cocoa area, with the majority in the Ashanti Region (46%), followed by the Eastern Region (28%), Western Region (12%), the Volta (7%) and Brong-Ahafo (7%).

Coffee farm sizes are estimated between one and five hectares, with the majority of farms having less than two hectares of coffee. There are also a number of large plantations, some of which are currently being rehabilitated, each with around 150-200 hectares. In the late 1970s, the Cocobod established a number of plantations which were destroyed, while still in their establishment stage, during the bush fires of 1983. Following the fires, the Cocobod redeveloped 19 of their plantations with an estimated 3,100 hectares planted to coffee. These were later privatised during liberalisation of the sector in 1991/92. From 1991 to 1995 about 15 of these plantations had been sold, all were in need of rehabilitation although less than five are currently being developed.

Diagram 1: Ghana — Coffee Production and Grower Prices, 1979/80-1998/99

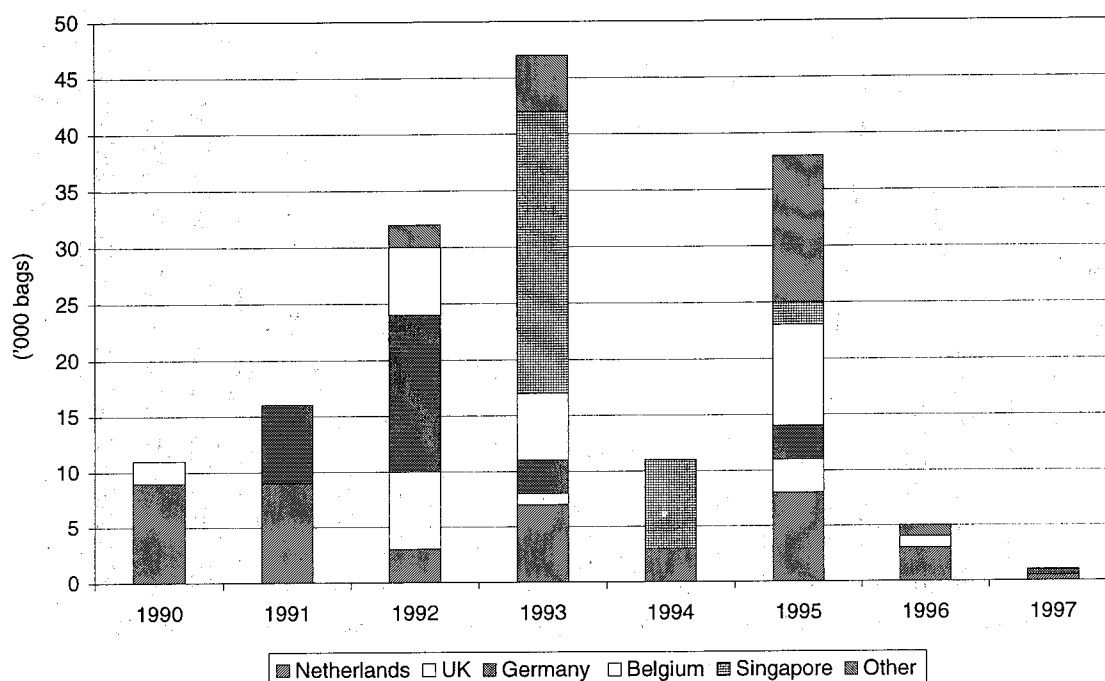


Exports

Exports of Ghanaian coffee fluctuate enormously according to the extent of cross border movements. In 1980/81 for example, exports reached 31,000 bags, up from 8,000 bags in 1979/80. From 1981/82 to 1990/91 exports ranged from 6,000 bags to 20,000 bags. Exports increased during the 1990s due to higher production resulting from higher prices following liberalisation. Exports fell considerably in 1996/97 due to a combination of lower international prices and the liberalisation of the coffee sector in neighbouring Togo in 1996. Some Ghanaian coffee is now being smuggled into Togo for export due to the more attractive prices.

A lapse in the use of certificates of origin by Ghanaian exporters make export figures difficult to interpret. ICO data, for instance, only accounts for the destination of a total of 1,000 bags of coffee exports in the 1997 calendar year, representing at most 10% of the estimated exports in that year. Given the significant margin of error that is embedded in the ICO export data as a result of this, the data used from 1990/91 onwards in Table 1 is taken from the Ghanaian Cocobod's statistics. Diagram 2, however, shows export data by destination as recorded by the ICO. Currently the main destinations for Ghanaian coffee are the UK, Germany, Italy and the Netherlands.

Diagram 2: Ghana — ICO Registered Coffee Exports, 1990-1997



Coffee in the Economy

Agriculture is the dominant sector of the Ghanaian economy, representing 40-45% of GDP, 50% of export earnings and 70% of employment. Food crops account for 30% of GDP, the main crops being maize, cocoyam, cassava and other root crops. The agriculture sector is, however, dominated by cocoa which accounts for over 30% of export earnings. The agriculture sector is estimated to be growing at an annual rate of 3.8%.

Coffee is not a main revenue earner for the Ghanaian economy although it is an important aspect of agricultural diversification which has been part of government policy for many years, and which prompted the World Bank funded Agricultural Diversification Project in 1991.

