

Ref: Capacity building in support of preparation of Economic Partnership Agreement –
8 ACP TPS 110 / Project #043

EU market access opportunities for Ghana and position for EPA negotiations

Final Report

April 2004

This Report was prepared with the financial support of the European Commission. The opinions are those of the authors and not necessarily those of the European Commission.

This report is produced by TAC, with inputs from Dr. Thierry Apoteker (Team Leader, Managing Director, TAC), Mr Sylvain Barthélémy (Senior Economist, TAC), Mrs Isabelle Legrand (Economist, TAC), Dr Charles Jebuni (Centre for Policy Analysis) and Mr Effa Ahenkora (Manager, Ernst & Young Ghana). The report also benefited from many inputs and comments received at two workshops organised in Accra, Ghana, in March 2004.

Table of Contents

List of Appendixes.....	3
List of Boxes	4
List of Charts.....	5
List of Tables	6
I Background	7
I.1 Overview of the Macroeconomic Challenges and Trade Policy	7
I.1.1 Introduction.....	7
I.1.2 Overview of Economic Performance	7
I.1.3 Trade-Related Issues.....	12
I.2 The Cotonou Agreement and key challenges for EPA negotiations	13
I.2.1 Loma Conventions (from 1975 to 2000)	13
I.2.2 Cotonou Agreement (June 2000)	15
I.2.3 The trade pillar of the Cotonou Agreement: EPAs	16
I.2.4 Consequences of EPAs and difficulties linked to EPAs	18
I.3 Overview of EU-ACP trade relations	22
II Detailed analysis of Ghana's exports.....	24
II.1 Characteristics of Ghana's exports by products and partners	24
II.1.1 Trade by products.....	24
II.1.2 Trade in services	28
II.1.3 Exports by partners	31
II.1.4 Trade policy	35
II.2 Ghana's exports to the EU	37
II.2.1 Exports to the EU by products	37
II.2.2 Ghana's market shares in the EU	40
II.2.3 Ghana's competitors in the EU	46
II.2.4 Analysis by destination within the EU	48
III Analysis of Ghana's constraints and potential for export expansion to the EU	54
III.1 Tariff and non-tariff trade constraints on Ghana's export	54
III.1.1 Tariffs	54
III.1.2 SPS and other safety regulations	62

III.1.3	Rules of Origin.....	65
III.2	Other non-regulatory EU constraints	67
III.3	Perceived constraints to Ghana’s exports and potential for diversification.....	68
III.3.1	Overall ingredients and conditions for export diversification and expansion	68
III.3.2	Export constraints and potential by sector	70
III.3.2 - a	Horticultural Products.....	71
III.3.2 - b	Fish and Tuna Processing	74
III.3.2 - c	Wood Processing.....	75
III.3.2 - d	Aluminium, Plastic and Hair Products.....	76
III.3.2 - e	Garments, cassava starch etc.....	77
III.3.2 - f	Services	78
IV	Simulation tool for Ghana’s export to the EU	79
IV.1	GHANEX, a model of Ghana’s exports to the EU by products	80
IV.2	GHANSHARE, a supply side model on Ghana’s market share in the EU	82
IV.3	Simulations 2004-2007	86
IV.3.1	Simulation with GHANEX.....	87
IV.3.2	Simulation with GHANSHARE.....	89
V	Conclusion and policy options.....	91

List of Appendixes

Appendix 1: Ghana: Merchandise Exports by Product, 1995-2001 (USD).....	94
Appendix 2: Ghana's Non-Traditional Exports, 1995-2002 (US dollars).....	100
Appendix 3: EU imports, Ghana's exports and Ghana's market shares in the EU, by products at a 6-digit level of classification.....	102
Appendix 4: Main competitors for Ghana in the EU, by products at a 6-digit level of classification (market shares in %)	108
Appendix 5: Ghana's export to the EU, by country of destination (1993-2002, th Euros)...	114
Appendix 6: Ghana's export to the EU,	115
by products and country of destination.....	115
Appendix 7: List of supplier institutions and companies members of Eurep-Gap	123
Appendix 8: Historical Data for Simulations on Exports	126
Appendix 9: Historical Data for Simulations on Market Shares	132

List of Boxes

Box 1.1. the Loma Conventions: 1975-1999	14
Box 1.2. Principles underlying EPAs' negotiations	17
Box 1.3. Potential Positive and Negative Impacts of the Cotonou Agreement and the EPAs	21
Box 2.1. Methodology for synthetic measure of competitors' presence and importance.....	46

List of Charts

Chart 1.1. Regional Composition of EU Imports from ACP Countries in 2002	23
Chart 2.1. Ghana's exports by major importing partner	32
Chart 2.2. Ghana's major partners (1996-2002)	33
Chart 2.3. Ghana's exports by partners and products	34
Chart 2.4. Ghana's exports by products and partners	34
Chart 2.5. Concentration of Ghana's exports to the EU	39
Chart 2.6. Dominance of commodity / unprocessed exports	40
Chart 2.7. EU's weight in total Ghana's exports	41
Chart 2.8. Size of markets and market shares.....	43
Chart 2.9. Size of markets and market shares (details)	43
Chart 2.10. Growth of markets and market shares.....	45
Chart 2.11. Growth of markets and market shares (details)	45
Chart 2.12. Synthetic Index of competitors' position in the EU market.....	47
Chart 2.13. Share of European countries in Ghana's exports to the EU (2002)	49
Chart 2.14. Share of major EU buyers in Ghana's exports (1993-2002).....	50
Chart 2.15. Structure by products of Ghana's exports to the largest EU markets (2002)	51
Chart 2.16. Structure of Ghana's major exports by country of destination (2002)	52
Chart 4.1. FACILITY variable.....	84
Chart 4.2. VSGS variable.....	85
Chart A.1. Ghana's exports and market shares in EU, by products.....	102

List of Tables

Table 1.1. Ghana - Selected Economic Indicators, 1997-2002.....	8
Table 1.2. Balance of Payments Account, 1997-2002 (US\$ million)	10
Table 2.1. Composition of Exports, 1995-2002 (Percentage Shares of Total Receipts)	26
Table 2.2 Composition of Ghana's Non- Traditional Exports, 1995-2002	27
Table 2.3. Trade In Services	29
Table 2.4. Trade in Services Exports By Mode of Supply (in US\$ Millions)	29
Table 2.5. Growth In Services Exports By Mode Of Supply	30
Table 2.6. International Tourist Arrivals from Thirteen Generating Markets	31
Table 2.7. Breakdown of Ghana's export by major trading partners.....	32
Table 2.8. Ghana's exports to EU - 2002 (thousands euros)	37
Table 2.9. Total Ghana's exports (millions of USD)	40
Table 2.10. Concentration of Ghana's exports by products in EU countries	51
Table 3.1. Tariff rates applied to imports from Ghana into the European Union.....	55
Table 3.2 : Tariff escalation for downstream commodity processing	58
Table 4.1. Econometric estimates of Ghana's exports to EU	81
Table 4.2. VSGS variable	84
Table 4.3. Econometric estimates of Ghana's market share in EU	85
Table 4.4. GHANEX simulation - summary table : assumptions.....	88
Table 4.5. GHANEX simulation - summary table : results	88
Table 4.6. GHANEX simulation - details on Cocoa : assumptions.....	88
Table 4.7. GHANEX simulation - details on Cocoa: results	89
Table 4.8. GHANSHARE simulation- results by HS6 products	90

I Background

1.1 Overview of the Macroeconomic Challenges and Trade Policy

1.1.1 Introduction

Ghana is a small developing economy with a population of about 20 million and a per capita income of US\$300.00. Over the last two decades the country has pursued a series of economic reforms under the structural adjustment programme (SAP). These reforms changed the country's development strategy from state-led industrialization oriented towards import-substitution to export-led growth with the private sector taking the lead. The reforms have also implied an approach to poverty alleviation that focused on economic growth in contrast to the previous strategy based on consumption and redistribution.

The economic reforms have generated impressive gains in terms of macroeconomic indicators. In spite of these, the underlying micro-economy does not appear to have changed significantly, giving rise to the continuing uncompetitive production structure and a fragile economy vulnerable to external shocks. The reforms and performance of the economy left a debt overhang that eventually led the country declaring itself HIPC in 2001.

1.1.2 Overview of Economic Performance

The performance of the Ghanaian economy over the last five years reflects the fundamental macroeconomic challenges confronting the economy after almost two decades of economic reforms.

As indicated in Table 1.1, real GDP growth dropped from 4.4 percent in 1999 to 3.7 percent in 2000 and increased further to 4.5 percent in 2002 and is recorded to have increased further to 5.2 percent in 2003. The rate of inflation as measured by the year-on-year change in the consumer price index (CPI) increased from 13.8 percent in 1999 to 40.5 percent in 2000 and dropped over the next two years to 15.2 in December 2002. However, by February 2003 the rate of inflation had hit 29.0 percent, but fell consistently to 23.6 percent by end-December 2003.

Table 1.1. Ghana - Selected Economic Indicators, 1997-2002

	1998	1999	2000	2001	2002	2003
A. STRUCTURE OF THE ECONOMY						
Gross Domestic Product (GDP)						
Real GDP (¢ billion)	4,747	4,957	5,142	5,358	5,599	5,890
Real GDP Growth (%)	4.7	4.4	3.7	4.2	4.5	5.2
of which Agriculture	5.1	3.9	2.1	4.0	4.4	6.1
Industry	3.2	4.9	4.7	2.9	4.7	5.1
Services	6.0	5.0	5.4	5.1	4.7	4.8
Real GDP per Capita (% change)	1.8	1.8	1.2	1.6	1.9	2.1
B. PRICES (including GDP Deflator)						
CPI Inflation (%)						
Average (December) 1/	-	12.4	25.2	32.9	14.8	26.7
Year-on-Year (December)	15.7	13.8	40.5	21.3	15.2	23.6
GDP Deflator (Annual % change)	16.9	13.9	27.2	34.6	22.8	27.1
C. INVESTMENT & SAVINGS (% of GDP)						
Gross Investment						
Private Sector	11.7	11.7	14.8	13.8	13.6	13.6
Public Sector 2/	12.4	9.8	9.2	12.8	6.1	8.7
Gross Savings	14.8	9.9	15.6	21.2	20.4	21.9
Private Sector	14.3	8.3	14.3	16.1	19.2	16.3
Public Sector 2/	0.5	1.6	1.3	5.1	1.2	5.6
Incremental Capital-Output Ratio (ICOR)	3.4	5.5	5.8	5.7	5.9	3.8
D. EXTERNAL SECTOR						
Current Account Deficit 3/	(7.0)	(12.4)	(6.7)	(5.7)	(0.5)	0.5
Trade Balance (% of GDP)	(6.8)	(16.4)	(15.3)	(19.4)	(11.4)	(8.9)
Marchandise Exports/GDP Ratio (%)	23.2	25.8	35.7	32.9	33.3	30.5
Marchandise Imports/GDP Ratio (%)	30.0	42.2	51.1	52.3	44.8	39.5
External Debt Indicators						
External Debt/GDP Ratio	79.3	75.0	120.5	115.8	112.3	85.7
External Debt Service Ratio 4/	27.4	21.1	21.0	18.9	18.4	16.8
Gross International Reserves						
US\$ million (end-period)	508	317	264	344	502	1,095
Months of imports	1.9	1.1	1.1	1.3	2.1	4.1

Source: IMF Country Reports No. 03/134 (May 2003); IMF Press Release No. 03/66 (May 12, 2003)
 ICOR is obtained as $I - 1/yGDP_t$; where $yGDP$ is real GDP growth, and I is the investment rate.

A major lesson to be learnt from this experience is that regaining and sustaining macroeconomic stability is one of the major challenges of the economy. Attaining macroeconomic stability was one of the major objectives of economic reforms introduced by Ghana in 1983. A combination of exchange controls introduced in 1960, fixed exchange rate, high protective tariffs, and expansionary fiscal policy accommodated by the Central Bank led Ghana to a crisis by 1981. Inflation reached 122 percent in 1982 and a substantial part of economic actors exited from the formal economy. The basic economic conditions prior to reforms were common across Africa: they involved macroeconomic mismanagement,

overvalued currencies with restrictive trade regimes leading to major price distortions, and rent-seeking behaviour responding to these distortions. The resulting inefficiencies and misallocation of resources had disastrous consequences for the economy. The need for economic reforms was obvious by 1982.

Starting from 1983, the government committed itself to economic reforms involving macroeconomic stabilization, market deregulation and realignment of the currency to a more realistic rate of exchange. At the same time, the trade regime was liberalized over a number of years. The response of the economy to these reforms was impressive.

The rate of inflation, which had hit 122 percent in 1982, dropped to about 40 percent in 1984 and continued to decline over the next year. In spite of some variations, the rate maintained a generally downward trend reaching a low of 10 percent in 1992. This was facilitated by fiscal deficits that remained below 3 percent of GDP until 1992; necessitating only limited borrowing by government. It appeared that at long last Ghana had attained macroeconomic stability, which needed simply to be maintained by a combination of tight monetary and fiscal policies. Over the next period, the macroeconomic stability that Ghana had achieved in the earlier period was lost. The rate of inflation increased, peaking at an average of 59 percent in 1995, before decelerating somewhat in subsequent years (Jebuni, C., Dirk Stryker and Selina Pandolfi, 2001).

A combination of external shocks, inappropriate policy responses and increased demand for public expenditures has made the attainment and maintenance of macroeconomic stability chronic. In spite of almost two decades of economic reforms, the Ghanaian economy remains fundamentally fragile and vulnerable to external shocks because of a very narrow export and production base. Thus, when in 1999 the economy suffered an external shock involving the tripling of crude oil prices to over US\$30.00 per barrel, a sharp decline of world cocoa prices to a 27-year low, and the price of gold to below US\$300.00 per ounce, the economy was devastated. The shock intensified in 2000. The effects of the shock were compounded by loss of fiscal discipline and a weak monetary stance in the run up to the Presidential and Parliamentary elections in December 2000 (CEPA, 2003, No. 6).

Thus in the Ghana Growth and Poverty Reduction Strategy (GPRS) achieving macroeconomic stability is one of the necessary conditions for poverty alleviation with about 27 percent of programme resources devoted to this objective.

Macroeconomic stability and poverty reduction cannot be sustained without significant supply responses reducing the demand for increased public expenditure. These public expenditure pressures and the difficulties of expenditure management are epitomized by public expenditure overruns and build-up of arrears. It is also clear that macroeconomic stability cannot be attained without realistic budgeting and fiscal discipline (CEPA, 2003, No.6).

Strengthening and accelerating economic growth is another major macroeconomic challenge facing the Ghanaian economy. Following economic reforms, real GDP, which had been declining since 1976, increased sharply in 1984. Between 1984 and 1999, real GDP grew by an average of 5 percent per annum. Per capita income growth averaged close to 1.8 percent

per annum. These initial responses generated some optimism. Policymakers were beginning to entertain hopes of acceleration in economic activity during the period 1992-1994, when real GDP was expected to grow at a rate of 8 percent per annum. However, instead of accelerating, the rate of growth decelerated. Real GDP growth rate though positive declined below the 5 percent rate of the previous period and has remained below 5 percent until 2003. An uncertain and fluctuating growth rate became the norm.

A central assumption of the adjustment programme in Ghana was that trade and exchange rate reforms and the maintenance of macroeconomic stability through demand management would produce sustainable and higher rates of economic growth. Some of the correction of bad policies may enable output to “bounce back” through increased and more efficient utilization of existing resources (Collier and Gunning, 1999). However, sustaining this growth required increased longer-term factor accumulation and increases in total factor productivity. The evidence suggests that the rate of investment increased from 3.7 percent in 1983 to about 16.0 percent in 1993. These levels of investments were too low to sustain accelerated growth. Much of this investment was financed from outside as domestic savings remained low.

Part of the higher investment rate observed in Table 1.1 could be due to the revision of the GDP data. If these numbers are accurate they also suggest that increased investment was accompanied by decreased productivity of capital. As indicated in Table 1.1, the incremental capital-output ratio (ICOR) increased from a low of 3.4 to a high of 5.9 in 2002. Thus apart from issues of low domestic savings and investment, the levels of productivity in the economy are low. The levels of human capital and technical capacity in Ghana are very low by the standards not only of developed countries but also of industrializing countries in Asia and Latin America (Lall et al, 1994).

Low and uncertain real GDP growth rates imply that the rate at which economic reforms impact on peoples’ lives and reduces the rate of poverty is low. This in turn makes the imposition of further macroeconomic stability difficult and increases the demand for spending by the government. It is for these reasons that the current Ghana Government has embarked on a programme to increase per capita income to US\$1,000 within a decade. This will involve a tripling of the current growth rate and investment levels in excess of 33 percent of GDP.

Table 1.2. shows the more recent external balance of payments position of Ghana. It is characterized by unsustainable current account deficits except for 2002 when favourable external market conditions led to a trade-induced surplus. Work done by CEPA in 1998 suggested that current accounts deficits in excess of 3 percent of GDP were unsustainable.

Table 1.2. Balance of Payments Account, 1997-2002 (US\$ million)

	1997	1998	1999	Prov. Actual 2000	Prov. Actual 2001	Prov. Actual 2002
Marchandise Exports (fob)	1,489.9	2,090.8	2,005.5	1,936.2	1,867.1	2,063.9
Gold	579.2	687.8	710.8	702.0	617.8	689.1
Cocoa Beans and Products	470.0	620.4	552.3	437.1	381.1	463.4
Timber & Wood Products	172.0	171.0	174.0	175.2	169.3	182.7

Others (n.e.c.)	268.7	611.6	568.4	621.9	698.9	728.7
of which Non-Traditional Exports	166.5	242.8	262.3	231.9	249.3	
Imports (fob)	2,128.2	2,991.6	3,279.9	2,766.5	2,968.5	2,705.1
Oil Imports	233.9	215.2	333.3	520.1	516.8	508.1
Non-Oil Imports	1,894.3	2,776.4	2,946.6	2,246.4	2,451.7	2,197.0
Trade Balance	(638.3)	(900.8)	(1,274.4)	(830.3)	(1,101.4)	(641.2)
Services (net)	(471.4)	(354.8)	(310.0)	(187.0)	(182.2)	(243.6)
of which Interest Payments	(145.4)	(148.8)	(131.2)	(109.0)	(106.1)	(126.6)
Private Transfers (net)	400.3	453.8	472.0	499.0	709.7	680.0
Current Account Balance (CAB)	(709.4)	(801.8)	(1,112.4)	(518.3)	(573.9)	(204.8)
Official Transfers (net)	159.7	280.1	148.4	154.0	249.3	220.2
CAB (including official transfers)	(549.7)	(521.7)	(964.0)	(364.3)	(324.6)	15.4
Capital Account Balance	524.8	422.3	726.3	246.5	333.1	24.4
Official Long/Medium (net)	499.4	348.9	144.8	139.7	84.6	(115)
Private Long/Medium Capital (net)	55.4	101.3	367.3	176.8	137.3	97
Other Capital and Errors and Omissions	(30.0)	(27.9)	214.2	(70.0)	111.2	43
Overall Balance	(24.9)	(99.4)	(237.7)	(117.8)	8.5	39.8
Change in Arrears	-	-	62.0	27.0	(89.0)	(49.0)
Official Settlements 1/			(175.7)	(91.0)	111.6	84.0
Memorandum Items						
Gross International Reserves						
End of Period (US\$ millions)	466.0	507.7	317.0	264.0	344.0	501.8
Equivalent months of Imports (cif)	2.4	1.9	1.1	1.1	1.3	2.1
Percent of Gross Domestic Product						
Current Account Deficit (incl. Off. Transfers)	(8.0)	(7.0)	(12.4)	(6.7)	(5.7)	0.3
Trade Balance	(9.3)	(6.8)	(16.4)	(15.3)	(19.4)	(10.6)
Marchandise Exports (f.o.b.)	21.6	23.2	25.8	35.7	32.9	34.1
Marchandise Imports (f.o.b.)	30.9	30.0	42.2	51.1	52.3	44.7
External Debt Indicators						
External Debt/GDP Ratio (%)	82.0	79.3	75.0	120.5	115.8	112.3
External Debt Service Ratio	32.3	27.4	21.1	21.0	18.9	18.4

Sources: Bank of Ghana Statistical Bulletin, March 2002; MOF – Budget Statement, February 2003

Traditionally, the balance of payments position has been determined by the trade account. Surpluses on the trade accounts were generated through imports compression measures to compensate the deficits in both the services and capital accounts. However, with the economic reforms and considerable donor support this pattern was changed and the balance of payments was largely determined by the capital account.