GOVERNMENT POLICY

Macroeconomic Policy

A series of internal and external shocks, compounded by poor economic management, caused a sharp deterioration in the economy during the 1970s and early 1980s. The drought of the early 1980s coincided with a sharp adverse movement in Ghana's terms of trade as oil price rises were accompanied by falling cocoa prices. The government's introduction of quantitative import restrictions, foreign exchange supply restrictions, price controls, and rationing further exacerbated the decline in the rate of economic growth. The distortion of price signals and market incentives led to growth in the black market, corruption, smuggling and tax evasion. Between 1970 and 1982, per capita income fell 30% in real terms, while domestic saving and investment declined from 12% and 14% of GDP, respectively, to almost zero. Prices increased at an annual average rate of 44%, while real export earnings halved.

Faced with economic crisis the government embarked upon a structural adjustment programme in 1983, which included a Cedi devaluation in 1984 (of 30%) and gradual conversion to a floating exchange rate through the use of a foreign exchange auction. This programme, combined with expansion in exports of gold and other primary products, helped to reverse the decline in the economy.

During the 1989 to mid-1992 phase of the programme, significant financial sector adjustment was made: regulation in the banking sector was improved and the foreign exchange auction was abolished. At the end of 1992, a constitutional government was elected (and re-elected in late 1996) and the emphasis of economic policy shifted more fully towards stimulation of the private sector. A private sector development plan was initiated and, in 1993, the government announced that the investment code would be further liberalised and that there would be radical revisions to tax and price control laws. Real GDP growth accelerated by 4.9% in 1993. However, this rate declined to 3.8% in 1994, as inflation began to accelerate from 10% in 1992 to 25% in 1994 and exceeded 70% in 1995 (Table 2).

Table 2: Ghana — Macroeconomic Conditions, 1990-1997

	1990	1991	1992	1993	1994	1995	1996	1997
Exchange Rate, Cedi per US\$	326	368	437	649	957	1,200	1,637	2,050
Real GDP Growth	3.4%	5.3%	3.9%	4.9%	3.8%	4.5%	6.9%	3.5%
GDP (1995 prices) Bn Cedi	5,958	6,273	6,518	6,839	7,100	7,419	7,933	8,210
GDP (1995 prices) Bn US\$	7.42	7.70	7.17	6.35	5.60	6.18	6.79	7.60
Per Capita GDP (US\$)	494	497	449	386	330	354	378	411
Interest Rate (discount rate) % p.a.	33%	20%	30%	35%	33%	45%	45%	45%
Annual Inflation (CPI)	37%	18%	10%	25%	25%	74%	34%	28%
Population (millions)	15.02	15.48	15.96	16.45	16.94	17.45	17.97	18.50

Source: IMF Financial Statistics, LMC

The IMF approved a three year loan to Ghana in 1995 under the Enhanced Structural Adjustment Facility (ESAF). The economic reform programme has achieved significant progress in structural reform since then. GDP grew by 7% in 1996 and inflation had fallen to below 30% in 1997. Although the ESAF facility was suspended in 1996 a second annual loan of US\$110 million was approved in March 1998. The government's economic programme aims to boost economic growth and halve inflation by 1999. The macroeconomy was affected by an electricity crisis in 1998 which caused power shortages across the country and was the cause of a reduction in growth estimates.

The release of the IMF's second annual ESAF in 1998 points towards the IMF's qualified endorsement of the government's macroeconomic policy. The budget deficit, which was an estimated 10% in 1996 and 9% in 1997, fell to 6% in 1998 and is forecast to reach 4% in 1999. However, high inflation and interest rates continue and act as a disincentive to increased investment.

Agriculture/Coffee Production Policy

The agricultural sector grew by less than 2% per annum in the late 1980s. Beginning in 1991, in order to promote expansion in the sector, government involvement in the marketing of all agricultural goods, with the exception of cocoa export marketing, was lifted (although for coffee, private exporters did not enter the market until the 1992/93 coffee year). Export levies on coffee and sheanuts were removed and centralised control over prices for crops such as coffee, rubber, cotton and tobacco were abandoned. In 1991, the Ghanaian Government received a loan from the World Bank to assist with its agricultural diversification strategy including the expansion of non-cocoa tree crops. Strategies for the coffee industry via liberalisation were to improve the pricing structure (more specifically to raise the producer price to 65% of the f.o.b. price) and increase investment in research and development.

Although the Ministry of Food and Agriculture (MOFA) is responsible for the agricultural sector, in 1995 the Cocobod, which performs some data collection for the coffee sector and is the issuer of coffee exporters' licences, was transferred to the Ministry of Finance's portfolio. The government has recently begun a review of agricultural policy and a report detailing potential projects for future funding, called the Agricultural Sector Services Investment Programme (AgSSIP), will be released by the end of 1998. The report has been compiled by representatives of both the government and private sector.

Provision and Financing of Services (i.e., Extension/Research)

Currently, extension advice for coffee (and cocoa) farming is provided by the Cocoa Services Division (CSD) of the Cocobod, although priority has always been given to cocoa, the main export earner. Some of the CSD's cocoa stations have coffee demonstration plots and CSD has been successful in developing coffee propagation units (13 coffee nurseries) and distributing clonal planting material but not in persuading farmers to rehabilitate the coffee areas. This is primarily due to the perceived higher returns from cocoa than from coffee.

The CSD officers cover the whole of the coffee growing areas, running workshops and using demonstration plots for husbandry advice free of charge. Growers are provided with planting material (seedlings and clonal cuttings) free of charge, however there is an active secondary market which has arisen due to the difficulties in meeting demand.