By a series of measures Ghana moved from a fixed exchange rate regime in 1982 to a flexible exchange rate regime – in which the exchange rate is determined largely by supply and demand for foreign exchange – in 1991. The liberalization of the exchange rate regime was also accompanied by a phased liberalization of the trade regime involving the abolition of import licensing, removal of quantitative restrictions, and a simplification and consolidation of the tariff system. Ghana now has four tariff bounds with tariffs ranging between 5 percent and 30 percent.

These measures were successful in reducing the anti-export bias of the trade and exchange rate regimes and creating incentives for exports. As a result exports, with some long lags due to production rigidities, increased substantially. At the same time, because of the existence of excess capacity due to the lack of imported inputs, imports increased on account of intermediate demand. Indeed for the period up to 1994, imports were increasing at a faster rate than exports, raising issues of sustainability of the program (Killick, 2000). These developments led to a worsening of the trade balance, which was financed by donor support. Thus, between 1984 and 1995, in spite of worsening trade deficits, surpluses were recorded in the overall balance of payments position. These surpluses enabled the Central Bank to build up considerable foreign exchange reserves. Thus by 1995 foreign exchange reserves could cover 5 months of imports.

However, in the second half of the 1990s, external assistance to Ghana declined. The balance of payments now reverted to depending on the trade account. With generally large trade deficits, the overall balance also run into deficits.

Throughout the reform period Ghana's external indebtedness increased. The external debt-GDP ratio increased consistently from 54.5 percent in 1989 to a peak of 120 percent in 2000. The external debt service ratio, meanwhile, had fluctuated. From a high of 56.7 percent it declined to 25.8 percent in 1992 and increased to 36.5 percent the following year and has remained above 20 percent for most of the rest of the period. Unable to honour its external debt obligations in 1999 and 2000, Ghana opted to go under the enhanced HIPC programme in 2001. This has partly reduced the external debt service ratio.

1.1.3 Trade-Related Issues

As indicated in the introduction, the economic reform programme in Ghana also implied a change in development strategy to an export-led growth strategy. The fundamental trade policy issue is to maintain incentives through the exchange rate and trade policy regimes in the face of increasing pressure from the import-substitution lobby. The exchange rate changes discussed earlier led to a substantial depreciation of the exchange rate, increasing the domestic currency costs of imports. At the same time the trade liberalization also increased the competition faced by domestic industry. This has led to the collapse of some uncompetitive domestic industries with others that are unable to adjust to the changes being under considerable stress. These have led to calls for higher levels of tariffs as protection for domestic industry. There have also been demands for a stronger currency, also partly because of the inflation effect and a stable exchange rate.

The beneficiaries of these changes represented by the Federation of Associations of Ghanaian Exporters (FAGE) are less organized and less able to articulate their case. At the same time, because of the importance of the international taxes for government revenues, the Ministry of Finance and Economic Planning make tariff policy decisions with only the revenue implications taken into consideration. Thus tariff policy become part of macroeconomic policy.

A substantial part of the balance of payments difficulties of the economy are due to the concentration of exports on the three primary commodities – gold, cocoa, and timber. In spite of the substantial growth in both the volume and value of exports, Ghana's exports remain concentrated in the three primary commodities, which predispose the balance of payments to substantial external vulnerability. The only change that has occurred is that gold is now the leading export instead of cocoa. Gold exports are however less useful because substantial amounts leak out for the purchase of equipment and machinery, and the repatriation of profits and dividends.

Even though non-traditional exports have increased since 1985, their levels are still below 10 percent of total exports. The limitations to a large extent arise from domestic supply constraints. More recently, tourism is emerging as a significant foreign exchange earner. Indeed, tourism might rank as the third most important export after gold and cocoa. Moreover, tourism has substantial multiplier effects. Thus issues of services liberalization will be of substantial interest to Ghana. The more substantial trade policy issue is to design policies to encourage the diversification of exports including services exports.

Issues of further trade policy liberalization and concessions from Ghana may be limited by domestic supply considerations. Continued liberalization in the face of low domestic technical and human capacity can lead to further unemployment in the short-run. This may be unacceptable in a democratic dispensation in the short-run.

There is mounting pressure from the Association of Ghanaian Industries (AGI) about reverse discrimination. The Ghana Standards Board specifies the technical standards and the quality of products that can be produced by Ghanaian industry. This has raised issues also of dumping.

1.2 The Cotonou Agreement and key challenges for EPA negotiations

1.2.1 Loma Conventions (from 1975 to 2000)

Upon the creation of the European Economic Community (EEC) with the Treaty of Rome (1957), was also set up the first European Development Fund aimed at supporting the colonies of some of the founding members. The first official programs came with the Yaoundé Conventions, which started in 1963 and which were dedicated at providing commercial advantage and financial aid to the 18 AASMs (Associated African States and Madagascar). With the entry of the United Kingdom in the EEC, the Yaoundé Conventions were replaced by the first Loma Convention (1975) in order to include 20 members of British Commonwealth in Africa, the Caribbean and the Pacific. The ACP group was thus set up.

The first Loma Convention and the three which followed it shared similar characteristics: the principle of non reciprocal preferential trade for most of ACP countries' exports to the EEC, the principle of equality of the partners, the right for each State to determine its own policies

and development strategy and the security of relations based on the achievements of the cooperation system.

Based on these broad principles, the Loma Conventions went from 1975 until 1999 and were based on several measures aimed at promoting development in these countries (see Box 1.1).

Box 1.1. the Loma Conventions: 1975-1999

Loma I (1975):

- Reduction of tariffs but not on agricultural products covered by the CAP (Common Agricultural Policy). Restrictions imposed in the form of rules of origin, quality and standards.
- To face these restrictions, the Trade Protocols (bananas, sugar, beef , veal and rum) were introduced.
- Introduction of the STABEX (System of Stabilization of Export Earnings) that compensated countries adversely affected by variations in the prices of their exports (cocoa, coffee, tea and groundnuts).
- Non-trade issues incorporated as well (agreement on industrial cooperation, financial and technical aids) and development aid focused on industrial development strategy.

Loma II (1979):

- Introduction of the SYSMIN (System for Safeguarding and Developing Mineral Production), which provides help to the mining industry for countries dependent on mining products for their earnings.

Loma III (1984):

- Move away from industrial development and trade towards sectoral development in agriculture and fisheries.
- Priority areas: rural development, self-reliance and food security
- Aid to transportation and communication, regional cooperation and cultural and social cooperation
- Focus on human rights

Loma IV (1989):

- Focus on structural adjustment
- Aid partly conditional on implementation of changes in economic policy
- Uncommitted special loans transformed into grants
- Crosscutting themes focused on: democracy, women's rights, environmental protection, decentralised cooperation, economic diversification, private sector development, regional cooperation.

In spite of the promising goals embedded in them, the outcomes of the Loma Conventions however appeared disappointing. First, considering the trade part of the Conventions, while ACP trade with the EU increased, it however lost importance relative to EU trade with other countries and regions. Moreover, access to EU markets remained restricted on key products. Finally tariffs were imposed on finished products but not on primary agricultural products, thus penalising value added production (trade preferences rather than supply side factors' development was then seen as a way to promote economic growth). Secondly, the development impact of the Conventions could also be challenged. Indeed, at the end of Loma IV, 40 countries of the ACP group were still considered Least Developed Countries (LDC), while over the same 1975-1999 period, non-ACP countries grew more than twice as fast as ACP ones. It also turned out that ACP countries often led counterproductive domestic policies that were not prevented by the Conventions. Finally, the latter did not account sufficiently for the institutional inadequacies and structural deficiencies of ACP countries.

To tackle these issues and difference itself from the Loma Conventions, the Cotonou Agreement was hence signed in 2000.

1.2.2 Cotonou Agreement (June 2000)

As stated in the first article, the Agreement aims at “reducing and eventually eradicating poverty consistent with the objectives of sustainable development and the gradual integration of the ACP countries into the world economy”, while its fundamental objectives are economic growth, employment, poverty eradication and good governance.

The differences with the Loma Conventions, which set the baselines of the new agreement were the following:

- The new agreement includes policy conditionality of the development aid
- The restructuring of development aid and financial support components is now based on needs, local ownership and a participatory approach to development
- It sets up a new basis for regional agreement and cooperation
- It seeks to involve non-state actors

The agreement further relies on 3 pillars :

Political dimension

This pillar contains articles on peace building, migration and human rights among others.

Development aid

This second pillar relies on a participatory approach to development, in which countries are responsible for their own economic policies. It seeks to involve non-state actors in the

development process. It stresses the need to respect the principles of human rights, democracy and the rule of law and emphasises the importance of good governance.

The Agreement further introduces the formulation of a Country Support Strategy (CSS) jointly between each ACP country and the EU, revised annually through a National Indicative Program (NIP), hence making development aid conditional on policy issues.

According to this dimension of the Agreement, development aid is to be distributed according to the needs of individual countries, taking into account: per capita income, the human development index (HDI), population size, indebtedness, exceptional export earning losses and high dependence on export earnings. Moreover the Agreement focuses on investment promotion as a development means.

The STABEX and SYSMIN are removed and support is now provided to countries hit by instability of export earnings, without consideration of specific products.

Economic and trade cooperation

The main objective of this third pillar is to liberalise essentially all ACP imports from the EU by 2020. Lacking supply and trading capacity will be supported through trade and economic cooperation. ACP exports to the EU will enter free of custom duties except for bananas, sugar and beef and veal among others (to be liberalised later through specific agreements).

This third dimension is to be implemented through EPAs (Economic Partnership Agreements), which are to determine the timetable and process of removal of trade barriers (see 1.2.3).

1.2.3 The trade pillar of the Cotonou Agreement: EPAs

EPAs should be coherent with the objectives and principles of the Cotonou Agreement as stated above. They also have to be built on regional integration initiative: they should be supportive of the Regional Integration Programs (RIPs) of ACP states and regions and take into account the development objectives and strategies of ACP countries.

EPA negotiations rely on several principles (see box 1.2. below) and aim at:

- Improving ACP exports to the EU
- Promoting intra-ACP cooperation, regional and inter-regional trade
- Increasing the ACP share of world trade
- Contributing to poverty alleviation and sustainable development by building productive, institutional and human resources capacities
- Structural transformation of ACP States: adaptation and adoption of information technology (IT), development of science and technology, mobilisation of scarce resource in productive sectors to attract foreign direct investment (FDI)

- Diversifying exports and increasing their value-added (inter-sectoral linkages, role of private sector)

Box 1.2. Principles underlying EPAs' negotiations

Positive Differentiation : special treatment to be granted to ACP LDCs (cf. EU's Everything But Arms, EBA, initiative) and to small, land-locked and island countries.

ACP unity, solidarity and cohesiveness: to secure negotiating strength with the EU and in WTO negotiations

Principle of partnership in EU-ACP relations

Preservation of Loma Acquis: trade liberalisation should improve current market access for ACP countries and no country should be worse after the EPAs than before. The Everything but Arms (EBA) Initiative has already been granted to LDCs and the review of the Commodity Protocols is planned, to make them WTO compatible while maintaining the benefits they brought.

Coherence and Consistency: countries will indeed be engaged in several parallel negotiations (with the WTO, other countries or group of countries) and should ensure consistency between national and regional policies.

Sustainability: the new agreements should seek to minimise adjustment costs associated to them and promote trade creation and not diversion (prevent from welfare losses). This principle ought to be present at all negotiation levels (economic, social, political, institutions...).

Sequencing: economic and trade cooperation should be built on regional integration of ACP States (CARICOM, SADC, WAEMU...). However, own regional integration should be consolidated first (priority over EPAs)

Flexibility/Asymmetry: ACP States' level of development should be accounted for and WTO compatibility criteria should not prevent the agreements from considering potential "differential treatment".

Legitimacy, Transparency, Inclusiveness: all stakeholders should be included in negotiations (civil society and private sector)

Although the aim and principles underlying EPA negotiations are welcome by ACP countries, the latter are also willing to debate with the EU on several important issues they would like EPAs to take into account. Thus in the negotiations, which were launched February, 7 2004, between the ESA (Eastern and Southern Africa) group and the EU, a set of priority issues have been defined:

➤ The steps, which need to be taken to integrate the region better (both intra- and inter-regionally) have to be settled. For this purpose, a gradual liberalisation towards the EU needs to occur, with the set up of a sensitive list of imports and the introduction of a special safeguard clause among others.

- The existing market access to the EU needs to be improved, especially as regards agriculture and fisheries. In that respect, rules of origin have to be simplified with new ones being negotiated for products originating from the EU. Similarly, SPS measures, technical regulations and standards have to be fully transparent and explained, so that countries know how to deal with them vis-à-vis the EU.
- Trade in services and trade related issue also have to be tackled, including the questions on potential technology transfer to ACP countries, on electronic commerce, on investment and on the relationship between trade, debt and finance. Finally the broader issue of WTO compatibility and special and differential treatment in trade relationships depending on the country's level of development has to be addressed (see below).
- The EU enlargement and the larger market that will thus be accessible to ACP countries' exports should also be accounted for in EPA negotiations, to make sure that the measures taken are also suiting the greater EU, and to assess the challenges that this enlargement raises for ACP countries (in terms of competition, market access...).

1.2.4 Consequences of EPAs and difficulties linked to EPAs

The Loma Conventions have not been pursued because they did not respect WTO compatibility requirements. Hence the Cotonou Agreement emphasises the need to implement a new trading arrangement to replace the Loma trade regime in 2008, for which they will not have to seek another WTO waiver. However, this WTO compatibility requirement will itself be influenced by the outcomes of the Doha development round, which is still under discussion and should end by January 1st 2005, although the recent failure of the Cancun meeting in September 2003 might delay it.

As a result, the WTO rules for trade arrangement between developed and developing countries still remain unclear, as well as those on "special and differential" treatment (SDT) provisions, regional agreements, agriculture and services. This might impact EPAs negotiations, as they have to be coherent with so far undecided WTO rules. The issue of the third party has thus been raised by ACP countries, which wanted to know whether within the EPA framework they would have to grant other WTO members the same access as the one granted to the European Union.

The main issues at stake are related to Article XXIV on regional trade agreements, by which the EPAs will have to abide. This Article raises several problems¹:

- Paragraph 8 (b) states that customs duties and other restrictive trade rules must be eliminated for 'substantially all the trade' among the FTA members. However, it does not mention how trade must be measured, or which proportion of trade must be liberalised between the parties (volumes, tariff line, trade percentage...).

¹ See "Implications of the Doha Development Agenda on the EPA negotiations", by Sanoussi Bilal, Seminar on the EPA, October 31-November 1st, 2002.

- Paragraph 5 (c) supports a ‘reasonable length of time’ in the establishment of an FTA and the full liberalisation of trade among the parties (not over 10 years unless in ‘exceptional cases’). This timeframe of setting up these FTAs should thus be further clarified.
- The Article appears too restrictive to ACP countries. Indeed, as the Doha Declaration puts it, ‘the negotiations shall take into account development aspects of regional trade agreements’, which underlines the goal of several ACP countries to be able to limit the degree of reciprocity resulting from EPAs. This goes in line with the wish to introduce a Special and Differential Treatment (SDT) clause in Article XXIV, as it already exists in Article V of the General Agreement on Trade in Services (GATS). This would provide for a legal framework for an asymmetry in the application of the article between developing and developed countries. However, the scope of this flexibility would have to be cleared.

New WTO-compatible EPAs have to be development oriented as supported in WTO principles on sustainable development.

In this WTO background, and although the EPA negotiations are still under discussion, their potential consequences can already be assessed as follows:

- **The impacts of the EPAs are bound to be unevenly distributed** upon countries depending on their exports (countries exporting sensitive products should benefit more).

Direct impacts will accrue to countries exporting sensitive products (citrus, coffee, tobacco, leguminous vegetable, bananas, sugar, beef and veal...) in which EU tariffs should be removed, as well as to countries changing their policy regime in a beneficial way because of the agreement.

Indirect impacts might occur through increased intra-regional trade between directly affected countries and the others provided intra-regional trade is promoted (which would occur if transport infrastructure between these countries is developed, and business environment promoted).

The Loma Conventions already offered most of the trade liberalisation benefits to the ACP countries that do not export sensitive products. Consequently, the impact from the Cotonou Agreement will rather come from the restructuring of EU development aid rather than through EPAs.

- **The benefit allegedly brought about by trade liberalisation depends on several factors:**

The administrative quality and capacity of the countries implicated in these EPAs has to be accounted for in order to insure a proper set up and follow up of the new agreement.

The supply capacity of these countries is also key for their exports to be able to compete on the European Market and/or for their local products to face European imports’ competition. As regards the former, the future EU agreement with the MERCOSUR and Mediterranean countries could be a further challenge for ACP countries (competition on the same export

products). Moreover, difficulties in meeting EU sanitary and phyto-sanitary (SPS) standards (especially in the beef and veal cases), can counterbalance the effects of reduced or removed tariffs by making exports to the EU difficult or even impossible.

The timing of the tariff removal should take into account the necessary adjustment period of ACP countries' industries to greater competition from European imports, in order to prevent these countries from suffering because of too fast and inappropriate trade liberalisation (in particular in the agricultural sectors and the processing of certain basic products).

- **The implementation of EPAs will translate into costs for ACP countries:**

The countries will have to face additional costs linked to the implementation or anticipation of EPAs (development and adjustment costs). They may be unbearable for most States owing to their current external and domestic debt burden and to the current flows of aid from the European Development Fund (EDF) and Official Development Assistance (ODA) and the low levels of FDI.

With the planned reduction or removal in customs tariffs, ACP countries will face a reduction in their public revenue. They will thus have to find new ways to make up for this loss, like a value-added tax (VAT) system, whose implementation may take time owing to lack of tradition or experience in this area.

- **The regional component of the EPAs raises several issues:**

The negotiations are supposed to take place between the EU and relevant formal country associations. However, the choice of associations is not easy since they include different countries with diverse economic situations and which do not necessarily belong to the same category (some are LDCs while others are not). Since the EU cannot negotiate EPAs with single countries, the issue is raised for countries that decide to opt out of EPAs because they do not belong to any formal association. This will also make EPAs negotiations more difficult as countries within a group will have diverging interests.

Many countries already belong to existing regional units, some of them including non-ACP countries (i.e. which are not eligible for EPA negotiations). Moreover, in Africa, the integration process still remains mostly formal, with difficulties raised by huge differences between countries of a same group as well as by conflicts plaguing one or several countries/areas of the region.

The EBA Initiative (February 2001) makes EPAs less relevant for LDCs that can benefit from this initiative (removal of all tariffs and quotas on all EU imports from LDCs except arms), but can disrupt EPA negotiations. Taking the example of ECOWAS is here revealing of this issue. Indeed, ECOWAS is a 15-member regional grouping, of which 12 also belong to the LDC group hence eligible to the EBA initiative, thus leaving only 3 countries of the regional grouping (Ghana, Ivory Coast and Nigeria), for which EPA negotiations are fully meaningful and necessary. Although EPAs and the EBA initiative are meant to be complementary, this difference in interests towards EPA negotiations among regional partners can slow down or impair the process.

Box 1.3. Potential Positive and Negative Impacts of the Cotonou Agreement and the EPAs

Potential positive impacts	Potential negative impacts
<p>Lower costs of imported goods from the EU: cheaper inputs for ACP companies and cheaper and better-quality products for consumers (if prices reflect the lower costs).</p>	<p>Decrease in customs revenues : need to find measures to compensate for fiscal losses (suitable tax system...), which however may take a while to be implemented.</p> <p>Unclear effect on trade balance (trade creation versus trade diversion).</p>
<p>FDI attracted by regional associations between the EU and ACP regional groups if these regional blocks are attractive.</p>	<p>Increased competition on domestic market: required improvement of the productive apparatus to face the new situation (cf supply side constraints in most ACP countries).</p> <p>Potential threat for domestic industries not competitive enough (local products replaced by less expensive imports, lack of economies of scale and poor access to advanced technologies): hence job losses and de-industrialisation possible in the short term.</p>
<p>Direct impact for countries exporting sensitive products since they will benefit from lower tariff on their exports to the EU.</p>	<p>Non-tariff barriers (SPS measures, standards...) may lower EPAs potential impacts if no help is provided in that regards.</p>
<p>Policy changes for countries that actually implement positive moves due to the agreement.</p>	<p>Adjustment costs due to EPAs implementation in the export/import sectors (investments to adjust to competition) and in the administrative one (to set up the regulatory framework).</p>
<p>Inter-regional trade may increase if infrastructure and relevant administration are supportive enough or changed in parallel.</p>	<p>Adverse effects if countries lack proper institutions and infrastructure and if EPAs are implemented too fast for them to adjust.</p>
<p>Promote competitiveness in the ACP countries' economies.</p>	<p>Landlocked countries may suffer from a delocalisation of industries to coastal countries (economies of scale and transportation issues). May threaten the economy of these countries.</p>
<p>Export diversification if development aid is actually focused on promoting foreign and domestic investment, transfers of technology and access to equipment goods in ACP countries.</p>	<p>Little or no impact and even negative impact for countries that do not export sensitive products and keep depending on agricultural and commodities exports, with large terms of trade variations.</p>

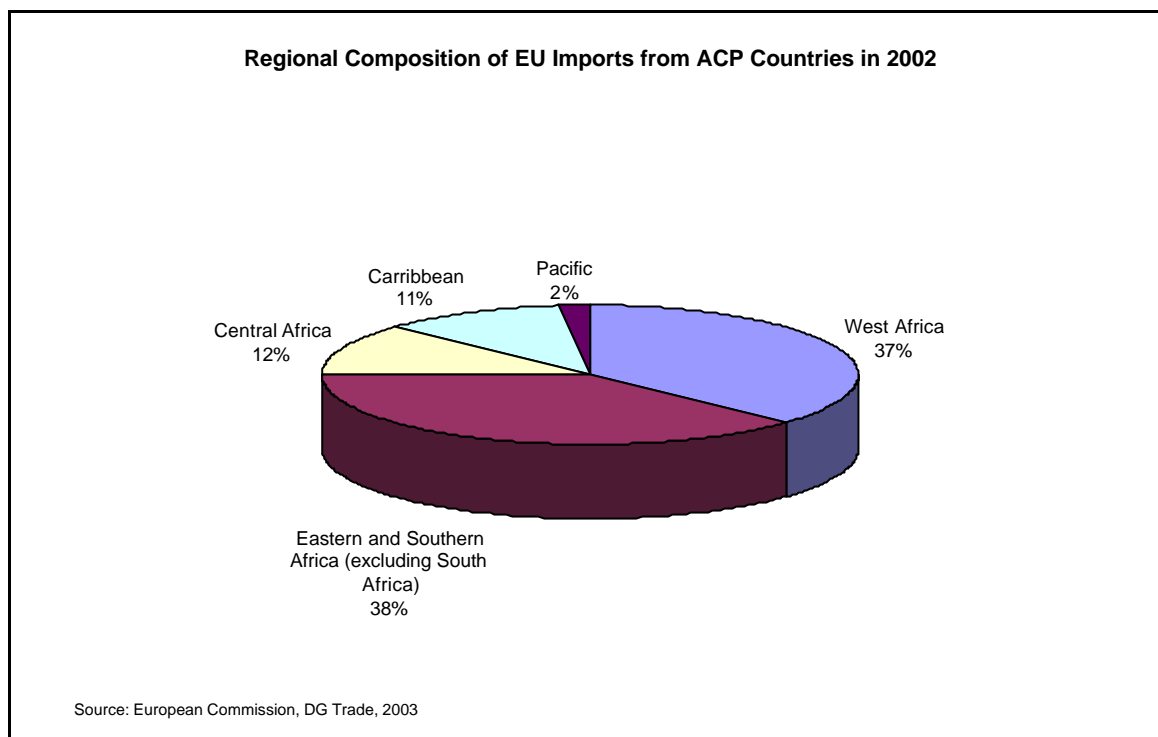
1.3 Overview of EU-ACP trade relations

Trade between the European Union and ACP countries has remained important for the latter, but marginal for the former, with even a decreasing share of ACP countries in total EU imports, while the EU remains the main trade partners of most of African ACP states.

Exports of ACP countries to the EU are hardly diversified (in 2002, eight products represented 61% of these countries' total exports) and most of these exports are raw materials and in particular agricultural products (processed goods represented only 21% of their exports in 2002). On the opposite, exports of the EU to ACP countries are made of machinery and mechanical appliances, ships, vehicles and chemical and allied industries products.

ACP countries trade with the EU is unevenly distributed from one country to another. Excluding South Africa, 10 ACP countries thus represented 60% of total EU-ACP trade exchanges, with Nigeria, Ivory Coast, Angola, Botswana and Cameroon being the leaders. Furthermore, as can be seen in the following chart, African countries represent the bulk of EU imports from ACP countries, historical and political links partly explaining this predominance.

Chart 1.1. Regional Composition of EU Imports from ACP Countries in 2002



As regards trade openness, the EU market is widely opened to products from the ACP countries (99.7% of African ACP exports enter the EU market free of tariffs). However, trade between ACP states remains limited with only 10% of ACP countries’ exports and imports.

Finally, trade has been identified by the EU as one of the six priority areas for its development policy. In the framework of the 9th EDF programming, EUR 522 mn have already been allocated to regional integration and trade related assistance. Furthermore the European Commission develops programmes aimed at meeting trade capacity needs in ACP countries in the medium and long term as well as horizontal programmes supporting supply capacity.

II Detailed analysis of Ghana's exports

II.1 *Characteristics of Ghana's exports by products and partners*

II.1.1 Trade by products

The structure and distribution of Ghana's merchandise exports have been determined by its history and inability to diversify exports significantly. Thus the combination of minerals, cocoa and timber continue to dominate merchandise exports. Ghana's exports, therefore, tend to follow the routes established by its colonial history, with Europe as the main destination. Non-traditional exports such as aluminium and plastic products tend to have more diversified destinations.

The need to diversify the production base and export structure of the Ghanaian economy had been recognized during the colonial period. All Ghana governments since independence in 1957 had recognized the need to diversify and promote exports as the basis of development. In the Seven-Year Development Plan of 1963/64 to 1969/70, it was expected that the industrialization effort would lead to increased exports of processed agricultural products. However, it was not until the 1969/70 Budget that specific policy incentives and the institutional framework was established for the promotion and development of non-traditional exports (Jebuni, et al, 1992).

The incentives package had four main elements. First, a scheme under which manufacturing firms were to receive an income tax rebate, the size of which was dependent on the percentage of total output exported: a 50 percent rebate if 25 percent of total output was exported; 33 percent if 15-25 percent was exported; and 10 percent if 5-15 percent was exported. The second component of the export package was an export bonus; producers would receive 10 percent bonus equivalent to the value of the increase in export earnings compared to the previous year. The third component was the automatic renewal of import licenses for raw materials of importance to manufacturing firms. Finally, there was a waiver of local taxes (i.e. sales and excise taxes) on goods that were exported. Exporters were also eligible for a refund of the local duties paid on raw materials used in the manufacture of exports.

The emphasis of the incentives structure was to encourage the export of manufactured products. As part of the promotion package, the Ghana Export Promotion Council (GEPC) was set up in 1969, with the objective to "promote, assist and develop exports in any manner which the Council thought necessary or desirable". The Ghana Export Promotion Council (GEPC) had been concerned primarily with the non-traditional export sector. It was empowered to perform the following duties: an advisory role to exporters and the government; marketing and promotion; financial, through the provision of insurance facilities; provision of information to exporters concerning markets; the development of new exports. The government also established the Ghana Export Company, which was to be concerned with the sale abroad of goods manufactured in Ghana. It is noteworthy that its functions overlapped with those of the GEPC.

In subsequent years the export-licensing requirement was abolished, customs duty drawbacks were introduced and the provision of bonded warehousing schemes for exporters was established.

As a further step to reduce the impact of the import control system on exporters of minerals, timber and non-traditional exports (NTEs), a foreign exchange retention scheme was introduced in 1981 and became operational in 1982. Its objectives was to enable exporters to circumvent the procedures of applying for foreign exchange and import licenses to obtain their inputs, by allowing them to hold 20 percent of their export earnings in a special account with the Ghana Commercial Bank in London.

An assessment of the impact of these policies prior to the launch of the Economic Reform Programme (ERP) in 1983 indicated that not much was achieved in terms of diversification and increasing the share of non-traditional exports in total exports. This was largely because the existing exchange rate regime and the macroeconomic environment created disincentives, which counteracted any incentives created by the new policies (Jebuni, et al, 1992).

One of the major achievements of the economic reform programme was to change both the exchange rate regime and the macroeconomic environment in order to provide incentives for exporting. The exchange rate regime was changed from the fixed and overvalued system to a flexible market determined system. Fiscal and monetary prudence were introduced in order to achieve macroeconomic stability. In addition, the export-specific incentives introduced earlier were either maintained or modified to make them more transparent and, in some cases, broaden the coverage. For instance, the corporate tax rebate scheme is no longer restricted to manufacturing firms, but applies also to producers of agricultural products at the following rates: 30 percent rebate for 5-15 percent of total production exported, 50 percent rebate for 16-25 percent, and 60 percent rebate for 25 percent and above of total production exported. In the 1991 Budget Statement, the 60 percent rebate was raised to 75 percent.

The bonded warehouse is now an exemption scheme while the customs-duty drawback scheme no longer operates on a drawback basis as previously. The refund on customs duty drawback was raised from 95 percent to 100 percent in the 1991 Budget Statement. The waiver of local taxes on exports has all been maintained.

A new incentive in the present export promotion package is the exemption from duties on packaging materials. In order to benefit from this scheme the exporter needs to register with the GEPC, and then to get a letter of exemption from the national Revenue Secretariat.

Foreign currency surrender requirements of the Bank of Ghana were relaxed allowing exporters of non-traditional exports to retain as much of their export earnings abroad if they so desired. Exporting procedures were amplified and a number of finance arrangements and programs, including the Trade and Investment Programme (TIP) and the PEED, were initiated.

Export processing zones were established and firms were encouraged to take advantage of the incentives created by the system. The main requirement was that the firm must be exporting up to 70 percent of its output.

These policies created incentives and an environment for the growth of both traditional and non-traditional exports. Since 1985, therefore, some level of diversification of exports has

occurred and the importance of the three traditional commodities – cocoa, minerals and timber – has declined.

Table 2.1. Composition of Exports, 1995-2002 (Percentage Shares of Total Receipts)

	1995	1996	1997	1998	1999	2000	2001	2002
COCOA BEANS & PRODUCTS	27.1	33.4	32.6	34.5	30.5	26.1	23.9	25.9
Cocoa Beans	25.1	29.0	26.7	30.2	27.5	22.8	19.9	21.6
Cocoa Products	2.0	4.4	5.9	4.4	3.0	3.4	4.0	4.3
MINERAL EXPORTS (US\$ million)	47.2	42.1	42.5	40.0	41.4	45.2	43.3	42.0
Gold Exports	45.0	40.2	40.1	38.3	39.3	42.0	38.7	38.6
Diamonds	1.0	0.9	0.8	0.6	0.5	0.7	1.3	1.2
Bauxite	0.7	0.5	0.7	0.4	0.4	0.8	1.0	0.8
Manganese	0.4	0.5	0.8	0.7	1.2	1.7	2.3	1.4
TIMBER & WOOD PRODUCTS	13.2	9.8	11.9	9.5	9.6	10.5	10.6	10.2
Lumber	10.6	5.4	7.0	4.8	4.9	4.0	3.6	4.2
Wood Products	2.6	4.4	4.9	4.7	4.7	6.5	7.0	6.0
ALL OTHERS	12.5	14.7	13.0	16.0	18.4	18.2	22.2	21.8
Non-Traditional Exports 1/	7.6	9.8	11.5	13.5	14.5	13.9	17.5	17.4
Other Exports (nec) 2/	4.9	5.0	1.5	2.5	3.9	4.3	4.7	4.4
TOTAL EXPORTS	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Memorandum Item								
Non-Traditional Exports (US\$ million)	159.7	276.2	329.1	401.7	404.4	400.7	459.6	504.3
Notes: 1/. Defined to exclude Cocoa and Wood Products. Data obtained from GEPC database.								
2/. Mainly electricity and residual fuel oil as reported by Bank of Ghana								

Sources: Customs Excise and Preventive Service (CEPS), Bank of Ghana and GEPC databases.

For most of Ghana's post-independence history, cocoa was the leading export commodity. The economic reform programme created incentives to induce cocoa farmers to rehabilitate their farms and increase production. At the same time, however, the structural adjustment programme, which accompanied the economic reforms, brought about substantial foreign investments in the mining sector. Thus, both cocoa and gold experienced substantial growth in terms of both volume and value of exports. However, by 1992, gold took over from cocoa as the leading export of Ghana. Gold now accounts for about 39 percent of Ghana's export earnings while cocoa (including beans and products) accounts for 26 percent of export earnings in 2002 (see Table 2.1).

In the initial stages of the reform programme, support was also provided to the timber sector. This included on lending of external loans by the Government of Ghana to enable the timber sector rehabilitate and retool. While this provided the impetus for exporting, the expansion in timber exports was limited. With a subsequent ban in the exports of certain species of lumber, logs exports declined while wood products exports consisting of veneer, furniture and furniture parts, increased. Thus, while lumber exports remain the third most important merchandise export commodity, its relative importance has changed (see Table 2.1).

With a share of less than 5 percent of total merchandise exports in 1985, the share of non-traditional exports increased steadily over the years. However, historical comparisons become difficult because of a change in definition of non-traditional exports in 1995. The 1995 Exports and Imports Act defined non-traditional exports (NTEs) such that cocoa products and wood products became part of non-traditional exports, compared with the earlier period when both were added to traditional exports. If one uses the 1995 definition, the share of NTEs in

total exports increased significantly between 1996 and 2001 – i.e., from about 11 percent in 1996 to approximately 22 percent in 2001. The value of non-traditional exports increased from US\$159.7 million in 1995 to US\$418.3 million in 2001 (see Appendix 2).

Non-traditional exports are dominated by processed and semi-processed products, which accounted for over 80 percent of NTEs in 2001 (see Table 2.2). In the processed and semi-processed category, exports are dominated by cocoa products and canned tuna exports. Wood products consisting of veneer, wood profiles, furniture and furniture parts follow these. Since 1998, aluminium products made up largely of cooking utensils to other West African countries have performed remarkably well. This followed partly from arrangements for the supply of aluminium ingots from the Volta Aluminium Company (VALCO) Limited, and partly from re-organization and increased productivity in the aluminium products industry. Processed natural rubber and plastic products have experienced an improved but uncertain performance since 1995.

Table 2.2 Composition of Ghana's Non-Traditional Exports, 1995-2002

	(percent of Total Receipts)							
	1995	1996	1997	1998	1999	2000	2001	2002
Total Non-Traditional Exports	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Agricultural Products	17.2	18.2	17.4	19.4	20.9	18.6	17.9	17.0
Horticultural Products	7.2	7.5	5.8	4.9	6.7	7.0	6.5	6.7
of which Pineapples	3.5	4.0	2.9	2.2	3.2	3.0	2.9	3.1
Banana	0.6	0.6	0.6	0.7	0.8	0.9	0.7	0.6
Fish and Sea Foods	4.6	4.5	5.7	5.2	5.2	4.6	5.2	4.9
Game and Wildlife	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4
Medicinal Plants	0.1	0.6	0.2	0.5	0.2	0.1	0.3	0.6
Kola Nuts	0.7	0.4	0.2	0.2	0.3	0.2	0.2	0.2
Cocoa Waste	0.7	0.4	0.7	0.9	0.9	0.5	1.0	0.5
Other Agricultural Products	3.7	4.8	4.7	7.5	7.5	6.1	4.6	3.7
Processed & Semi-Processed	81.6	80.7	81.1	79.0	77.5	80.2	78.9	80.6
Wood Products	23.5	24.2	21.6	21.1	21.2	27.0	24.2	21.3
Aluminium Products	4.8	0.7	1.7	3.0	3.7	3.1	2.7	6.5
Common Salt	2.7	1.1	0.6	0.7	0.8	0.7	0.5	0.4
Non-Ferrous Metal Scrap	0.2	0.8	0.8	0.8	0.5	0.9	0.6	0.4
Natural Rubber (Processed)	5.6	2.8	2.7	1.4	1.2	1.5	1.0	1.8
Processed & SemiProc. Foods	44.7	51.1	53.8	52.1	50.1	46.9	49.8	50.2
of which Cocoa Products	7.9	21.9	27.8	18.5	14.0	15.1	15.0	17.1
Handicrafts	1.3	1.1	1.4	1.6	1.6	1.2	3.2	2.2
Cane Products	0.1	0.4	0.2	0.8	0.9	0.3	1.1	0.1
Wood Carvings	0.04	0.06	0.07	0.15	0.11	0.10	0.10	0.05
Kente Products	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Batik Products	0.01	0.02	0.02	0.04	0.03	0.06	0.06	0.13
Assorted Handicrafts 1/	0.8	0.6	1.1	0.6	0.6	0.8	2.0	1.9

Notes: 1/. Includes beads, earthenware bowls, hides and skins, imitation jewellery and musical instruments

Source : Ghana Export Promotion Council (GEPC, Accra)

Apart from domestic policy and capacity limitations, expansion of these exports is limited by the ineffectiveness of the ECOWAS Trade Liberalization Scheme (TLS). Under this scheme, certain qualified firms can export duty free within the community. Experience suggests that

where firms qualify and obtain the ECOWAS TLS document, they are still subject to duties and discrimination especially among UEMOA countries.

Firms producing processed and semi-processed products for exports tend to be medium- to large-scale companies. This contrasts sharply with firms exporting raw agricultural products, which tend to be small-scale in nature. The average exports value by firms in this area amounted to US\$59,453 in 2002 and compares with US\$273,112 in the processed and semi-processed category.

Agricultural exports accounted for about 17.0 percent of non-traditional exports in 2002. These exports are dominated by horticultural products (6.7%) of which the largest, pineapples, contributed 3.1 percent of total value of NTEs in 2002. This is followed by banana with a contribution of 0.6 percent. Horticultural products are followed, in terms of importance, by Fish and Seafood, which contributed about 5.0 percent of total non-traditional exports in 2002 (see Table 2.2).

Handicrafts, including kente and batik products, woodcarvings and cane products, contributed 2.2 percent of total export value of non-traditional exports in 2002.

Current government policy and emphasis in terms of financial support to firms from Export Development and Investment Fund (EDIF) suggest that textiles and garments, cassava starch, and salt will contribute significantly to non-traditional exports in the next two to three years. There may also be potential for expansion in data processing services exports, as the value of services exports as a source of diversification is appreciated.

II.1.2 Trade in services

In spite of the importance of services in the level of economic activity in Ghana, trade in services has been very low. Using balance of payments data, the share of exports of services in 1987 was less than 10 percent of the total exports (Table 2.3). Exports of services however, have been growing at a much faster pace than exports of goods. This has resulted in a steady increase in the share of exports of services in total exports of goods and services. Thus, the share of services exports in total exports increased from less than 10 percent in 1987 to about 20 percent in year 2000.

➤ Trade in Services by Mode of Supply

According to the General Agreement on Trade in Services (GATS) framework, trade in services may occur through four different modes of supply that bring consumers and producers together. These are through cross-border supply (mode 1); consumption abroad (mode 2); commercial presence (mode 3); and presence of natural persons (mode 4).

Cross-Border supply refers to the traditional concepts of exports and imports applied to services. In spite of the inadequacies of balance of payments data coverage, this mode of supply may be approximated by the services category in the balance of payments less travel and government services not included elsewhere.

Mode 2, Consumption abroad, involves movement of the consumer to a foreign country or supplier, such as in tourism, education and health. This is approximated in the literature using balance of payments data on travel, reflecting basically tourism services. Commercial

presence, mode 3, involves foreign direct investment. This is estimated using inward foreign direct investment stocks. In terms of comparison with the other modes, this may create problems of comparing stocks with flows.

Presence of natural persons, mode 4, represents the temporary movement of producers to provide services. This is estimated using 'compensation of employees' in the balance of payments data (Karsenty, 2000).

Each of these measures has its own inadequacies, leading to the under-or over-estimation of the different modes of supply (Maurer and Chauvet, 2002). Using these as rough indicators, we present in Tables 4 each mode of supply for Ghana.