In January 1999, the provision of coffee (as well as cocoa) extension advice to farmers is to become the responsibility of MOFA's Extension Services Division. The reasoning behind this action is clear: it is unnecessary and costly to have two extension officers attend the same areas, one providing advice on coffee and cocoa and the other on all other farming techniques. However, in practice the transfer of responsibility is difficult. It is expected that some of the CSD officers will be re-employed by MOFA, however, the extension officers at the CSD are employed under very different contractual terms to those at MOFA. Despite these well recognised problems, the CSD was expected to cease operations in January 1999.

With the dissolution of the CSD comes the leasing of its coffee seedling centres to the private sector. Some of the 13 nurseries are yet to be taken over by the private sector.

Coffee research is undertaken by the Cocoa Research Institute of Ghana (CRIG). CRIG has been administered by the Cocobod since 1979. CRIG's mission is to undertake research into all problems relating to the production of cocoa, coffee, sheanuts and tree species which produce fats similar to cocoa butter. Coffee research priorities include the selection and breeding of improved planting material and an entomology programme. Recently, CRIG re-introduced a new species of coffee called Arabusta, a cross of the arabica and robusta species, which was initially developed in the early 1990s. The new "cross-breed" is a more disease-resistant and high-yielding variety. Experimental plantings are currently being monitored.

The coffee research programme has achieved good results in producing and distributing improved planting material. The agronomy and entomology programmes have also produced some useful results. However, the amount of research work on coffee undertaken since 1991 under the World Bank funded Agricultural Diversification Project has been less than initially envisaged. By the time of the project's mid-term review in 1996, only 8% of funds allocated to coffee research had been spent. This was primarily due to project proposals failing to get through the CRIG, the Cocobod, Ministry of Finance and World Bank pipeline. The result of this has been that the majority of coffee research has been funded by the Cocobod, and as the Cocobod funding for CRIG has declined, so have the funds that are available for coffee research, as cocoa research continues to take priority.

Distribution of Inputs

Before liberalisation, the CSD sold inputs to farmers at a subsidised rate, although the use of inputs was more prevalent among cocoa farmers than coffee farmers. Input requirements were determined by CRIG and CSD. Subsidised input provision by CSD has continued even after liberalisation. However, under the Ghanaian Government/IMF Structural Adjustment Programme, responsibility for the procurement and distribution of inputs, pesticides, fungicides and spraying materials was transferred to the Ghana Cocoa, Coffee and Sheanuts Farmers' Association (GCCSFA) in 1994. In 1995, GCCSFA formed 'Ghana Inputs Company' (GIC) which procures inputs either through direct imports or through private companies on the domestic market. GIC operates district warehouses and retail shops at the village level. Other inputs such as fertilisers (as well as those sold by GIC) are also supplied by independent retailers who also have shops at the village level. In order to be able to compete with the private sector, the GCCSFA is unable to subsidise inputs and, as a result, the price of certain items such as pesticides have increased by as much as 1000% since before liberalisation.

Until recently, private distributors have found it difficult to trade profitably due to the subsidisation of key cocoa inputs, such as insecticides and fungicides, by CSD. However, these subsidies have now been almost completely removed. For coffee, farmers use few insecticides or fertiliser and pests and diseases are not considered a serious problem. The specifics for fertiliser use has not yet been recommended by CRIG.

Credit

Before liberalisation, farmers were able to receive inputs (particularly for cocoa) on credit from the Cocobod and payment would be deducted when the farmer sold his crop to the Cocobod. Coffee due to be delivered to the Produce Buying Company (PBC), the buying arm of the Cocobod, could be used as collateral as the PBC was the sole buyer of the crop. However, after liberalisation, this form of credit was no longer available. Most smallholders do not have any other form of collateral and therefore access to credit is limited.

In the early years of liberalisation, some exporters, or Licensed Buying Companies (LBCs), made cash advances to farmers. However, without being able to ensure delivery of the coffee at harvest time, many LBCs were unable to recoup these advances as farmers simply sold to the highest bidder. This mass "default" brought a halt to the practice of cash advances.

Plantation owners are more able to obtain credit or raise finance through the formal banking sector than farmers. However, interest rates are high and banks are generally reluctant to put money into coffee. Some funding for plantation development has been provided by donor agencies such as the International Finance Corporation (IFC — part of the World Bank) and the Ghanaian Agricultural Development Bank (ADB).

The ADB provides almost 80% of the credit available to the agricultural sector. The ADB provides finance both for marketing and for establishment or plantation development, although in the latter case only one company has applied for a plantation development loan. The bulk of ADB's funding for coffee is secured via the Ministry of Finance from the World Bank Agricultural Diversification Fund (currently amounting to loans of around US\$250,000). To date, only around \$60,000 of the ADB's own funds have been loaned to the coffee sector. The agricultural sector default rate is currently around 13%.

Other institutions which participate in rural credit, although on a very small scale, are rural banks and credit unions.

Rehabilitation of Plantations

With liberalisation of the coffee market came the privatisation of the Cocobod coffee plantations. Over the period 1991-1995, 15 out of the 19 plantations were sold to the private sector. They were all in a state of disrepair. Rehabilitation of the coffee plantations has been, in several cases, stalled by land tenure problems. Many of the new owners have not been able to redevelop the land as the original owners of the land claim that they have not been properly compensated by the Cocobod since the land was acquired by the government in 1979. In some cases, the new owners have had to pay both the Cocobod and compensate the original landowners before being able to proceed with rehabilitation.