Table 2.3. Trade In Services

Years	Exports of Goods & Services (US\$ Millions)	Exports of Services (US\$ Millions)	Share of Services Exports in Total (%)	Growth of Total Exports (%)	Growth of Service Exports (%)
1987	899.2	72.4	8.1	---	---
1988	952.4	71.4	7.5	5.9	-1.40
1989	882.7	75.5	8.6	-7.3	5.70
1990	969.9	79.3	8.2	9.9	5.00
1991	1092.7	95.1	8.7	12.7	19.90
1992	1096.7	110.3	10.1	0.4	16.00
1993	1208.3	144.7	12.0	10.2	31.20
1994	1385.2	147.5	10.6	14.6	1.90
1995	1581.8	150.6	9.5	14.2	2.10
1996	1726.9	156.8	9.1	9.2	4.10
1997	1654.8	164.9	10.0	-4.2	5.20
1998	2529.4	438.6	17.3	52.9	166.00
1999	2473.3	467.8	18.9	-2.2	6.70
2000	2402.7	504.3	21.0	-2.9	7.80

Continuous series for FDI stocks are not available. Fragmented data for the 1990s suggest that commercial presence has been the most important means of trade in services in Ghana. As shown in Table 2.4, there has been a continuous increase in inward FDI stocks since 1990. A substantial amount of this reflects divestiture receipts. The initial impulse was investment in mining but subsequently investments in services, finance and hotels and tourists facilities accounted for the major components.

Table 2.4. Trade in Services Exports By Mode of Supply (in US\$ Millions)

Year	Mode 1: Cross – Border Supply	Mode 2: Consumption Abroad	Mode 3: Commercial Presence (Inward Stocks)
1987	64.8	2 (N.A.)	N.A.
1988	62.6	2.6 (N.A.)	N.A.
1989	65.3	3.4 (79.09)	N.A.
1990	67.4	4.4 (80.83)	316

1991	81	5.9 (117.70)	N.A.
1992	93.4	7.1 (166.90)	418
1993	122.8	10.6 (205.62)	N.A.
1994	125.2	10.8 (227.60)	N.A.
1995	127.8	11 (233.20)	823
1996	131.7	12.7 (248.80)	943
1997	137.3	14.6 (265.59)	1024
1998	143.4	284 (283.96)	1069
1999	149.7	304.1 (304.12)	1143
2000	155.2	334.6 (386.00)	1253

Source: International Monetary Fund – Balance of Payments Yearbook 2001/2002, UNCTAD World Investment Report 2002, Ghana Tourist Development Corporation

Using data from UNCTAD (2000), part of which is reproduced in Table 2.4, inward FDI stocks, which were between 5 percent and 6 percent of gross domestic product (GDP) in the 1980s, increased from 5 percent in 1990 to 14.8 percent in 1999. In year 2000, the share of inward FDI stocks in GDP almost doubled to 25.2 percent even though the increase in stocks was only 7.5 percent of the 1999 level. This reflects the difficulty of using GDP, which has a large component of non-traded goods and services to scale trade in goods and services. In year 2000, the exchange rate depreciated substantially leading to a decline in GDP in US dollar terms. This is what accounted for the doubling of the share of inward FDI stocks.

In comparison with commercial presence, which dominates other modes of supply throughout the period, cross-border supply and consumption abroad have witnessed changes in their relative importance. In the 1980s, it appeared that cross-border supply ranked second to consumption abroad in terms of trade in services. However, by the second half of the 1980s, consumption abroad exceeded cross-border supply. Part of this could be explained by the current account liberalization, which increased individuals' access to foreign exchange for travel purposes. Part could also be due to the foreign investment in tourists' facilities as well as the promotion of tourism as a source of exports.

Table 2.5. Growth In Services Exports By Mode Of Supply

[Using Data From Table 2.4]

Year	Growth in Mode 1: Cross – Border Supply (%)	Growth in Mode 2: Consumption Abroad (%) [Tourists Receipts]	Growth in Mode 3: Commercial Presence (%)	Growth in Mode 4: Presence of Natural Persons (%)
1987	---	--- [---]	---	---
1988	-3.395	30.00 [---]	0.00	-15.87
1989	4.313	30.77 [---]	0.00	1.89
1990	3.216	29.41 [12.12]	0.00	29.86
1991	20.18	34.09 [45.61]	0.00	10.00
1992	15.31	20.34 [41.80]	0.00	5.19
1993	13.48	49.30 [23.20]	0.00	0.00
1994	1.954	1.89 [10.69]	0.00	0.00
1995	2.077	1.85 [2.46]	0.00	0.00
1996	3.052	15.45 [6.69]	14.58	0.00
1997	4.252	14.96 [6.75]	8.59	0.00
1998	4.448	1845.21 [6.92]	4.39	0.00
1999	4.393	7.08 [7.10]	6.92	0.00
2000	3.674	10.03 [26.92]	9.62	0.00

Source: International Monetary Fund – Balance of Payments Yearbook 2001/2002, UNCTAD World Investment Report 2002

In Table 2.5, we also report tourist receipts as published by the Ghana Tourist Board (in brackets). The data shows that tourism has dominated cross-border trade throughout the period. Tourism became the third largest export earner after gold and cocoa from the second half of the 1990s. It also has considerable multiplier effects, estimated at 3.5 and 3.4 for employment and income respectively (Ghana Tourist Board, 2002). Thus there is room for beneficial liberalization in tourism especially in the development of tourist sites. The main sources of tourist arrivals are the advanced countries and Ghanaians resident abroad as shown in Table 2.6.

Table 2.6. International Tourist Arrivals from Thirteen Generating Markets

Country	1996	1997	1998	1999	2000
USA	20108	21465	22950	24580	26317
UK	26395	28177	30126	32264	34546
Germany	14709	15702	16788	17980	19251
France	11016	11759	21573	13466	14418
Netherlands	7380	7878	8423	9021	9659
Canada	1096	4372	4675	5007	5361
Switzerland	2891	3086	3300	3534	3784
Scandinavia	4069	4343	4644	4974	8325
Italy	3702	3951	4225	4525	4845
Overseas Ghanaians	82984	88585	94713	101437	108609
Cote D'Ivoire	14657	15646	16729	17916	19183
Nigeria	41842	44667	47757	51147	54764
Togo	9124	9739	10413	11152	11941

Source: Ghana Tourist Board Fact Sheet 2002

The presence of natural persons is the least important. However, data on this mode of supply is only available up to 1994. The situation is not expected to have changed drastically

II.1.3 Exports by partners

EU is by far Ghana's largest export market, accounting for more than half total exports. The three largest developed markets (the EU, USA and Japan) absorb the bulk of Ghana's exports, but their total share has declined since 1996, from 72.5% of total exports to 62.1% in 2002. Conversely, the share of African countries, other European countries (mostly ex-USSR) and other countries (for which a significant portion relates to unknown or unspecified market destinations, amounting to USD 147 mn, 8.7% of the total). This change in geographical pattern would suggest significant difficulties in being able to supply the mix of products that have registered a rapid growth in such industrialised nations², possibly compensated by a growing ability to find new markets for less dynamic products.

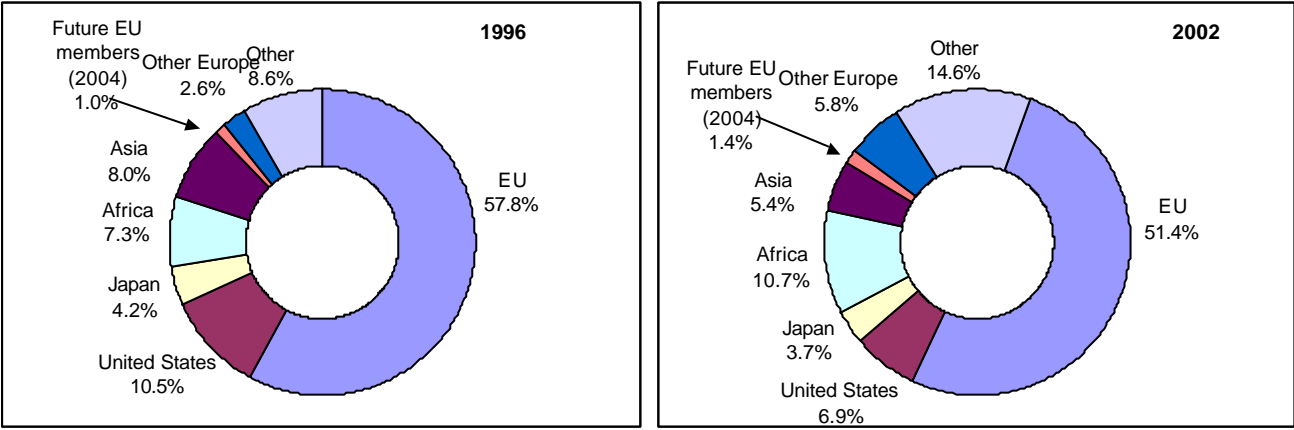
² The detailed analysis on the EU markets confirms this pattern

Table 2.7. Breakdown of Ghana's export by major trading partners

	1996	1997	1998	1999	2000	2001	2002
EU	57.8%	55.0%	59.2%	54.5%	50.2%	49.1%	51.4%
United States	10.5%	9.4%	7.9%	10.4%	13.1%	12.0%	6.9%
Japan	4.2%	5.0%	3.7%	3.3%	2.9%	2.9%	3.7%
Africa	7.3%	8.0%	7.9%	8.0%	10.2%	11.0%	10.7%
Asia	8.0%	7.3%	5.1%	6.4%	5.7%	5.5%	5.4%
Future EU members (2004)	1.0%	1.8%	3.2%	1.3%	1.3%	0.9%	1.4%
Other Europe	2.6%	3.8%	3.2%	5.8%	5.2%	6.1%	5.8%
Other	8.6%	9.7%	9.8%	10.2%	11.4%	12.5%	14.6%

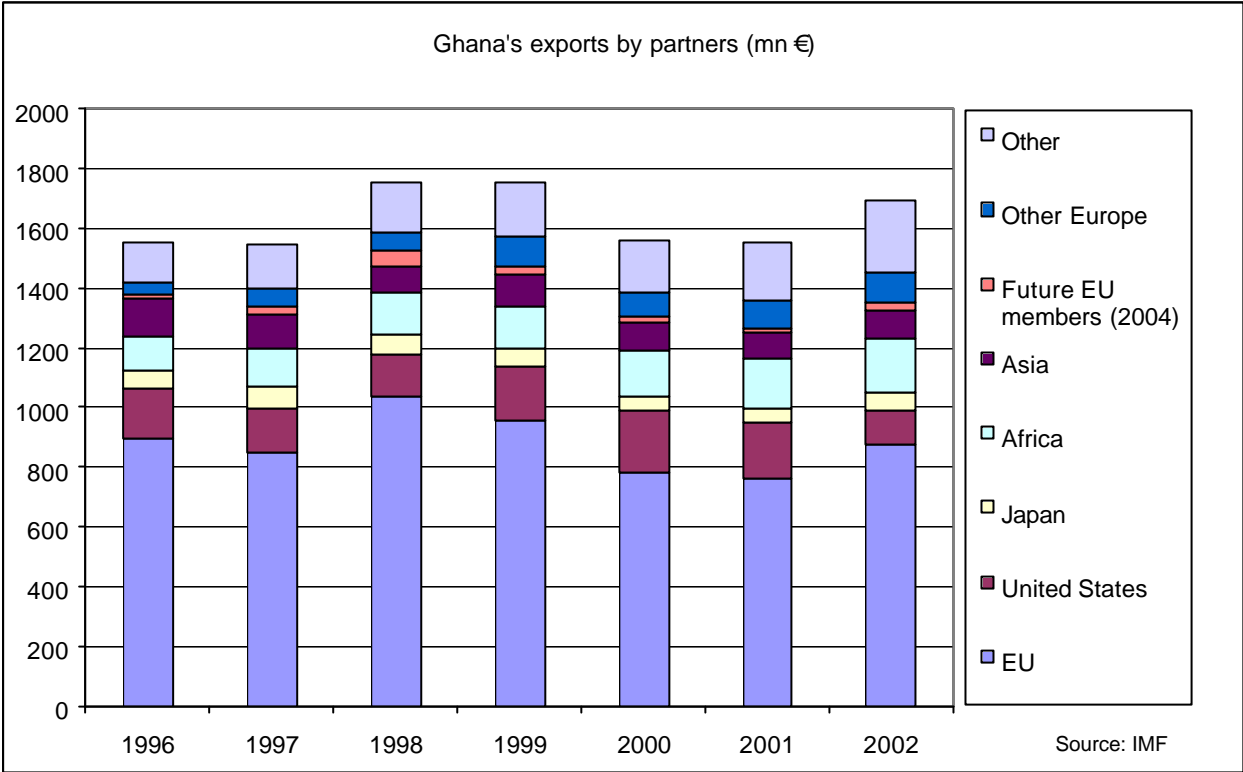
Source: IMF

Chart 2.1. Ghana's exports by major importing partner



EU's market share tends to increase when the favourable price cycle of major exported commodities pushed total exports upwards, as in 1998 and again in 2002. When such cyclical factors are neutralized, a moderate downward trend is clearly visible.

Chart 2.2. Ghana's major partners (1996-2002)



The various countries with which Ghana is trading are absorbing a very different mix of products: indeed, only the EU has a structure of imports from Ghana that is fairly distributed across the major groups of products. Conversely, exports to the US are much more concentrated (cocoa, wood and petroleum products), and even more so for exports to Japan (cocoa products accounting for 80% of total Ghanaian exports to Japan). Precious metals, gold and diamond are exported primarily to ‘other countries’, including non-EU European countries (Switzerland).

When observed from a product perspective, the “absorption’ role of each trading partner is therefore hugely different. The EU is by far the dominant buyer of cocoa, wood and furniture, marine products and fruits, while the USA are an important buyer of petroleum products. African countries (mostly ECOWAS members, accounting for nearly 90% of Ghana’s exports to Africa) are significant buyers of petroleum products, fish and crustaceans, and ‘other products’.

Chart 2.3. Ghana's exports by partners and products

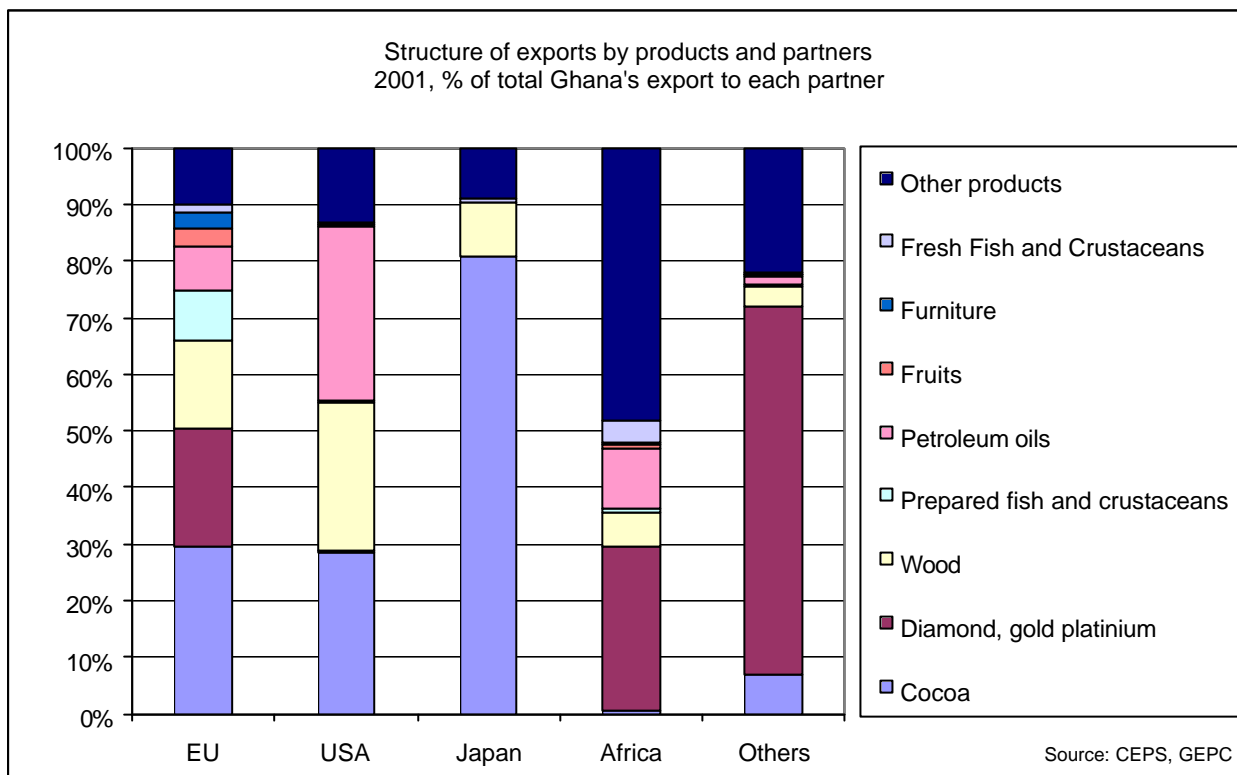
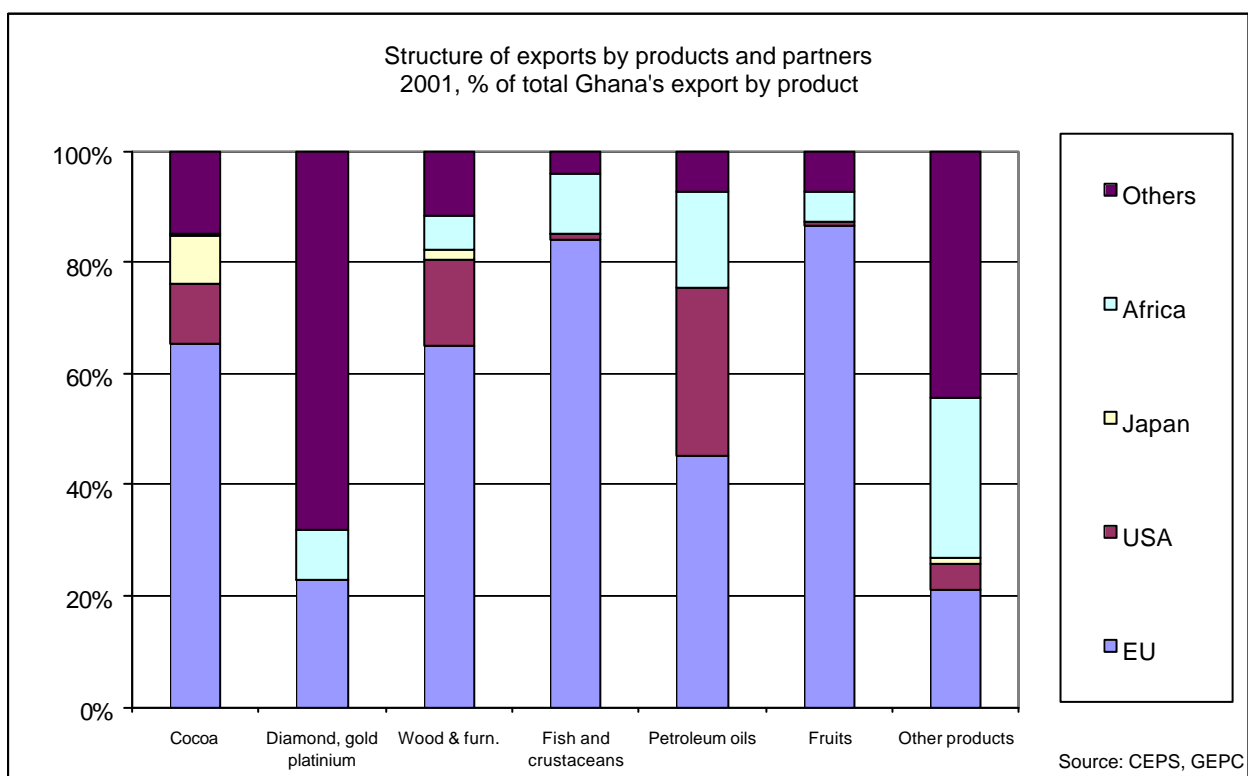


Chart 2.4. Ghana's exports by products and partners



II.1.4 Trade policy

➤ Liberalization of Trade in Services and Horizontal Commitments

Impediments of all kinds of trade take the form of tariff and non-tariff barriers. For merchandise trade much of this is in the form of border measures mainly in the form of tariffs and quotas. It can also take the form of discriminatory measures whereby goods once they have entered a country may be subject to different regulatory and taxation requirements, which is forbidden under the national treatment clause under the GATT. For services trade these two forms of impediments are characterized in a slightly different way. The provision of services requires the interaction between consumers and suppliers. Any deliberate action that impedes this interaction through the four modes of supply can be considered as a barrier to trade in services. Barriers in services trade are termed market access barriers and national treatment barriers. Market access barriers are equivalent to non-tariff barriers in merchandise trade but they embody more than just restrictions on foreign suppliers to include all barriers against all comers whether domestic or foreign. National treatment is equivalent to the same concept in the GATT but here again it has a wider interpretation, as it does not draw a distinction between border measures and internal policies. It includes both. For instance any discrimination against foreign suppliers in whatever form it takes is a national treatment impediment. Therefore liberalization of trade in services involves the reduction of regulatory barriers to market access and discriminatory national treatment across all four modes of supply (Hodge, 2002).

The liberalization of trade in services was tied up with the general economic liberalization that was occurring in Ghana as a result of the economic reforms initiated in 1983. Prior to this period, international transactions, investment in the domestic economy and prices were regulated by a number of laws that tended to create a controlled regime that limited both access and national treatment within the World Trade Organization (WTO) framework. Three elements of economic reforms were important in generating liberalisation in trade in services: current account liberalization, the need to attract foreign investment and the overall need to increase Ghana's international competitiveness for non-traditional exports or as an investment destination. These three strands of the reform programme led to general liberalisation generating competition within the economy, improving the conditions for access and attracting foreign direct investment.

Liberalization of trade in services was linked to the current account liberalization, which reduced exchange controls and other non-tariff barriers to international trade, affecting trade in goods and services. Prior to this, a system of import licensing and exchange controls, introduced with the Exchange Controls Act (1961) prevailed. A system of import and exchange rate liberalization began in September 1986, with the introduction of a weekly auction of foreign exchange. In 1989, the import licensing system was abolished because the introduction of the foreign exchange auction and the establishment of the forex bureaux rendered the licensing system redundant (Jebuni et al, 1994).

Current account liberalization went hand in hand with a change in development strategy to an export led private sector based growth. This required an increase in exports, particularly non-traditional exports. This implied that Ghana's productive base had to become internationally competitive. It was recognized that cost advantage in production could be eroded by inefficiencies in the provision of intermediate services such as port and harbour facilities, air transport, maritime transport and communication services. Tyler Biggs, et al, (1996), had

indicated that Ghana was competitive with Asian countries in garments in terms of the cost of production. However, this cost advantage could not be translated into a price advantage once costs of intermediate services were added. Thus the liberalization in trade in intermediate services was driven by the need to increase Ghana's competitiveness in the provision of such services, as an input into increasing the general competitiveness of Ghana's non-traditional exports in terms of price and scheduled delivery.

Success of the reform programme also required increasing foreign direct investment to supplement the limited domestic investment or to increase competition and productive efficiency. This required the development of Ghana as an investment destination through macroeconomic policies and provision of incentives. More importantly, it required changes in the legal and regulatory environment to liberalize the investment environment and reduce discriminatory action against foreign investment.

➤ **Market Access**

The liberalization of the current account was accompanied with a policy of liberalizing the prices and distribution of goods and services within the domestic economy. A system of price fixing and distribution was instituted by the Prices and Incomes Regulations, 1973 (L.I. 805), the Manufacturing Industries Act, 1971 (Act 356), (SMCD 146) and the Commercial Houses and Supermarkets (Sale of Specified Goods) Investments 1976 (L.I. 1066) (MOTI, 1995). These regulations led to Government control, subsidies and the fixing of prices at such low levels that they gave advantage to incumbents and discouraged entry.

While these regulations existed, practices following the current account liberalization ignored them. From 1988, there was a deliberate policy to liberalize the pricing and distribution of goods and services. In 1991, the Government established a Private Sector Advisory Group to review the legal and regulatory framework for private investment and make "recommendation for the revision or repeal of existing laws and regulations affecting private investment in consonance with the spirit of deregulation, liberalization and exchange rate reforms (Asante, 1999, page 72). Following the recommendations of the group, the above laws and regulations were repealed in 1992, thus liberalizing the environment for private sector operations. These changes eliminated what Stern (2002) refers to as the price-based types of barriers to trade in services.

➤ **Commercial Presence (Foreign Investment)**

While the changes in regulations above liberalized market access in terms of cross-border trade and consumption abroad, changes in the role of the state in production and the promulgation of new laws, liberalized the environment in terms of commercial presence. The divestiture of state enterprises and the general reduction in state participation in direct production formed a basis for attracting foreign direct investment. As a result of this policy, the regulations establishing these state enterprises had to be changed or modified to allow private sector, both foreign and domestic, either to purchase shares or buy these enterprises outright. In a number of cases where an outright sale could not be made particularly in the financial sector, the state actively sought a strategic foreign investor to participate in the privatisation of the enterprise.

These measures were complemented by the deregulation of the investment laws in order to both liberalize and attract foreign investment. The Ghana Investment Promotion Centre Act, 1994 (Act 478) and the Securities Industry Law 1993 (PNDCCL 333) liberalized substantially

both foreign portfolio and direct investment. Prior to those acts, the Exchange Control Act, 1961 and the Investment Code, 1985, regulated foreign investment. These laws were generally restrictive on foreign investment. They restricted dealings in Securities and repatriation of profits, dividends and capital. Lending to foreign companies under the Exchange Control Act, 1961 required the consent of the Bank of Ghana.

➤ Presence of Natural Persons

Prior to the Ghana Investment Promotion Centre Act of 1994, the presence of natural persons for the purpose of providing a service was governed by the Aliens Act, 1963 (Act 160) and its subsequent amendment. This act required a license in writing by the relevant minister before a foreigner could be employed in Ghana. The Ghana Investment Promotion Centre Act, 1994, modified this requirement by specifying automatic quotas for the employment of foreign nationals depending on the level of investment.

11.2 Ghana's exports to the EU

The detailed analysis of Ghana's export to the EU is a key component of the analysis for future development and to identify the key issues for such development. Indeed, the structure by products, or by markets within the EU, the analysis of major competitors and of changes in market shares, are fundamental ingredients for the definition of what could be achieved for export growth and what could not, including in the background of trade negotiations such as the EPAs. What the following paragraphs show is a high concentration of exports on a very limited number of export products and on a small number of EU member states, and a declining share of export values when moving down the upstream (raw commodity) / downstream (processed goods) processing chain.

11.2.1 Exports to the EU by products

Ghana is exporting about 700 different products, when looked at a 6-digit level of custom classification (HS6³). However, the 35 leading export items account for 95% of the total, a very high concentration ratio. 3 products only represent almost 60% of exports: cocoa beans (raw or roasted), accounting for 32% of Ghana's total exports to the EU (EUR 357 mn), unwrought gold (13%, EUR 149 mn euros) and unwrought aluminium (13%, EUR 149 mn).

The following table gives the details of the 35 largest products, accounting for 95% of the country's total exports to the EU. Most of the analysis made below on Ghana-EU trade relations is concentrated on this list of products.

Table 2.8. Ghana's exports to EU - 2002 (thousands euros)

HS6	HS6desc	Value 2002	Share in total	Cumulative share
1801 00	Cocoa beans	356 796	31.98	31.98
7108 12	Gold, other unwrought forms	149 236	13.37	45.35
7601 10	Aluminium, not alloyed	148 928	13.35	58.70
1604 14	Tunas, skipjack and bonito	63 366	5.68	64.38

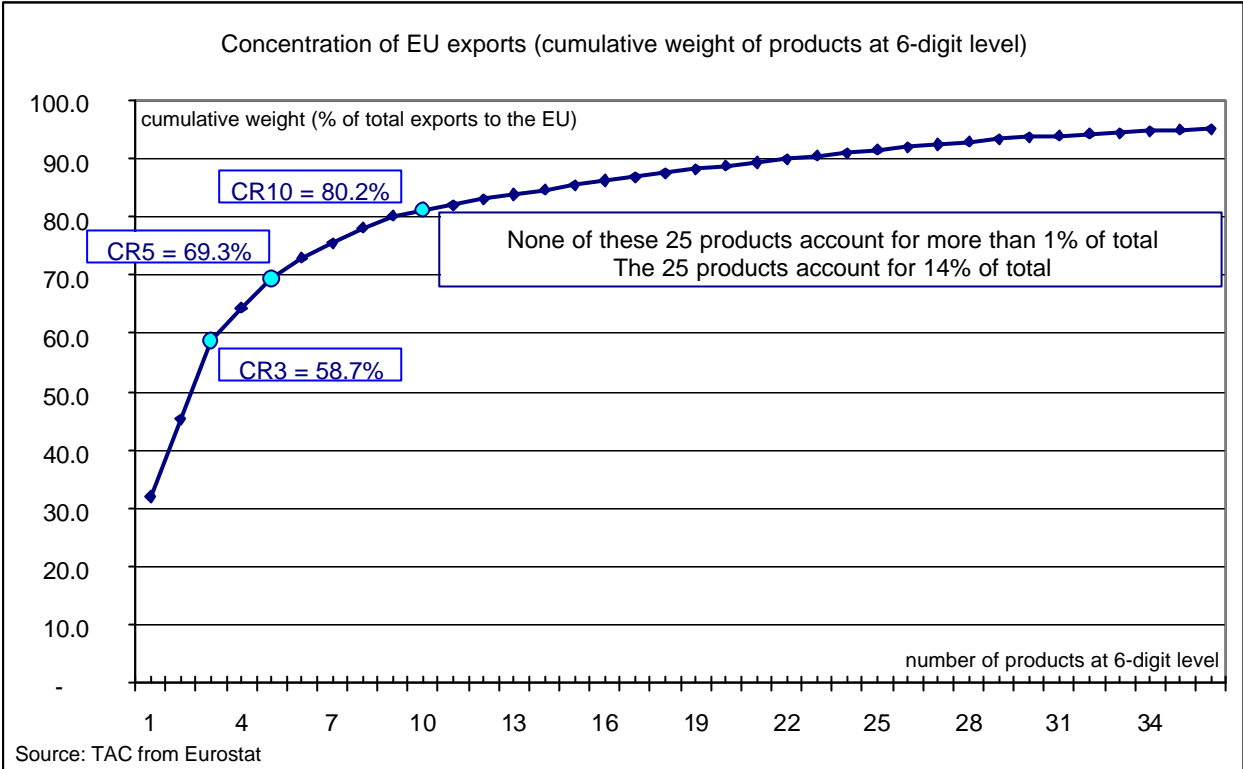
³ Total EU imports on the same 6-digit classification are spread over more than 10,000 products.

4407 29	Wood sawn, other	55 292	4.96	69.33
0804 30	Pineapples	41 717	3.74	73.07
4408 39	Other wood sheets for veneering	28 496	2.55	75.62
1804 00	Cocoa butter, fat and oil	28 494	2.55	78.18
7102 31	Unworked diamonds	22 709	2.04	80.21
2602 00	Manganese ores and concentrates	10 668	0.96	81.17
7601 20	Aluminium alloys	10 439	0.94	82.10
4408 90	Other wood sheets for veneering	10 326	0.93	83.03
1803 10	Cocoa paste not defatted	9 749	0.87	83.90
1207 99	Other oil seeds & oleaginous fruits	9 562	0.86	84.76
0709 90	Other vegetables, fresh or chilled	8 589	0.77	85.53
0307 49	Other molluscs	8 346	0.75	86.28
4407 99	Wood sawn, other	7 661	0.69	86.96
9403 60	Other wooden furniture	7 574	0.68	87.64
0303 43	Skipjack or stripe-bellied bonito	6 661	0.60	88.24
4409 20	Non-coniferous wood	6 475	0.58	88.82
1803 20	Cocoa paste wholly or partly defatted	6 431	0.58	89.40
2710 11	Light bituminous oils and preparations	6 202	0.56	89.95
4407 24	Virola, mahogany, imbuia and balsa	6 010	0.54	90.49
2606 00	Aluminium ores and concentrates	5 949	0.53	91.02
0303 42	Yellowfin tunas	5 599	0.50	91.53
1604 20	Other prepared or preserved fish	5 584	0.50	92.03
0714 90	Other manioc or similar roots	5 417	0.49	92.51
4412 13	Plywood with at least one outer ply of tropical wood	5 241	0.47	92.98
0307 59	Other molluscs	4 340	0.39	93.37
1802 00	Cocoa shells / cocoa waste	3 772	0.34	93.71
1515 90	Other vegetable fat and oils	3 327	0.30	94.01
0803 00	Bananas, including plantains, fresh or dried	2 798	0.25	94.26
4001 22	Technically specified natural rubber (TSNR)	2 747	0.25	94.50
4001 21	Smoked sheets natural rubber	2 509	0.22	94.73
4412 14	Plywood with at least one outer ply of non-coniferous wood	2 355	0.21	94.94

Source: Eurostat

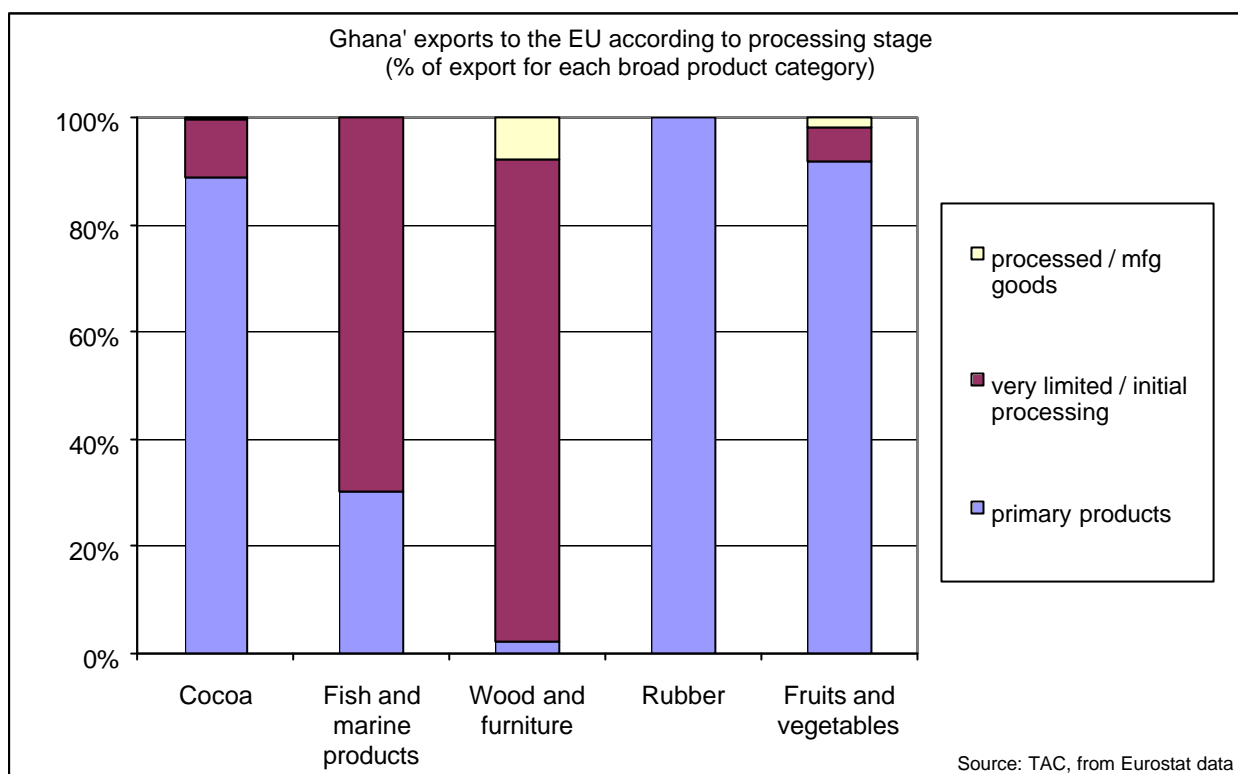
The high level of concentration can be illustrated with a chart plotting the cumulative share of products in Ghana's total exports to the EU: the 5th largest export product (tuna fish) is weighing less than 5%, and no product after the 9th largest accounts for more than 1% of Ghana's total exports to the EU.

Chart 2.5. Concentration of Ghana’s exports to the EU



The other key and obvious characteristic of Ghana’s export to the EU by products illustrates the difficulties in moving into processed products from the raw commodities available. A simple appreciation can be made on five broad categories of products (cocoa, fish and marine products, wood and furniture, rubber and fruits/vegetables) by grouping all exports related to such products whatever the level of transformation and processing (i.e. covering different HS2-classification products), and computing the share of raw commodities (no transformation except those required for production of the commodity), of products having received a very limited or initial processing (e.g. freezing fish, sawing wood, producing cocoa paste...), and of processed or manufactured articles derived from the same commodities (e.g. cocoa powder, fruit juice or preparation, furniture). The chart below clearly shows the very limited share of the last category of processed or manufactured goods. The dual issue of supply side constraints to move downward the value addition process, and of market access difficulties for manufactured articles, is therefore one of the most pressing for future export development. The initial steps of processing being already apparent for wood, fruits and vegetables, and fish products, it may be relevant to pursue particular efforts in these areas.

Chart 2.6. Dominance of commodity / unprocessed exports



II.2.2 Ghana's market shares in the EU

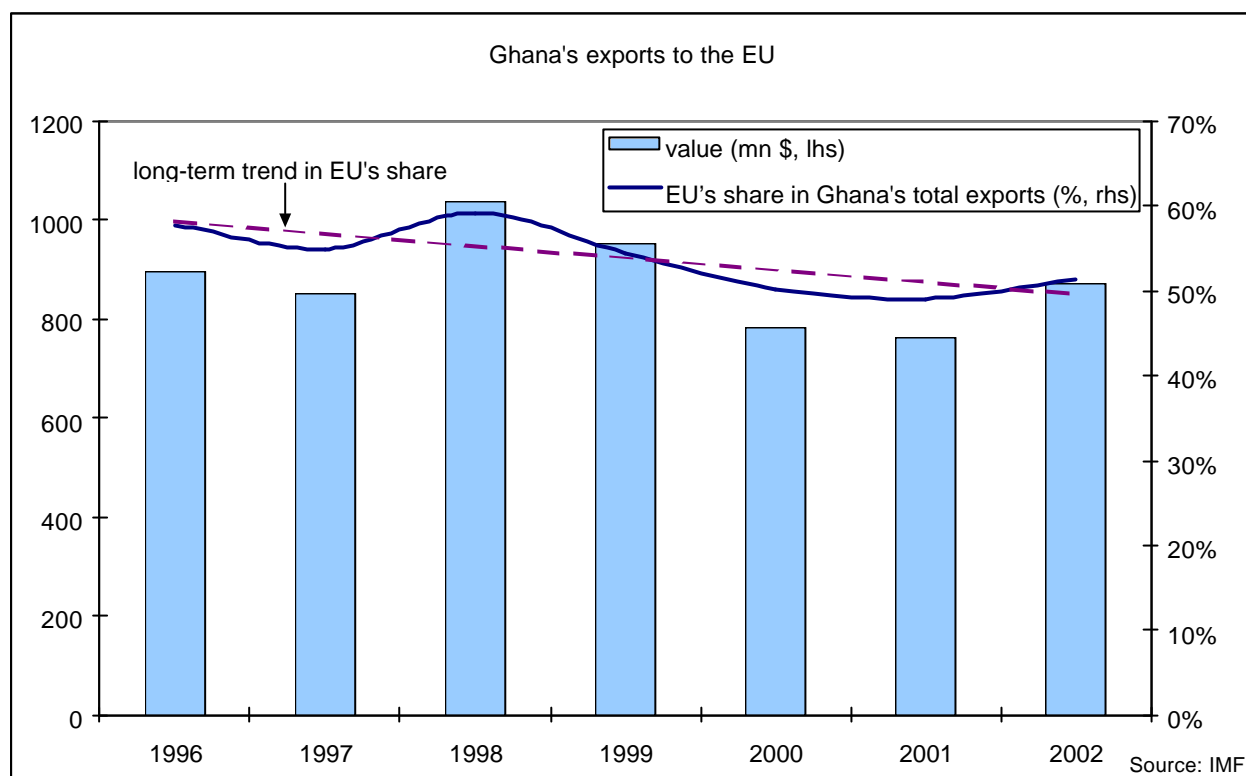
As previously indicated, EU markets are the dominant outlets for Ghana's total export, with a share hovering around 50% with a slightly declining trend. The following table and chart illustrate this broad picture.