Some of the plantation owners are now bidding for the lease of the CSD propagation units in order to secure seedling provision for their planting programme as well as for future commercial sales of cuttings. Financing for this is being sought from funds which remain unused from the World Bank Agricultural Diversification Project (which terminated in 1998).

MARKETING SYSTEMS

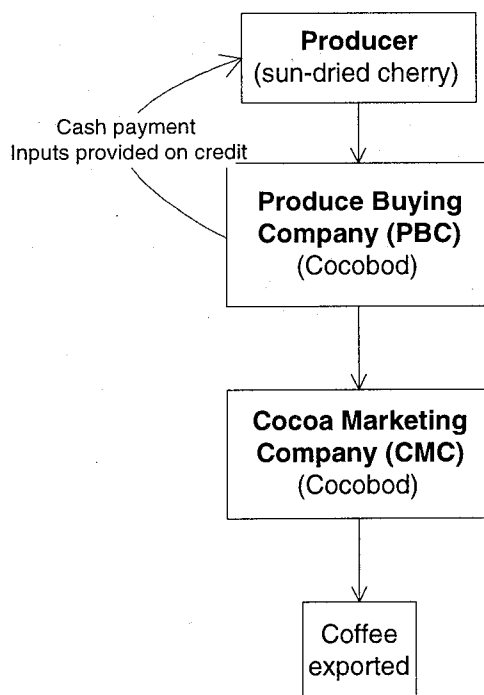
Marketing Channels

Pre-liberalisation

Prior to liberalisation, the Cocobod had full control over both the internal and external marketing of Ghanaian coffee. Growers sold their sun-dried coffee to the internal buying arm of the Cocobod, the Produce Buying Company (PBC), who then transported it to one of their eight hulling centres in the producing areas to be processed into clean beans. The Cocobod had a monopoly on processing and also had a number of mobile hullers. The coffee was inspected, graded and sealed by the Cocobod's Quality Control Division (QCD) at the PBC regional warehouses before being transported to one of the two ports, Tema or Takoradi. As with cocoa, the Cocobod fixed grower prices and marketing margins for coffee annually.

The Cocoa Marketing Company (CMC) of the Cocobod was responsible for the export of coffee (Diagram 3). The external marketing of Ghana's coffee was undertaken by the CMC's trading team. The CMC only traded in physical coffee, using the robusta futures markets in London for price reference. Given the small volumes of coffee being traded, the CMC rarely sold forward but worked primarily on a back-to-back basis.

Diagram 3: Pre-liberalisation Marketing Chain



Post-liberalisation

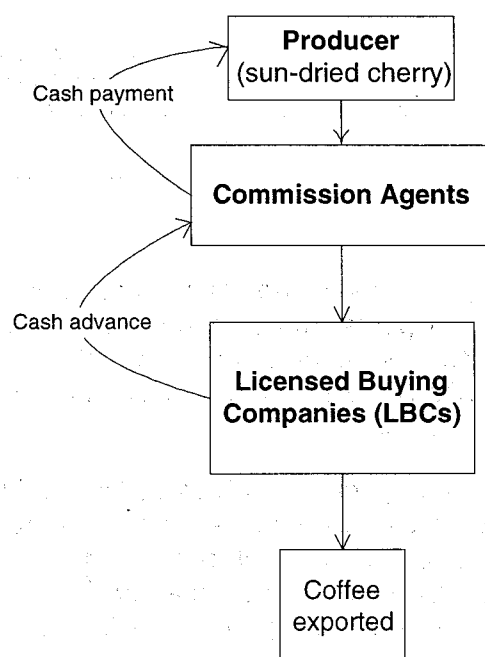
Liberalisation of the Ghanaian coffee sector (as well as all other "non traditional" exports) was part of the conditionality of the IMF structural adjustment programme. There was little resistance due to the low quantities of coffee which were being produced in Ghana. Furthermore, the costs to the Cocobod of supporting the coffee industry were seen to be far outweighing the benefits.

Liberalisation of coffee, sheanuts and cashew marketing was initiated in April 1991. Although retaining a role in regulating the coffee industry, the Cocobod withdrew from the purchasing and export of coffee as of the 1992/93 coffee year: it no longer set grower prices or marketing margins and the private sector was able to operate freely both in the internal and external marketing of coffee. In 1992, seven companies were issued with coffee trading licences (by the Cocobod). This was followed by the licensing of a further nine in 1993, 30 in 1994 and 19 in 1995. However, only 27 of the 46 Licensed Buying Companies (LBCs) purchased coffee in 1994/95. For the 1998/99 season, there are 75 registered coffee LBCs. However, less than ten are expected to actually export any quantity of coffee. Most of the main LBCs are locally owned and OLAM is the only multinational operating in Ghana. In addition to handling coffee, the LBCs purchase cocoa internally which they sell to the Cocobod which retains the monopoly for cocoa export. For the cocoa trade, grower prices and marketing margins continue to be fixed annually by the Cocobod.

The LBCs purchase sun-dried cherry, which is bagged in jute sacks of 65kg, from their intermediaries (or Commission Agents) who purchase directly from the farmer having received cash advances from the LBCs. The cherry is then hulled by the LBC and the clean coffee is hand picked to remove black and defective beans (Diagram 4). Quality control is still in the hands of the Cocobod's Quality Control Division (QCD). QCD officers travel to the regions to inspect, grade and seal the coffee and the coffee is then transported to the port of shipment. Ghanaian coffee is not sorted according to screen size, it is the proportion of defects in the bean samples which determines the grade. In some cases, foreign buyers request that SGS certify the weight and grade of the coffee. The export documentation required is: a certificate from QCD after their check at the hulling centre; a certificate from Customs and Excise at the port check point; and, if requested by the buyer, an SGS certificate. The LBCs have leased processing and storage facilities from the Cocobod and some private warehouses are also being rented. Although hulling capacity is great, many of the hulling machines are over 30 years old.