Table 2.9. Total Ghana's exports (millions of USD)

	1996	1997	1998	1999	2000	2001	2002
EU	897.8	851.5	1 039.3	955.3	784.3	763.3	872.7
World	1 553.7	1 547.5	1 756.1	1 754.2	1 563.0	1 556.1	1 697.1
EU's share	57.8%	55.0%	59.2%	54.5%	50.2%	49.1%	51.4%

Source: IMF-DOTS 2003

Chart 2.7. EU's weight in total Ghana's exports



One of the important issue for Ghana is to assess its performance on the EU market, both from its own perspective (are the market shares by products stable, or do they register trend development) and in relation to the major competitors exporting the same categories of products on the same market.

Charts in Appendix 3 provide a graphic illustration of Ghana's exports to the EU and her market shares, at a detailed level of 6-digit custom classification.

The observation of market share patterns across products allows to identify five broad groups:

- **Products having significant market shares in Europe, with a strong volatility and no clear structural trend in market-share gain or loss:** cocoa beans, the largest export item, and some important wood products (virola, mahogany and balsa wood) already have a large presence in Europe (respectively 15%-20% and 3%-8%), but exports are unable to cope with market fluctuations and/or competitive pressures from other suppliers, and market shares are highly volatile. The key objective for such products should therefore be a stabilization in market share, probably through improvement in marketing / customer relation and flexibility in prices. Market access issues are likely to be irrelevant.
- **Products having significant market shares, and having registered large declines over the past 10 years,** mostly wood products (other wood sawn, sheets for veneering). Starting the 90s with a large presence on EU markets (respectively 15% and 5%), Ghana has (irregularly) lost most of its share (respectively 7% and 2%). Supply side issues, but possibly market access problems (voluntary standards adopted by consuming industries or customers in Europe, for instance), are probably the core reasons for such a negative pattern.

- **Products having low market shares and a very high volatility**, including most mineral products (aluminium, manganese ores, diamonds), for which market access are very unlikely to be an issue compared to supply side constraints and competition / relations between large international companies, but also food products (molluscs, bananas), natural rubber (TSNR) and plywood. The very strong volatility in market share suggests that production issues (quality, reliability, volumes) and/or marketing issues (limited number of customers, too small players...) are dominant for these products.
- **Products having started the 90s with low market shares, followed by substantial gains, but suffering in the later period of either a very volatile stabilization or a large decline**: these are cases of early and promising successes on which the country has not been able to capitalize, either by maintaining gains in market shares, or even by simply securing a stable and significant market share in the EU. A significant number of marine products are included in this broad group (tuna, skipjack, yellowfin tuna), as well as non-coniferous wood and furniture, and manioc or similar roots.
- **Export successes with low initial market shares and substantial gains over the whole period**, even though such gains may not be very regular since the early 90s. Only four products at the 6-digit level of classification belong to the favourable group: pineapples, other vegetables (HS code 070990), other prepared fish (HS6 code 160420), and smoked sheets of natural rubber. These four products account for 5.2% of all Ghana's exports to the EU, pineapples only accounting for 3.7%. The qualitative survey of Ghanaian exporters and the field research would suggest that such successes could be emulated in other products as well, and that institutional issues and capacity building in the industries are key to overcoming the obstacles (marketing organisation, support for meeting SPS or voluntary codes of practice, transportation issues).

A second way of using market shares to clarify the key challenges and issues at stake in future trade negotiation with the EU examines how Ghana's product mix fits with EU market development or market sizes. The four following charts plot the 6-digit products exported by Ghana to the EU according to Ghana's market share on one hand (vertical axis in the charts), and to the size of EU market for each product (charts 2.8. and 2.9.) and the growth in total EU imports over the past three years for each product (2000 to 2002, charts 2.10. and 2.11.), on the other hand (horizontal axes in the charts).

Chart 2.8. Size of markets and market shares

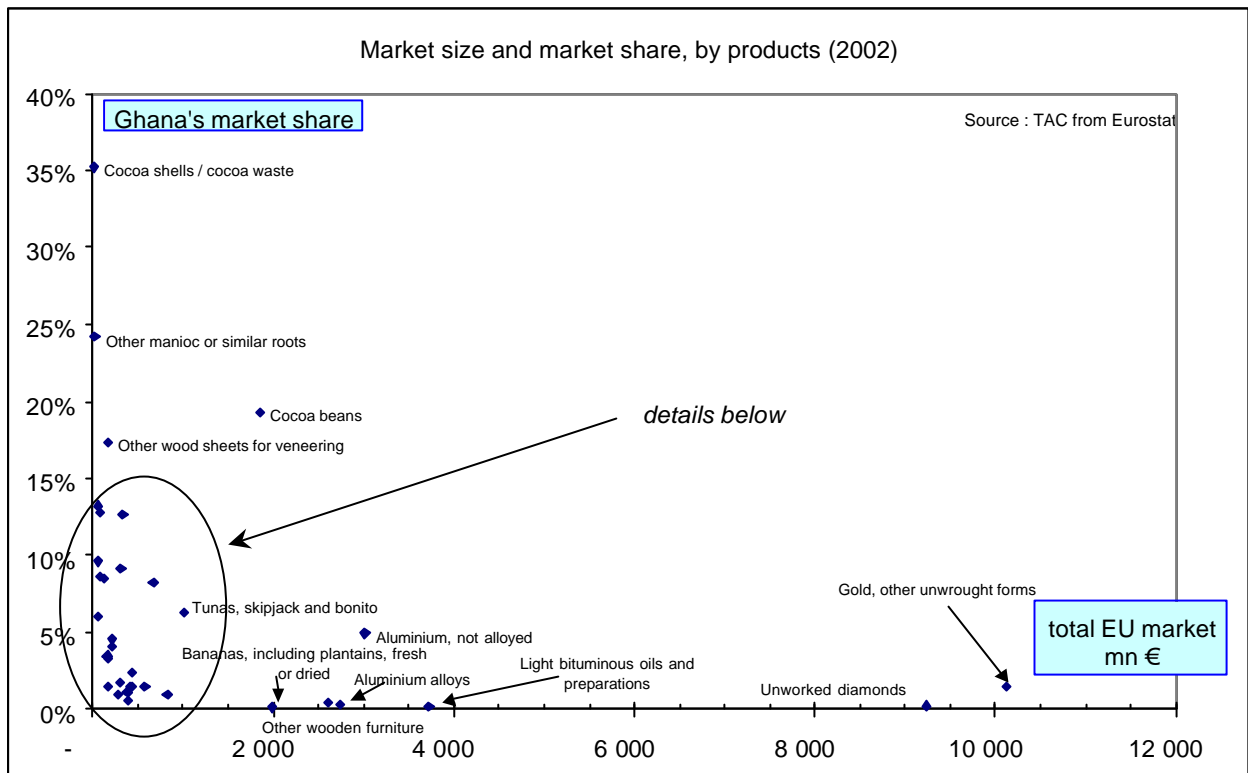
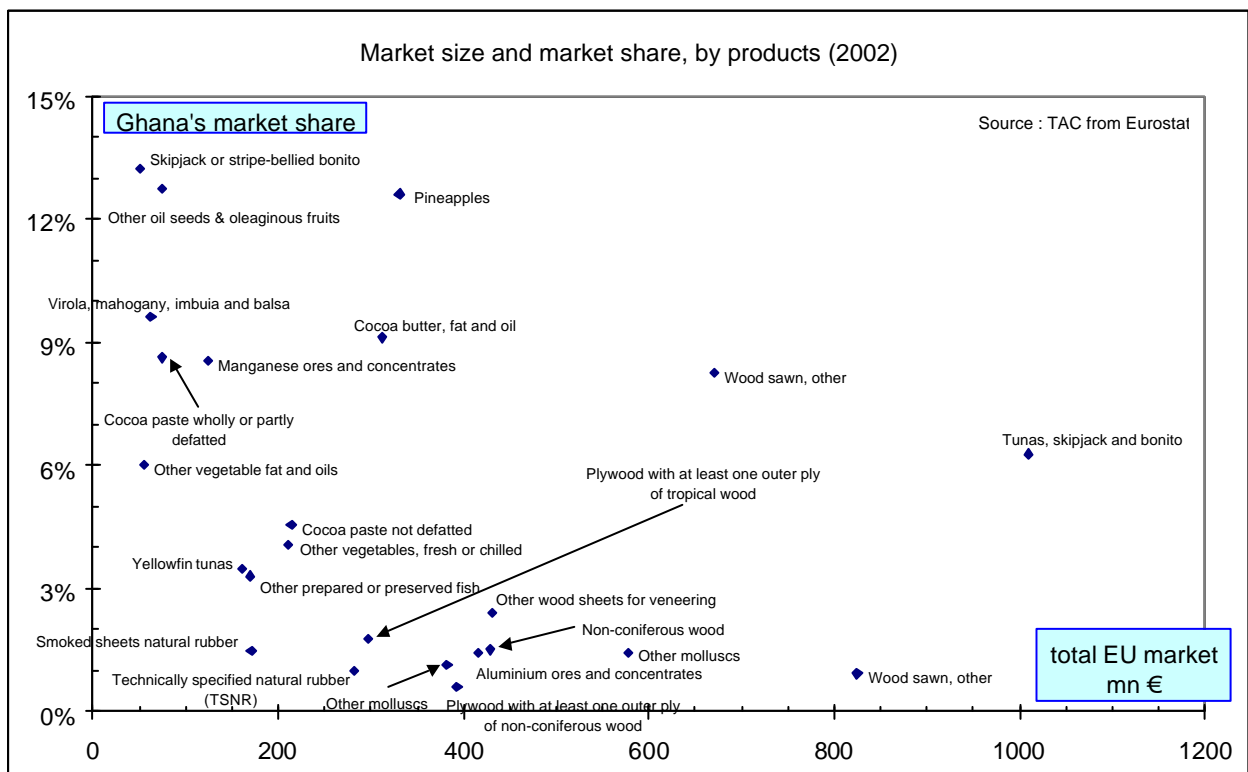


Chart 2.9. Size of markets and market shares (details)



These initial charts suggest the following:

- **Apart from cocoa beans, no product has a significant market share on a large EU market.** The couple of products having a very high market share in Europe are concentrated on tiny markets (cocoa shells & waste, manioc), while for the products with very large EU markets, shares of Ghanaian goods are very small (gold, diamond, bituminous products). Considering the very peculiar nature of gold and diamond market, and the structure of the industry, both in Ghana and worldwide, it would be unwise and unrealistic to suggest any specific recommendation related to trade negotiations. Bituminous products may warrant a specific attention, as the major market for such exports is currently the US, suggesting that a potential opportunity exists for exports to the EU.
- **The ‘product-specific’ attention and challenges that would yield the largest benefits for overall exports should be concentrated on those with very low market shares by Ghana, large market sizes in Europe, and past successes in similar or close products:** this includes notably wooden furniture, bananas, other vegetable (fresh or dried), marine products (tunas, skipjack, yellowfin and bonito, molluscs), and some cocoa products (paste not defatted, butter). Wood products are also appearing in the same areas of the chart, but supply side issues suggest a lower ‘priority’. For marine products, SPS and RoO regulations do have a significant influence on market access, while EU banana imports are still quantitatively regulated. Other potentially interesting products for export expansion are in the downstream areas of aluminium transformation (e.g. aluminium alloys, but also aluminium articles and parts).

When looking at Ghana’s market shares across the recent growth in total EU import values by products over the past three years (2000-2002), three conclusions can be drawn:

- **Cocoa products’ high import growth is reflecting the cocoa price cycle from 2000 to 2002, but is also highlighting differences between products,** with initially processed products growing much faster than cocoa beans (paste, butter, shells), therefore clearly pointing to the interest in increasing even this limited value addition.
- **Most of the marine products** (especially yellowfin tuna and molluscs, but also skipjack), **fresh or dried vegetables, seeds and oleaginous fruits, and pineapples are enjoying a rapid growth in European demand,** with three among them having achieved a significant market share (pineapples, skipjack, oil seeds and oleaginous fruits).
- **Conversely, many wood products have been faced with declines in EU imports over the past years, with only two of them showing a positive growth** (plywood with at least one ply of non-coniferous wood, and wooden furniture), suggesting both a cautious approach for any raw wood export expansion, and the pressing need to add value to the commodities. This conclusion appears to be widely shared in Ghana, even though the ability to move downwards the value-addition process is questionable in the absence of much further manufacturing and marketing capabilities.

Chart 2.10. Growth of markets and market shares

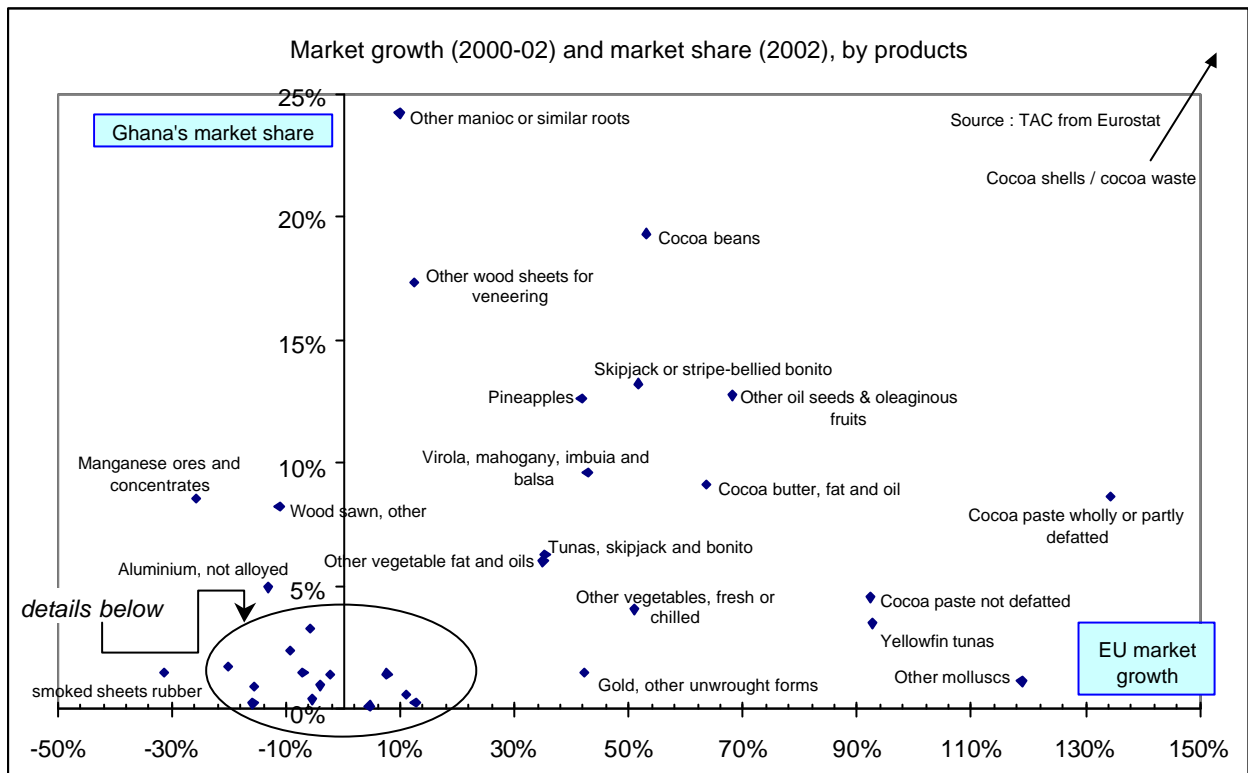
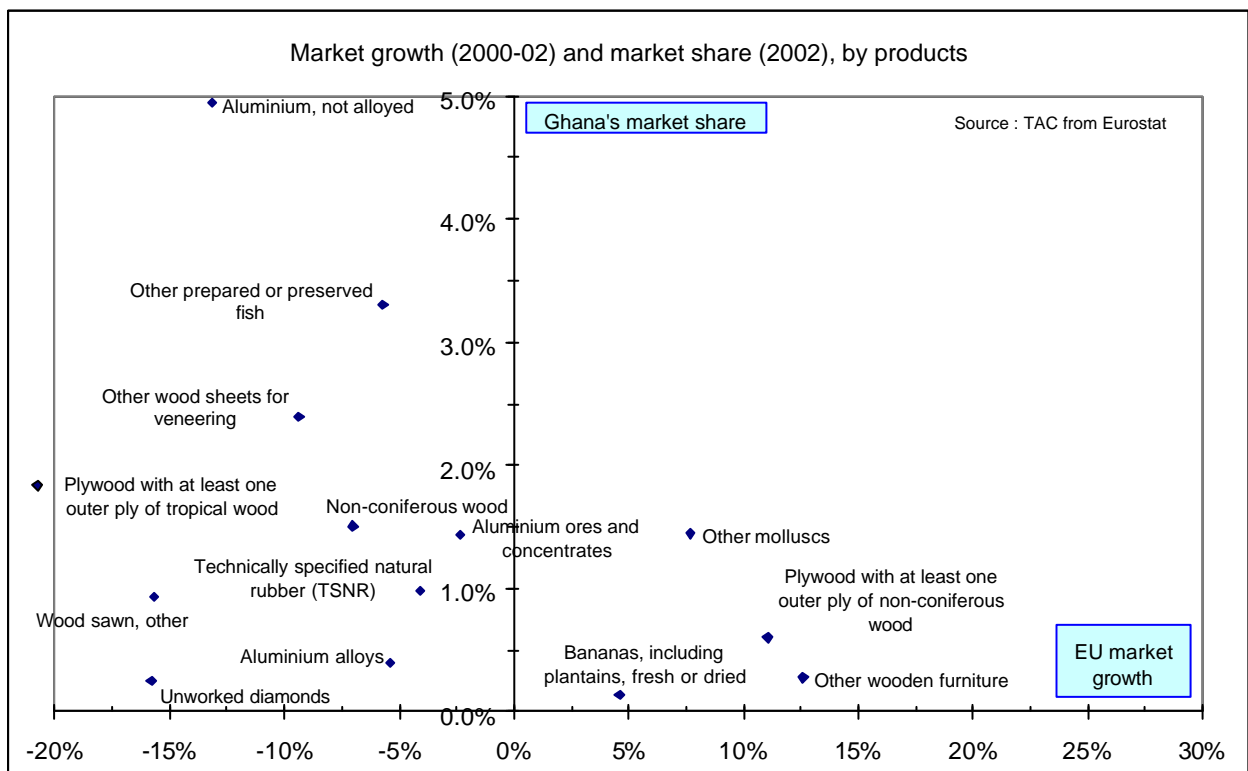


Chart 2.11. Growth of markets and market shares (details)



II.2.3 Ghana's competitors in the EU

A close examination of Ghana's competitors on the EU markets is an essential element in the determination of key export challenges and obstacles. From a trade negotiation perspective, it allows a very synthetic assessment of the existence and importance of potential 'country-specific' trade barriers: in other words, if the major competitors are subject to the same trade regime for market access to the EU, it implies that Ghana is not subjected to country-specific (or region-specific) trade restrictions. It also provides some guidance on trade policy issues by highlighting the differences between Ghana and her major competitors.