Prior to liberalisation, the Cocobod sold Grade I beans to local roasters at around a 50% discount to the export price. There were three or four large domestic roasters who supplied the domestic market including the army, universities and colleges. With liberalisation, this industry ceased as roasters were unable to purchase at the free market price. At present, the domestic market for coffee is supplied by Nestlé with soluble imports from Côte d'Ivoire.

Diagram 4: Post-Liberalisation Marketing Chain



Pricing Policy

Prior to liberalisation, the grower price was set annually by the government/Cocobod on the basis of production costs, taxation, marketing margins and the expected f.o.b. price. However, the setting of the grower price was seen as being secondary to that of the cocoa grower price. The small volume of coffee meant that a degree of cross-subsidisation between the grower price for coffee and cocoa could occur. This ensured growers a relatively stable internal price and protection from world price collapses and volatility. This was evident in the maintenance of grower prices which averaged 80% of the export unit value during the international price slump from 1989 until liberalisation.

Following liberalisation, the grower price has been determined by market forces, with exporters using the London terminal market price for price reference. Growers are paid cash on delivery. In the lead up to liberalisation, there was little preparation both in raising awareness of the farmers to a liberalised system and in creating the infrastructure within which the private sector could effectively operate. Farmers are currently poorly informed with regard to the prevailing international market price and receive only sporadic information via newspapers or radio.

Although government policy recommends that a tax be levied on coffee exports, there are currently no tax levies in place.

Regulation/Quality Control

Coffee prior to liberalisation was graded according to three grades; Grade I, II and a third "sub-standard" grade which was prohibited from export. Beans were not sorted by screen size. Following liberalisation, Grades I and II continue to be the main exported grades but there are now exports of 100% black bean consignments and what are known as "pickings" or defective beans (Table 3). There continues to be no sorting for screen size and most exports are sold on a sample basis.

Table 3: Ghana — Coffee Quality Standards (Post Liberalisation)

Superior (Grade I)	Defects 20% maximum - 4% black beans maximum
Fair Average (Grade II)	Defects 25% maximum - 8% black beans maximum
Sub-standard (Pickings)	Defects 50% maximum - 8% black beans
Black Beans	100% black beans

Quality control has always remained in the hands of the Quality Control Division (QCD) of the Cocobod. The QCD inspects, grades and seals coffee up-country and issues a grading certificate. The QCD also performs a further check at the port before export. Its role has not changed with liberalisation. It remains law that coffee should not have more than a 13% moisture content.

The liberalised coffee sector requires that LBCs be licensed by the Cocobod. In order to obtain a trading licence, LBCs must possess: a Tax Clearance Certificate; an Export Promotion Council Certificate; evidence of coffee industry knowledge and qualified staff; sufficient funds; and evidence of potential overseas buyers. LBCs are legally required to submit monthly operational reports to the Cocobod.

Recommendations for the licensing of companies comes from the Independent Committee which was established by the Cocobod during liberalisation to review LBC applications and which consists of representatives from the government, banks and the Export Promotion Council.

The Cocobod, as the regulator of the industry, is responsible for the collection of data. In practice, much of their data are collected from the Export Promotion Council which receives export figures from exporters as part of their annual awards for export performance.

Crop Finance

Prior to liberalisation, the Cocobod raised funds on the domestic market to finance its purchasing and export operations. It did this by issuing "Cocoa Bonds" through the Bank of Ghana. This system was regarded as being relatively inflexible. Interest was locked-in for the duration of the Bills (90 or 180 days), removing any potential benefit from settlement prior to maturity date should funds no longer be needed. When funds were not available to retire Bills on maturity, unpaid principal was typically rolled over for another complete interest period.

Since liberalisation, the Cocobod has negotiated a syndicated loan to purchase the cocoa crop, while LBCs have faced greater difficulty in financing their operations. Most LBCs require short-term finance to cover the period between purchasing the coffee from the farmer and its export. LBCs are reliant upon a combination of own funds, loans from the domestic banking system and pre-finance from overseas buyers.

Funds raised from the domestic banking system attract a high interest rate, around 32% in 1998, down from 48% in previous years, and collateral requirements are beyond most of the smaller LBCs. Recently, a credit facility has been established by the World Bank to improve access to crop finance: the Private Enterprise and Export Development Programme (1993-1998) provides crop finance through the domestic banking system for periods of up to 12 months, but a bank guarantee is normally required which has limited its accessibility.

Similarly, USAID funded a Trade Investment Programme (TIP) from 1992 to 1997 which provided commodity financing. Cedi 4.2 billion was made available for trade finance under the TIP in March 1997, all of which was disbursed by Ecobank on behalf of the Ministry of Finance (for a fee). The Ecobank was established as a merchant bank in 1990 through ECOWAS, the West African banking group. Eleven companies dealing in coffee (as well as other commodity exports such as cashew, sheanut etc.) have received approximately Cedi 1 billion of the TIP money. The requirement for securing a TIP loan is a letter of credit (LC) from a buyer. The bank aims to provide the exporter with 70% of the value of that LC, although maximum limits apply. Also, a letter of assurance has to be provided by the director of the LBC. The bank has been operating an informal warehouse warrants' scheme as security for payment. Certificates are either issued by SGS, if the coffee is stored in their warehouses, or by the bank itself which carries out its own inspections. The interest rate for the loans is set by the Ministry of Finance and was 30% in 1997. The repayment period is 180 days, but once repaid a further equivalent amount can be borrowed. Overall, the TIP has suffered a default rate of approximately 30%, although there have been no defaults among companies borrowing funds for coffee.