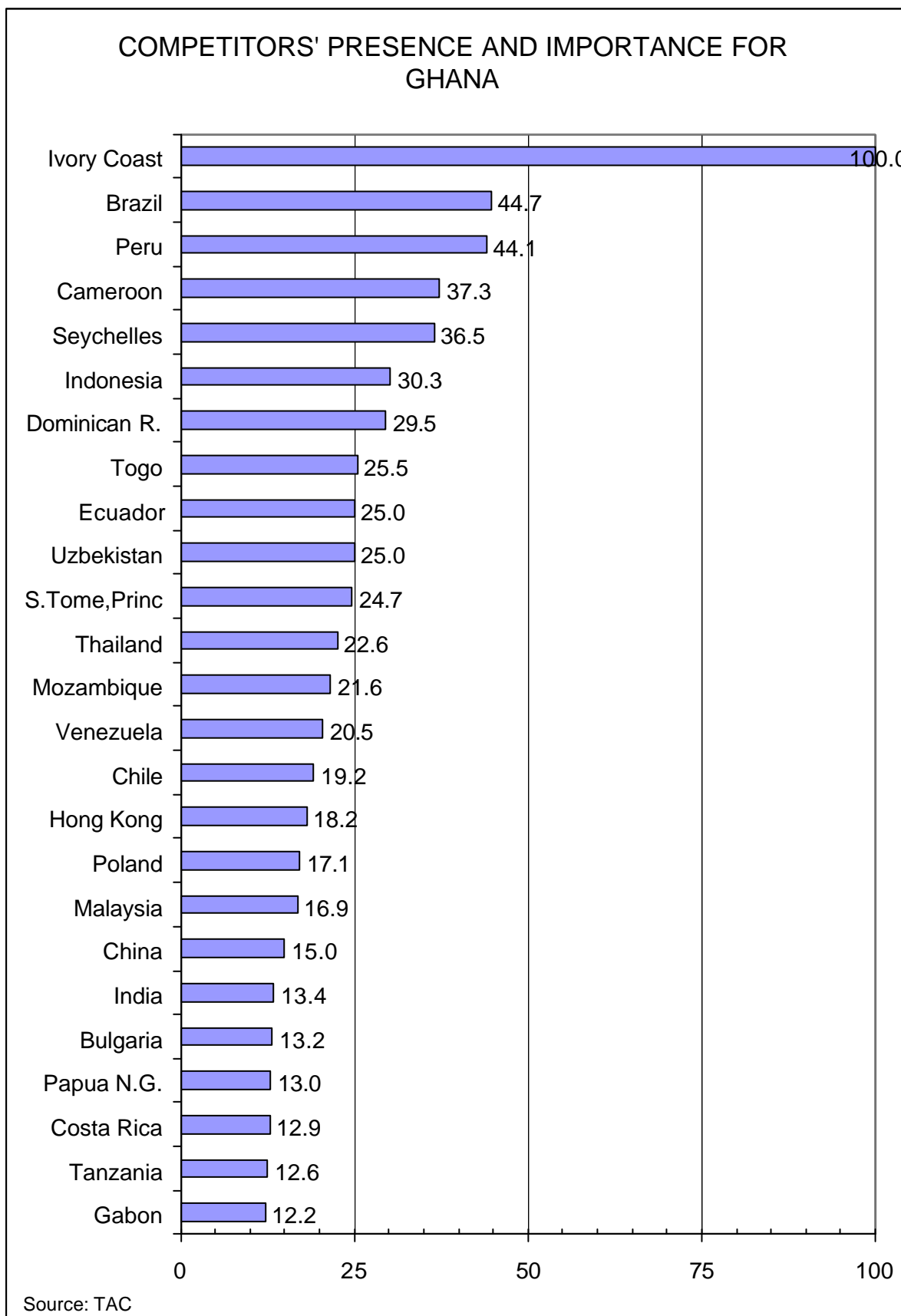
The analysis is conducted on the 35 products at a 6-digit level of classification that account for 95% of Ghana's total exports to the EU, and with the 15 largest suppliers on the EU market (excluding intra-EU trade). Overall, a list of 119 countries gives the broadest view of Ghana's competition on its exports to the EU.

A ranking of these countries has been attempted in order to define the degree of competition exerted by each country, across the range of products that are exported to the EU. A synthetic 'competitor's presence' index is constructed, taking into account the number of products for which a given competitor is competing with Ghana, such products' importance in Ghana's exports to the EU, and the relative positioning of the country versus Ghana in the list of suppliers, see box 2.1. for methodology). The results for the 25 most important competitors are shown in chart 2.12., and the detailed results are in Appendix 4.

Box 2.1. Methodology for synthetic measure of competitors' presence and importance

- | | |
|---------|--|
| Step 1: | list the 15 largest non-EU competitors for each of the 35 products (6-digit level of HS classification) |
| Step 2: | computation of the relative position of each competitor <i>versus</i> Ghana as
$RP_{ci} = P_{gi}/P_{ci}$ Where P_{gi} is the position of Ghana in the list of suppliers to the EU, and P_{ci} the position of country c , for product i |
| Step 3 | computation of a score for each competitor in each of the 35 products as
$S_{ci} = W_i * RP_{ci}$ Where W_i is the weight of products I in Ghana's total exports to the EU |
| Step 4 | computation of the gross synthetic index for each competitor as
$GSI_c = \sum_i S_{ci}$ |
| Step 5 | computation of the synthetic index for each competitor by normalizing the gross index
$SI_c = (GSI_c - \text{MinGSI}) / (\text{MaxGSI} - \text{MinGSI})$ Where MinGSI and MaxGSI are respectively the lowest and highest values of GSI_c across the list of competitors |

Chart 2.12. Synthetic Index of competitors' position in the EU market
 (computed from 0 : least intense competitor, to 100 : most intense competitor)



The most important competitor for Ghana is, by a very large margin, Ivory Coast: Ivory Coast is listed in 18 out of the 35 products under consideration, and for 16 of them, it is better positioned as a supplier to the EU. The only products where Ivory Coast is a competitor, but with a lower market share than Ghana are sheets for veneering (HS6 code 440890) and prepared or preserved fish HS6 code 160420). Except for gold and aluminium, Ivory Coast has a larger market share than Ghana on all the 6 largest export products.

Among the 25 most important competitors for Ghana, 10 are ACP countries (in descending order of competition, Ivory Coast, Cameroon, Seychelles, Dominican Republic, Togo, Sao Tome and Principe, Mozambique, Papua New Guinea, Tanzania and Gabon): in the context of EPA negotiations, market access issues are by definition the same for all these competitors, even though only Ivory Coast is an ECOWAS member.

Interestingly, many significant competitors for Ghana are from Latin America: Brazil is a key supplier for mineral products (manganese, aluminium), but also for most wood products including furniture, and for some of the marine products. The Dominican Republic is an important competitor for cocoa beans and products, as well as for fruits. Concerning pineapples, the strongest competitor is Costa Rica (45% market share in Europe).

Finally, a couple of important Asian countries appear also in the list of key competitors, with Indonesia very present in wood products, and Seychelles and Thailand in marine products.

The important conclusion from this analysis of competition in Europe for Ghana's export, from the perspective of trade negotiations, is to make sure that such negotiations take into account potential future trade agreements between the EU and these broad geographic areas (EU-Mercosur, EU-ASEAN, for instance).

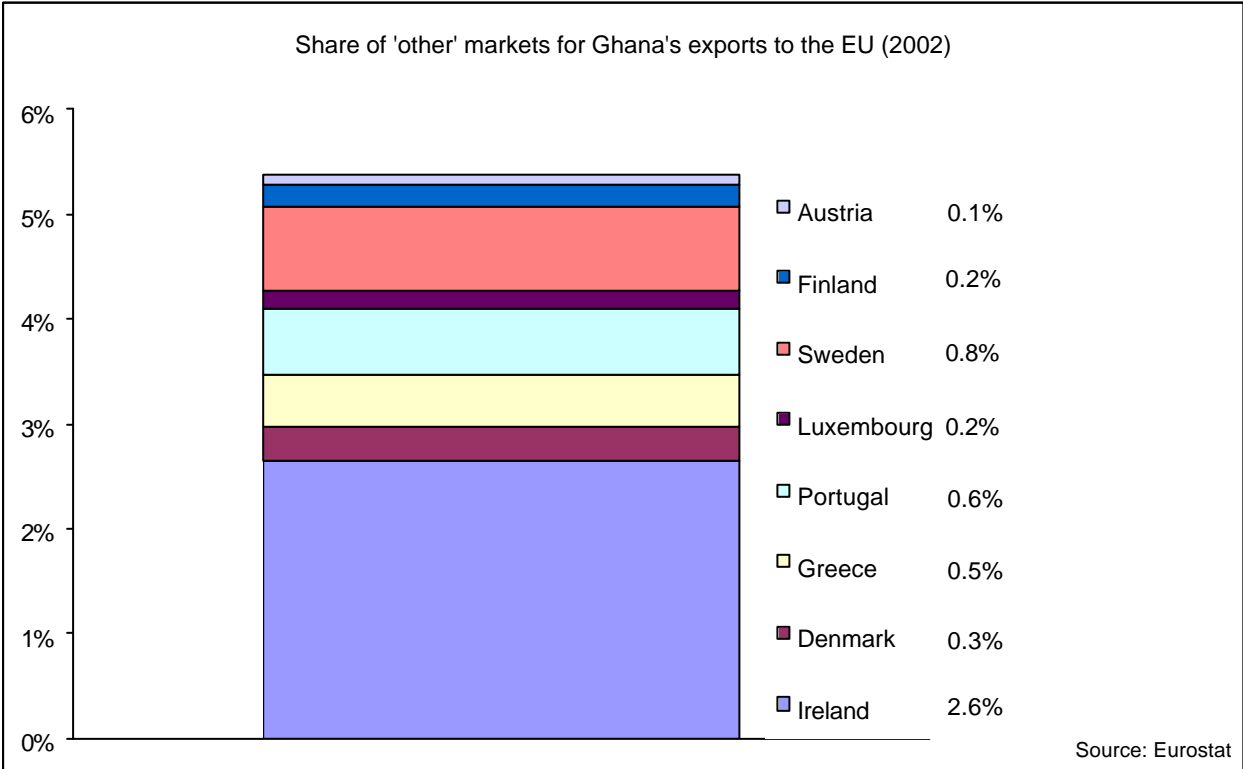
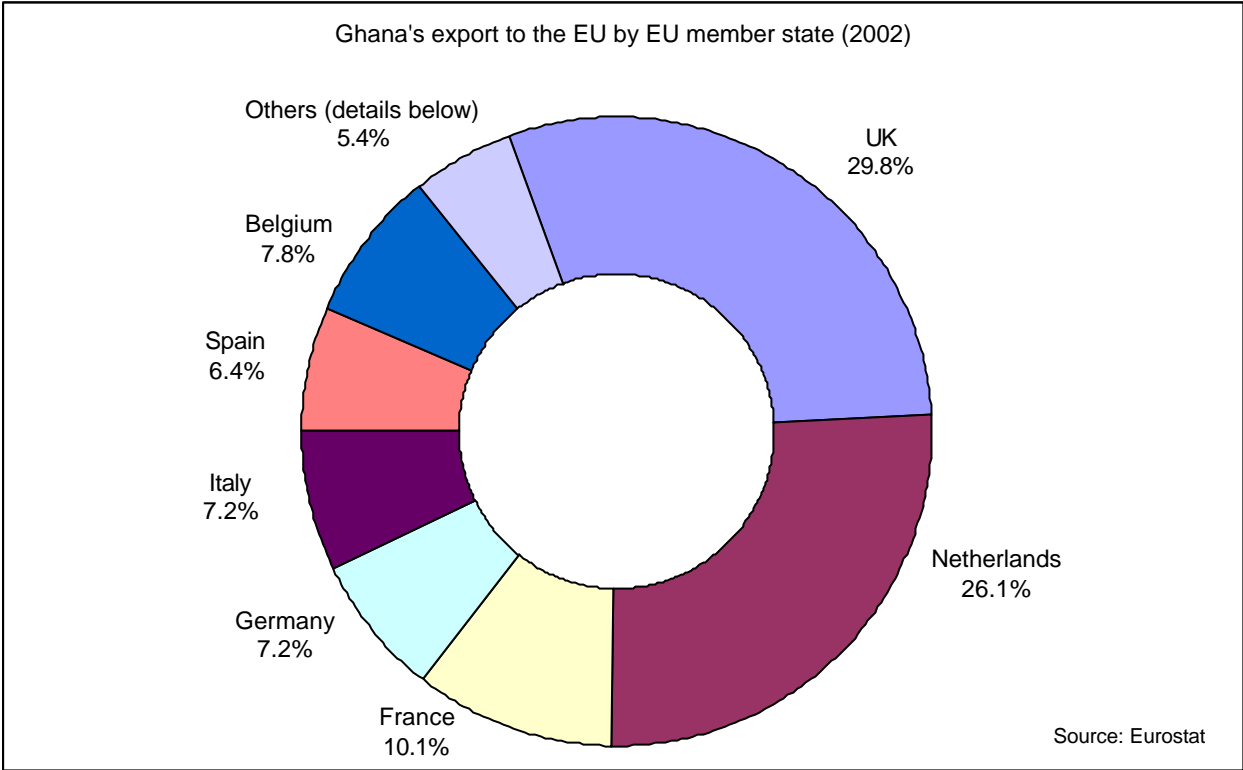
II.2.4 Analysis by destination within the EU

The analysis of Ghana's exports to the EU according to the market of destination is also very important in the definition of the negotiation position in trade negotiation because it is assumed that most of the potential trade obstacles faced by Ghanaian exporters would be almost identical across the EU: the external tariff is identical and most SPS or other non-tariff barriers to trade would be defined at the European level and would be applied across all countries.

Ghana's exports to the EU clearly shows three different groups of customer-countries: the two largest importers of Ghanaian products within the EU are absorbing close to 60% of all Ghana's exports to the EU, with 30% to the UK and 26% to the Netherlands. A second group includes markets with a weight within Ghana's exports to the EU between 5% and 10%: France, Germany, Italy, Spain and Belgium (in descending order of importance). A third group includes the remaining 8 EU member states, with a total weight in Ghana's exports to the EU of 5.4%, half of which is for Ireland, and no other market absorbing more than 0.8% of the total (Chart 2.13.)

In this respect, the very heavy concentration of Ghana's exports to a very limited number of EU countries is very revealing of dominant marketing / networking issues as opposed to standard trade barriers.

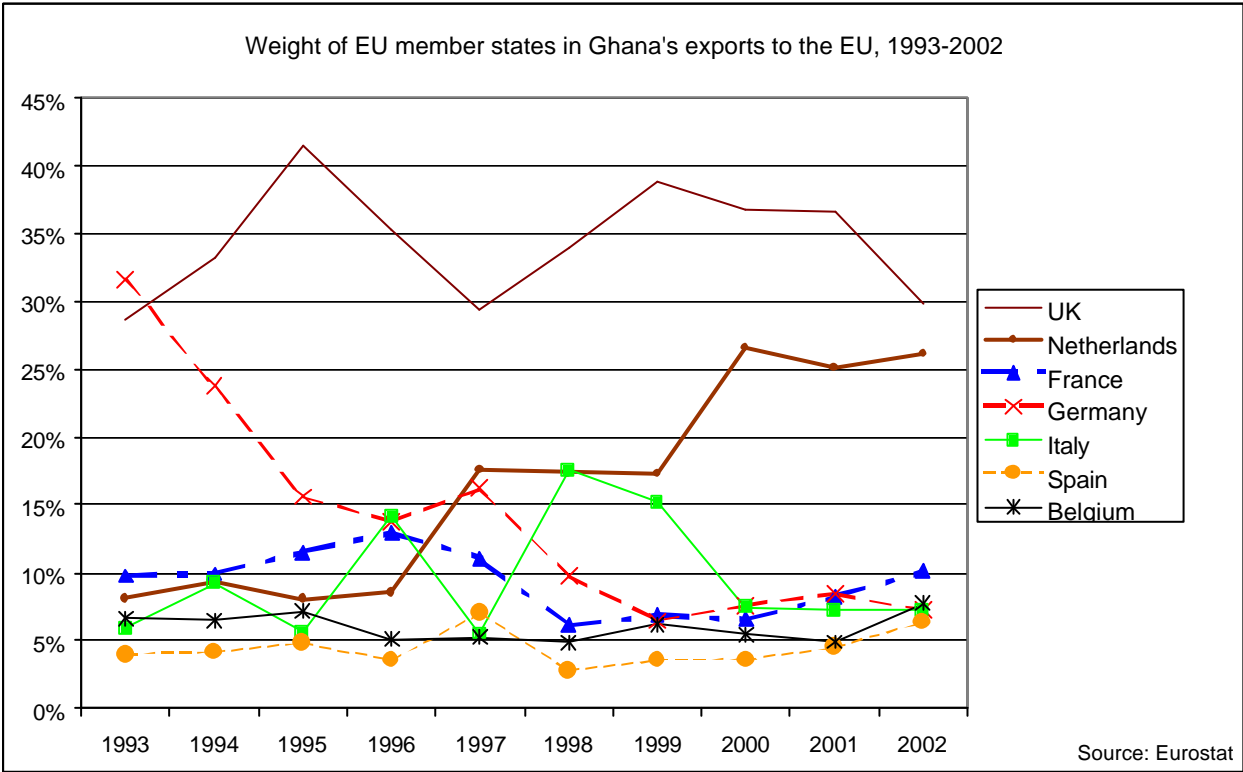
Chart 2.13. Share of European countries in Ghana’s exports to the EU (2002)



The importance of each EU member state in Ghana’s export to the EU has been somewhat irregular during the past decade. The observation of such markets’ weight suggests three important remarks:

- **Markets’ weights are highly volatile, especially for the UK and Italy** (37% of Ghana’s exports to the EU in 2002), with UK’s share oscillating between 28.7% and 41.4%, and Italy’s between 5.5% and 17.5%. The key issue would therefore be to achieve a favourable stabilization in such markets.
- **There has been a structural shift between Germany and the Netherlands**, with the weight of the former declining from 31.5% in 1993 to only 7.2% in 2002, while Netherlands’ share has increased from 8.1% to 26.1% over the same period. When observed at a detailed product level, the shift is clearly visible for cocoa beans, aluminium, and, to a lesser extent, some wood products. It is likely that such a shift, concentrated on a few products for which international trading companies dominate the markets, illustrated changes in “locational” decisions by such companies. It still highlights the crucial need to investigate further and try to re-capture some markets in Germany.
- **During the last few years, the “smaller markets” have registered a faster growth than the traditional UK market**, with a collective weight of 29.6% in 2002 for France, Spain, Belgium and “others⁴” against only 22% in 1999 and a more convincing trend feature for the past three years. Observed at a detailed level of product classification, this coincides with the successes in pineapples exports, especially in Belgium and France.

Chart 2.14. Share of major EU buyers in Ghana’s exports (1993-2002)



The breakdown of Ghana’s exports by products reveals a degree of concentration even higher for each market destination than the one (already high) observed for the whole EU market. The following table illustrates the point in showing the cumulative percentage share of the

⁴ Ireland, Denmark, Greece, Portugal, Luxemburg, Sweden, Finland and Austria

five (CR5) and three (CR3) largest products (at a 6-digit level of custom classification) exported by Ghana in each of the large EU markets:

Table 2.10. Concentration of Ghana’s exports by products in EU countries

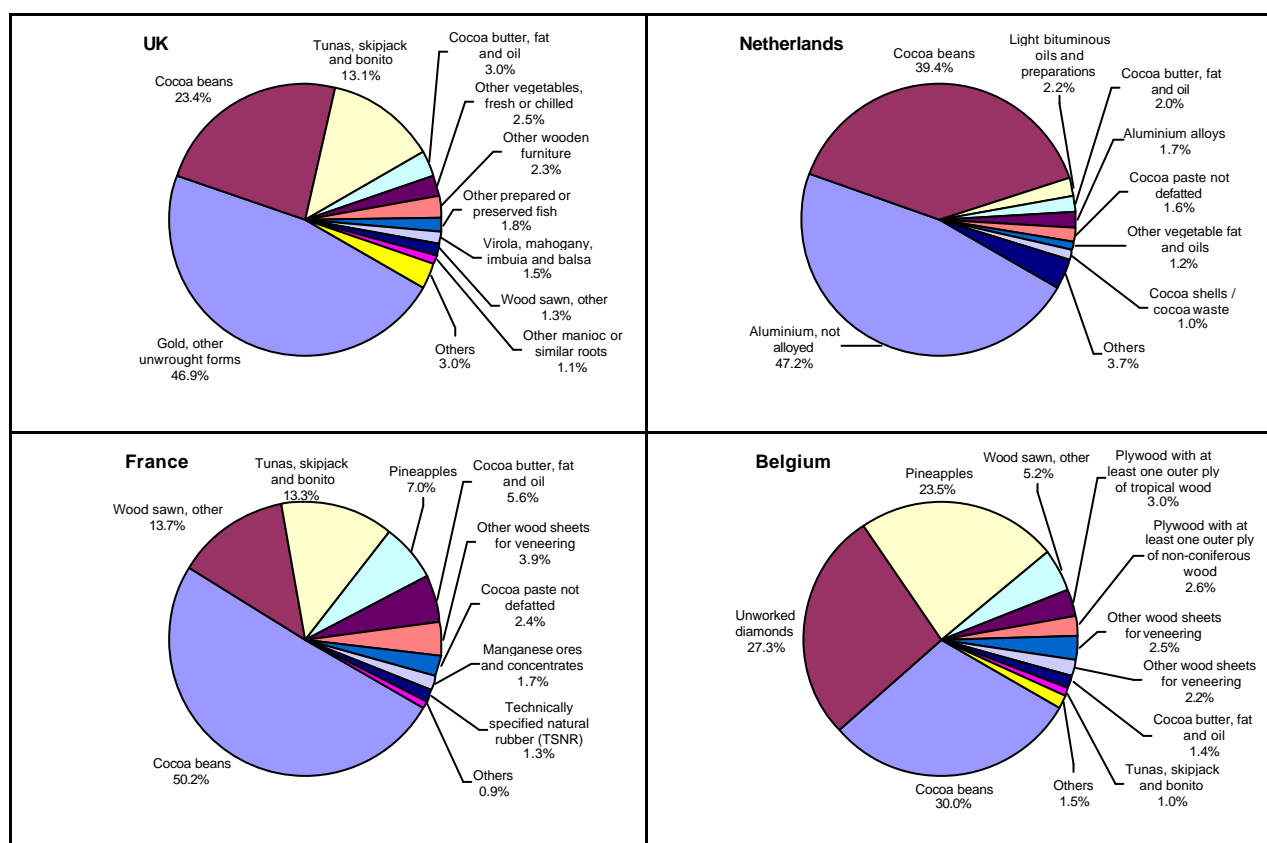
(%)	CR5	CR3
UK	86	81
Netherlands	91	87
France	87	75
Germany	82	73
Italy	77	58
Spain	60	47
Belgium	86	78
EU	69	59

Source: Eurostat

This very high level of concentration highlights a strong vulnerability for Ghana’s export performance if any specific product faces new or unexpected constraint in a given EU country. The fact that the concentration is the highest in the two major outlets for Ghana’s exports is particularly worrying in that respect. Only Italy and Spain, among the significant markets for Ghana’s exports, offer a stronger diversification feature.