Ecobank is not yet willing to loan its money to small agricultural exporters due to the perceived high risk. Other smaller banks have been providing some loans to agricultural exporters but default rates have been very high. Furthermore, many LBCs are unable to meet the bank's loan criteria of a high level of collateral and the submission of three years of accounts.

Crop finance from the ADB, which is the supplier of 80% of agricultural credit, is on a three to six month rollover basis and around US\$1 million are loaned annually to, at present, three companies. Where necessary, the bank operates an inventory credit programme, generally using SGS certification.

Around half of the current exporters have access to foreign funding. This can either be in the form of direct borrowing from international banks or pre-financing from overseas buyers. Although not widely practised, in general, pre-financing is provided on the basis of trust between the buyer and exporter. International borrowings have a lower interest rate than domestic borrowings although the LBC then becomes subject to foreign exchange risk. The small volume of coffee traded means that few LBCs receive crop finance from international buyers as it is difficult to secure sufficient quantities to honour forward contracts.

With limited collateral, new local entrants face great difficulty in trying to secure domestic financing. Warehouse warrants are in limited operation at present, although banks are being flexible in their application. Generally, SGS warehouses and certificates are used, although some banks conduct their own inspections. SGS operates an inventory finance scheme and charge a fixed annual fee. SGS issues a warehouse receipt for each consignment in the name of the company or bank which is financing the stocks. The stocks are only released for shipment upon instruction from the financier. Local exporters consider the fees to be very high and thus many are discouraged from its use.

Risk Management

Prior to liberalisation, all the market risk was taken by the Cocobod. The grower received a fixed price during the season and all the risk of a fall in international prices fell on the Cocobod. However, this stability of grower prices was achieved by the grower receiving a relatively low proportion of the international price in some years and cross-subsidisation from the cocoa sector in others. The CMC did little to reduce and

manage its coffee price risk, primarily because the coffee volumes were so small compared to those of cocoa and thus the risk was considered to be relatively low. In contrast to cocoa, the CMC did not sell coffee forward, partly because of the low level of the coffee crop, but also because of the low liquidity in the forward months in the futures market.

Following liberalisation, all the price risk has been transferred to the market participants. LBCs have sought to reduce their risk by selling back-to-back with prices fixed outright, thus when coffee is bought it is sold promptly. In some cases, coffee is bought and stored in warehouses until a sufficient quantity has been purchased to be marketed. Some LBCs have entered into forward contracts (of up to three months) with foreign buyers, although again, the volumes contracted are small. For these contracts, prices are fixed in advance, subjecting the LBC to the price risk between the time of signing the contract and purchasing coffee from the grower. Some LBCs which are partly foreign owned are able to hedge their coffee via their foreign head office, thus assisting them to alleviate their price risk. Most of the main coffee exporters are also buyers of cocoa in a system where margins are guaranteed by the Cocobod. Thus, while coffee trading is viewed as potentially highly profitable, in comparison to cocoa trading, the risks are considerable. With only limited quantities available and strong competition, some LBCs have been unable to secure the volumes necessary to honour forward contracts and have defaulted on them, this was particularly true in the years immediately following liberalisation. In order to increase availability and reduce this risk, some LBCs have acquired land and are developing coffee plantations. Around 15 of the original 19 Cocobod plantations are now in the hands of the private sector, although only around five are currently in the early stages of rehabilitation.

Following liberalisation, growers were subjected to free market prices having been given little information on the risks associated with a liberalised system. In the first year of liberalisation in 1992/93, international prices were very low and as a result grower prices fell. However, international prices recovered soon after that and the higher prices were passed down to the farmers. The fall in international prices in 1996, however, led to a nationwide outcry from farmers who threatened to burn the trees due to the lack of buyers and the poor prices being offered for the coffee crop.

INSTITUTIONS

Prior to liberalisation, the coffee sector was dominated by the Cocobod and its wholly owned subsidiaries. It was established in 1948 to control all marketing of cocoa, coffee and sheanuts with the aim of protecting farmers from excessive price fluctuations and other market instability. The Cocobod was responsible for: the distribution and pricing of inputs (mainly seedlings, sprayers, insecticides, fungicides, fuel oil and farm implements); providing extension and training including disease identification; managing all aspects of coffee research; and all the internal and external marketing of coffee.

Although the Cocobod's role in coffee marketing is now limited to regulation, it remains active in the export marketing of cocoa. It is made up of a number of operating divisions and subsidiaries, which can be divided into marketing and non-marketing functions.

Non-Marketing Functions:

- *The Cocoa Research Institute of Ghana (CRIG)*, investigates a range of problems associated with cocoa production. It has a relatively minor coffee research programme; and
- *The Cocoa Services Division (CSD)*, has always been the provider of extension services to coffee and cocoa farmers. However, as of January 1999, the CSD is to be disbanded and extension services will be provided by the Extension Services Division of the Ministry of Food and Agriculture.

Marketing Functions:

- *The Produce Buying Company (PBC)* was, until recently, the largest single commercial enterprise in Ghana. Up until the 1992/93 season, it had a monopoly on the internal marketing of cocoa, coffee, sheanuts and cashew. The PBC now competes with LBCs to buy cocoa. Since 1992/93, it has had no role in coffee marketing;
- *The Quality Control Division (QCD)* is responsible for inspection, grading and sealing of export bags and subsequent check testing and sampling. For coffee, the QCD inspects coffee at the regional level and prior to export. For cocoa, it conducts inspections at three stages of the marketing chain, up-country at the primary buying depots, at the point where cocoa is taken over by the CMC and at the point of export; and
- *The Cocoa Marketing Company (CMC)* has a monopoly on export sales of cocoa beans from Ghana but following liberalisation in 1992/93, no role in coffee exporting.

All coffee farmers are members of the Ghana Cocoa, Coffee and Sheanuts Farmers' Association (GCCSFA). The GCCSFA is run by a national association of ten members and is funded by a sales levy on cocoa exports and has the full support of the government. At village level, there are 2,800 farmers' societies. The GCCSFA competes with private traders in the provision of inputs.

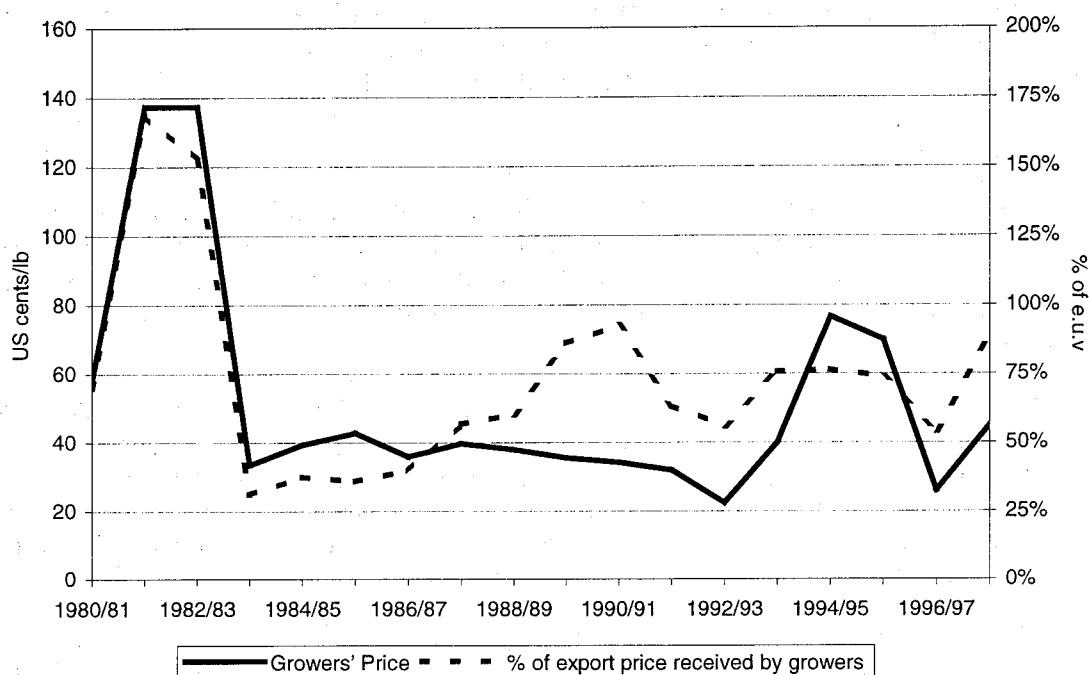
The Coffee Producers and Marketing Association is a trade association which was registered in March 1998 with the aim of promoting plantation development in Ghana. The Association has produced a project proposal and is seeking financing for a "Working Capital Loans" scheme which, it is envisaged, will be used to rehabilitate existing plantations, set up seedling production centres and operate an outgrowers scheme for smallholders.

EVALUATION OF COFFEE SECTOR REFORMS

Grower Prices

Prior to liberalisation, grower prices were fixed annually by the government. With very low international prices in 1989/90 and 1990/91 the price received by growers rose to over 80% of the f.o.b. price as the grower price was maintained by a cross-subsidy from the cocoa sector. Following liberalisation, the influx of new and inexperienced exporters and the continued slump in international prices led to a fall in grower prices. However, with the recovery of international prices and with competition forcing the inexperienced traders out of the industry, the grower price has increased and has, since 1994/95 (except for during the 1996 international price slump), been over 70% of the f.o.b. value (Diagram 5).

Diagram 5: Ghana — Growers' Prices (Absolute Values and as a Proportion of Export Unit Value), 1980/81-1994/95



Quality and Quality Control

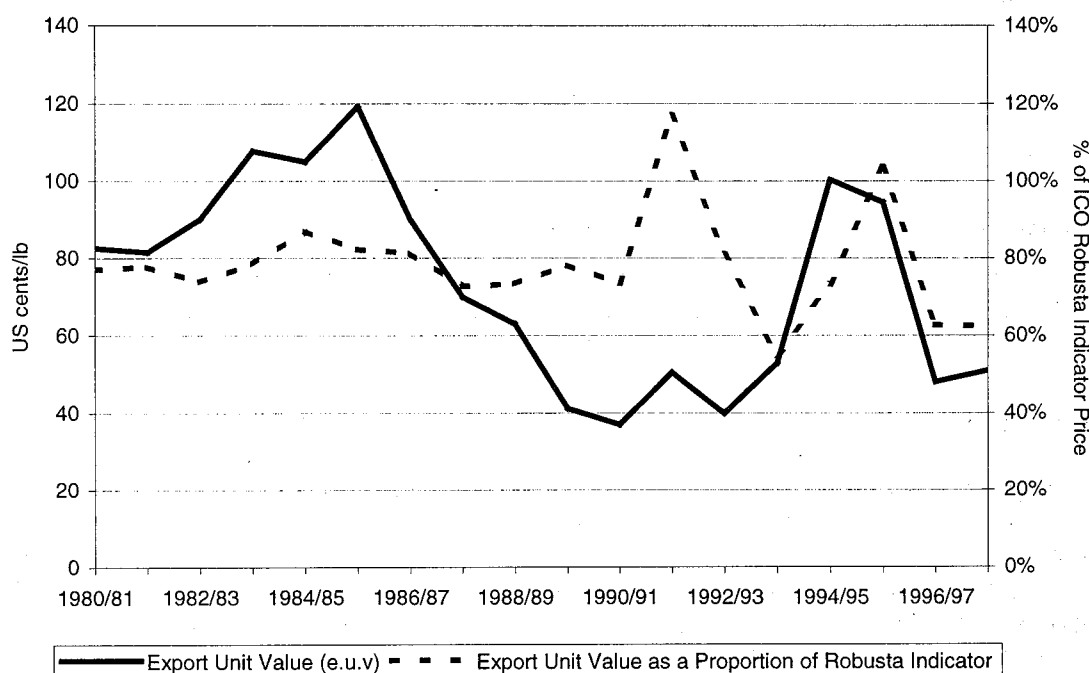
Ghanaian coffee does not have a good reputation for quality and after hulling the level of defective beans can be as high as 30%, although this varies enormously according to region. At export level, grading standards are lenient compared to other producing countries, with defects of up to 20% allowed for Superior Grade I, and grading does not include differentiation by bean size. As a result, and because Ghanaian coffee is produced in small quantities and not well known, Ghanaian coffee has sold at a discount on the London futures market price of between US\$250 and US\$350 per tonne since liberalisation. Grade II coffee is sold at a further discount of US\$30-50 per tonne below the Grade I price. Following liberalisation, exporters are now permitted to export black bean consignments and "pickings" which sell at around US\$600 and US\$500 per tonne respectively.

Quality levels have remained unchanged throughout the transition to a liberalised market. The amount of defective beans has historically been high and is due to the harvesting of immature beans. The high number of defects means that the costs of hand picking and sorting are high. Grade I coffee exports account for a maximum 25% of exports.

Comparing average f.o.b. prices with the ICO Robusta indicator to gain an impression of the level of the Ghanaian differential reveals that prior to the collapse in international prices in the early 1990s, Ghanaian export unit values were relatively stable at around 75% to 80% of the ICO robusta indicator. This fell to under 60% in 1993/94 but has since risen. The fall in value immediately following liberalisation was due to the influx of

small, inexperienced companies, which were unable to effectively export the crop, and the collapse in international prices at the time. The QCD was flooded with demands for check up-country in that period and the result was a marked deterioration in the quality of coffee exports. However, this problem was later addressed by the QCD and as there has been a concentration of exporters in recent years, so the quality levels have improved. An increase in international prices at the time of the Brazilian frost in 1994 is reflected in the export unit value received at that time (Diagram 6).

Diagram 6: Ghana — Export Unit Values as a proportion of the ICO Robusta Indicator Price, 1980/81-1997/98



Marketing Costs

Table 4 shows indicative marketing costs for the 1998/99 season. With an average f.o.b. price of around \$1,400 per tonne, grower prices are currently averaging 64% of the f.o.b. price. This is lower than in recent years when grower prices, according to the Cocobod, have averaged closer to 75% of the f.o.b. price. Growers are generally paid per 65kg bag of dried cherry at an approximate price of 60,000 to 70,000 Cedis. The exporters' margin is relatively high at 16%, although with the main exporters exporting a maximum of 1,000 tonnes, overheads are likely to represent a large proportion of costs. There are no taxes on coffee exports at present.

Table 4: Ghana — Marketing Costs, 1998/99

	Cedi/kg	US c/lb	%
<i>Grower price (per 65kg bag of cherry)</i>	67,664		
Outturn (50%)			
Grower Price (green bean)	2,082	40.36	64%
Middleman margin	59	1.15	2%
Transport to hulling centre	210	4.07	6%
Hulling/Hand sorting/Bagging	210	4.06	6%
Transport to port	43	0.82	1%
Port Costs	61	1.18	2%
Finance	88	1.71	3%
Exporters' margin	524	10.16	16%
Taxes/levies	-		
f.o.b	3,276	63.50	
Exchange Rate (Cedi:\$)	2,340		

Source: Industry, LMC.

Production

The high level of cross border movement makes it difficult to assess the effect of liberalisation on production. However, the demand for seedlings has increased to the extent that the free provision of seedlings by CSD is insufficient to cover demand and smallholders are purchasing seedlings on the secondary market. Around five of the ex-Cocobod plantations are being rehabilitated by the private sector which raises future production potential. Although only in the early stages of development, the potential for output is good and new interest is still being shown for plantation development.

With the disbanding of the CSD, the coffee propagation units/nurseries are in the process of being leased to the private sector. The Agricultural Diversification Programme led to the privatisation of production of planting material. Thus, future prospects for the provision of seedlings and cuttings to farmers and plantations are good. The private sector considers sales of cuttings and seedlings as potentially profitable.