Detailed data on each EU member state’s imports from Ghana at a 6-digit level of classification are presented in Appendix 6, with the 10 largest products listed. The charts below provides an illustration for the four largest markets (UK, Netherlands, France, Belgium).

Chart 2.15. Structure by products of Ghana’s exports to the largest EU markets (2002)



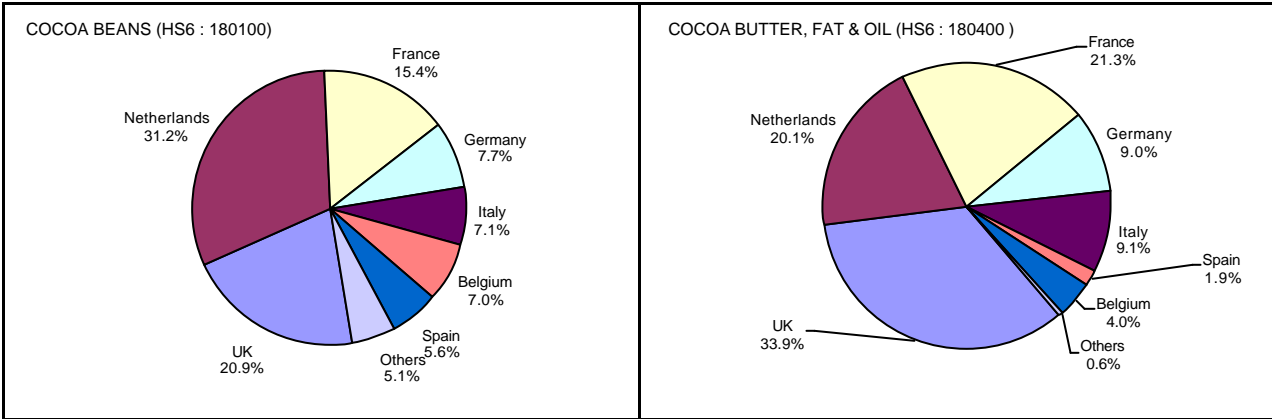
Source: Eurostat

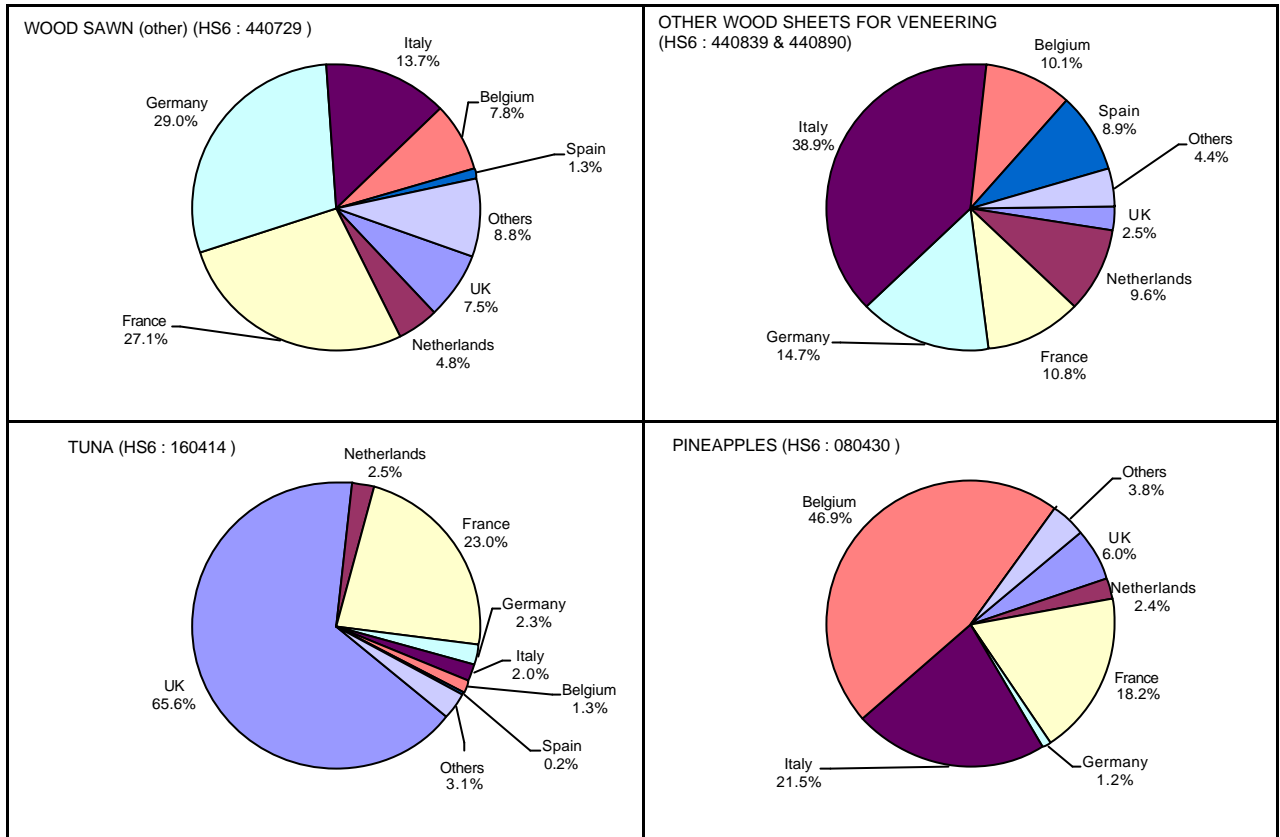
The importance of UK as a primary destination for Ghana’s export is clearly related to the large share of gold sold in the UK (45% of Ghana’s export to the UK and almost 100% of all gold sold by Ghana to the EU, while it amounts to only 13% for the EU as a whole). Products for which the UK is a dominant buyer of Ghana’s exports also include fish (tunas, skipjack and bonito), other vegetables (so-called “ethnic” vegetables targeting the country’s Ghanaian community), and wooden furniture.

In the Netherlands, it is aluminium that plays a specifically large role in total Ghana’s export to the country 46% of the total, and nearly 90% of all aluminium sold by Ghana in the EU), as well as cocoa beans, for which it is the largest European buyer (followed by the UK and France). France’s imports from Ghana are indeed dominated by cocoa beans (49% of the total French imports from Ghana), but are also highlighting a strong presence for wood products, fish (tunas, skipjack and bonito), pineapples and natural rubber. Among the four largest importers, Belgium structure of imports shows the importance of pineapples, cocoa, wood products, and a specific role of diamonds (26% of total Belgium imports from Ghana).

Observed from the angle of market structure for the major exported products from Ghana in the EU, the same feature of high concentration and very uneven distribution across countries is apparent, except for raw cocoa beans, where the structure is more diversified. Among the 23 products (at 6-digit level of classification) that account for 90% of all Ghana’s exports to the EU, the share of the two largest customer countries is above 85% for 10 of them, and above 95% for 8 of them. This concentration is even present in “niche markets”, i.e. countries that are not traditional importers of Ghanaian products, but which nonetheless absorb almost the total sales to Europe (for example, oil seeds and oleaginous fruits exports from Ghana to the EU amounted to EUR 9.5 mn in 2002, the 15th largest export item for Ghana: such exports are concentrated up to 94% in two countries only, Sweden and Denmark, even though these two countries account for only 1.1% of total Ghanaian export to the EU).

Chart 2.16. Structure of Ghana’s major exports by country of destination (2002)





Source: Eurostat

III Analysis of Ghana's constraints and potential for export expansion to the EU

III.1 *Tariff and non-tariff trade constraints on Ghana's export*

This chapter explores the various constraints faced by Ghanaian exporters when targeting the EU market. The analysis is built on a close examination of the regulatory constraints, in the form of both tariff and non-tariff barriers, a description of the non-regulatory obstacles (voluntary code of conducts between European private buyers and their suppliers), and a systematic overview of the concrete obstacles as perceived from the exporters' point of view.

III.1.1 Tariffs

The current structure of Ghana's exports to the EU reveals that almost all the products exported do not face any tariff when getting into the EU. Observed at a 6-digit of classification for the 35 products that account for 95% of Ghana's total exports to the EU, the table next page shows that it is only for "Other vegetables, fresh or chilled" (HS6 code: 070990) that tariff rates apply (from 4.7% to 8.7%, according to the product). For all the other products, the tariff rate for all countries party to the Loma Agreement (noted LOMA on the table next page) is 0%. It is shown that only 7 products do not benefit from unconstrained entry into the EU, at least from a tariff and quantitative restriction perspective. For ten products within this list, the difference in tariff protection is significantly favourable to LOMA countries as compared with the standard rate applied.

The only significant case of quantitative restriction is related to the banana trade regime, as agreed by the EC in 2001. Duty free access was given for 2,400 tons to Ghana (a very small share of the total quota as Ghana was not a traditional banana producer within ACP countries), to be replaced by tariff measures in 2006. A removal of the quantitative restriction for all suppliers would benefit Ghanaian producers looking for a larger market share.

Table 3.1. Tariff rates applied to imports from Ghana into the European Union
(as of March 2004)

HS6	Description	Duty rates	LOMA Tariff preference	SPGL Tariff preference	Export authorization	Entry into free circulation
P180100	Cocoa beans	0.0%	0.0%			
P710812	Gold, other unwrought forms	0.0%	0.0%	0.0%		
P760110	Aluminium, not alloyed	6.0%	0.0%			
P160414	Tunas, skipjack and bonito	..	0.0%			
P440729	Wood sawn, other	..	0.0%		Yes	
P080430	Pineapples	5.8%	0.0%	2.3%		
P440839	Other wood sheets for veneering	0.0%	0.0%	0.0%	Yes	
P180400	Cocoa butter, fat and oil	7.7%	0.0%	4.2%		
P710231	Unworked diamonds	0.0%	0.0%	0.0%	Yes	Yes
P260200	Manganese ores and concentrates	0.0%	..			
P760120	Aluminium alloys	6.0%	0.0%			
P440890	Other wood sheets for veneering		0.0%	0.0%	Yes	
P180310	Cocoa paste not defatted	9.6%	0.0%	6.1%		
P120799	Other oil seeds & oleaginous fruits	0.0%	..			
P070990	Other vegetables, fresh or chilled	..	See below			
P030749	Other molluscs	..	0.0%			
P440799	Wood sawn, other	..	0.0%		Yes	
P940360	Other wooden furniture	0.0%	0.0%	0.0%	Yes	
P030343	Skipjack or stripe-bellied bonito	..	0.0%			
P440920	Non-coniferous wood	0.0%	0.0%	0.0%	Yes	
P180320	Cocoa paste wholly or partly defatted	9.6%	0.0%	6.1%		
P271011	Light bituminous oils and preparations	..	0.0%			
P440724	Virola, mahogany, imbuia and balsa	..	0.0%		Yes	
P260600	Aluminium ores and concentrates	0.0%	..			
P030342	Yellowfin tunas	..	0.0%			
P160420	Other prepared or preserved fish	..	0.0%			

P071490	Other manioc or similar roots	..	See below			
P441213	Plywood with at least one outer ply of tropical wood	..	0.0%			Yes
P030759	Other molluscs	..	0.0%	2.8%		
P180200	Cocoa shells / cocoa waste	0.0%	..			
P151590	Other vegetable fat and oils	..	0.0%			
P080300	Bananas, including plantains, fresh or dried	..	See below			
P400122	Technically specified natural rubber (TSNR)	0.0%	0.0%	0.0%		
P400121	Smoked sheets natural rubber	0.0%	0.0%	0.0%		
P441214	Plywood with at least one outer ply of non-coniferous wood	7.0%	0.0%	3.5%		Yes
DETAILED PRODUCTS						
P070990 Other vegetables, fresh or chilled						
P070990-10	Salad vegetables, other than lettuce (<i>Lactuca sativa</i>) and chicory (<i>Cichorium</i> spp.)	10.4%	8.7%	6.9%		
P070990-20	Chard (or white beet) and cardoons	10.4%	8.7%	6.9%		
P070990-31	Olives	4.5%		0.0%		
P070990-40	Capers	5.6%	4.7%	2.1%		
P070990-50	Fennel	8.0%	6.7%	4.5%		
P070990-60	Sweet corn	9.4 c / 100 kg	9.2 c / 100 kg			
P070990-70	Courgettes	12% + per kilos	0% + per kilos			
P070990-90	Other	12.8%	0.0%	8.9%		
P071490 Other manioc or similar roots						
071490-11	Arrowroot, salep and similar roots and tubers with high starch content	9.5 c / 100 kg	0.0%			Yes
071490-90	Other	3.0%	0.0%	0.0%		Yes
P080300 Bananas, including plantains, fresh or dried						
080300-11	Fresh	16.0%	0.0%	12.0%		
080300-90	Dried	16.0%	0.0%	12.0%		

Source : Taric / European Commission

However, the structure of tariff protection on existing exports from Ghana may be misleading as far as the analysis of constraints is concerned, as other products, for which tariff may be higher, would have been discouraged and probably not developed. In particular, any economic development or export development strategy including a move downwards on the value addition chain in commodity processing would point towards the issue of tariff escalation, i.e. the fact that many tariff lines on processed products are higher than those on raw or semi-processed commodities.

A detailed analysis has been conducted on four large upstream-downstream groups of activities and products: cocoa, vegetables and fruits, wood, and aluminium. Among the complete classification list of imports into the EU, a very large sample of 6- or 8-digit level products having progressive increases in valued addition have been selected. The complete table with associated tariff rates is provided below. Three conclusions can be draw:

- **Tariff escalation is clearly visible for cocoa products, and to a lesser extent for processed fruits and vegetables.** For cocoa products, there is a tax per kilo levied for cocoa powder (HS6 code 180610), with a value increasing with the proportion of sugar equivalent (sucrose), from 25 c/kg⁵ to 41 c/kg; similarly, ice cream that would contain cocoa are subjected to a progressive tax per kilo. Conversely, chocolate preparations, including bars, are not subjected to tariff barriers. For processed fruits and vegetables, fruit juices are subjected to a tax per kilo (20.6 c/kg). Tariff are also applied to preserved vegetables (yam, sweetcorn, respectively 3.8 c/kg and 9.4 c/kg) and preserved fruits (23.9 c/kg).
- **For the other processed goods derived from wood and aluminium, there is no tariff escalation as all tariff rates applied to LOMA countries are 0%.**
- **LOMA countries still benefit from significant tariff preference against other competitors**, even when taking into account the non-zero tariff applied to some processed commodities (cocoa a, fruits and vegetables). This is particularly true for aluminium products, where the tariff difference range from 2.5% up to 7.5%.

⁵ cents (one hundredth of a Euro) per kilo

Table 3.2 : Tariff escalation for downstream commodity processing

		DUTY	LOMA	SPGL
COCOA				
P180610-15	Cocoa powder - Containing no sucrose	8	0	2.8
P180610-20	Cocoa powder - Containing 5 % or more but less than 65 % by weight of sucrose	8 (+25c/kg)	0 (+25c/kg)	2.8 (+25c/kg)
P180610-30	Cocoa powder - Containing 65 % or more but less than 80 % by weight of sucrose	8 (+31c/kg)	0 (+31c/kg)	4.5 (+31c/kg)
P180610-90	Cocoa powder - Containing 80 % or more by weight of sucrose	8 (+41c/kg)	0 (+41c/kg)	4.5 (+41c/kg)
P180620-10	Chocolate & other prep - Containing 31 % or more by weight of cocoa butter	8,3 (+)	0	4,8 (+)
P180620-30	Chocolate & other prep - Containing a combined weight of 25 % to 31% of cocoa butter and milk fat	8,3 (+)	0	8,3 (+)
P180620-50	Chocolate & other prep - Other	8,3 (+)	0	8,3 (+)
P180631	Chocolate & other prep - filled	8.3 (+)	0	4.8 (+)
P180632	Chocolate & other prep - not filled	8.3 (+)	0	4.8 (+)
P180690-11	Chocolate & other prep - other preparations in blocks - Chocolate and chocolate products	8,3 (+)	0	4,8 (+)
P180690-50	Chocolate & other prep - other preparations in blocks - Sugar confectionery and substitutes thereof made from sugar substitution products, containing cocoa	8,3 (+)	0	4,8 (+)
P180690-60	Chocolate & other prep - other preparations in blocks - Spreads containing cocoa	8,3 (+)	0	4,8 (+)
P180690-70	Chocolate & other prep - other preparations in blocks - Preparations containing cocoa for making beverages	8,3 (+)	0	4,8 (+)
P180690-90	Chocolate & other prep - other preparations in blocks - Other	8,3 (+)	0	4,8 (+)
P210500-10	Ice cream, whether or not containing cocoa - with milkfats	8.6 (+20c/kg)	0 (+20c/kg)	5.1 (+20c/kg)
P210500-91	Ice cream, whether or not containing cocoa - not milkfats	8 (+38c/kg)	0 (+38c/kg)	4.5 (+38c/kg)
VEGETABLES & FRUITS				
P2001-2005	Vegetables, fruits, nuts, etc. prepared or preserved by vinegar or acetic acid			
P200110	Vegetables - cucumber and gherkin	17.6	0	14.1
P200190 - 10	Mango chutney	0	..	0
P200190 - 20	Fruit of the genus Capsicum	5	0	1.5
P200190 - 30	Sweetcorn	5.1 (+9,4c/kg)	0 (+9,4c/kg)	1.5 (+9,4c/kg)
P200190 - 40	Yams	8.3 (+3,8c/kg)	0 (+3,8c/kg)	4.8 (+3,8c/kg)

		DUTY	LOMA	SPGL
P200190 - 50	Mushrooms	16	0	12.5
P200190 - 60	Palm hearts	10	0	3.5
P200190 - 65	Olives	16	0	12.5
P200190 - 70	Sweet peppers	16	0	11.2
P200190 - 91	Tropical fruit and tropical nuts	10	0	6.5
P200190 - 93	Onions	16	0	12.5
P200190 - 99	Other	16	..	11.2
P200490-10	Other vegetables & mixtures of veg - Sweetcorn	5.1 (+9,4c/kg)	0 (+9,4c/kg)	1.6 (+9,4c/kg)
P200490-30	Other vegetables & mixtures of veg - Sauerkraut, capers, olives	16	..	11.2
P200490-50	Other vegetables & mixtures of veg - Peas	19.2	0	15.7
P200490-91	Other vegetables & mixtures of veg - other	14.4	0	10.9
P200590-10	Other vegetables prepared - Fruit of the genus Capsicum	6.4	0	2.9
P200590-30	Other vegetables prepared - Capers	16	0	11.2
P200590-50	Other vegetables prepared - Globe artichokes	17.6	0	12.3
P200590-60	Other vegetables prepared - Carrots	17.6	0	12.3
P200590-70	Other vegetables prepared - Mixtures of veg.	17.6	0	12.3
P200590-75	Other vegetables prepared - Sauerkraut	16	0	11.2
P200590-80	Other vegetables prepared - Other	17.6	0	12.3
P200600-10	Vegetables, fruits,... preserved by sugar - Ginger	0	..	0
P200600-31	Vegetables, fruits,... preserved by sugar - Other	20 (+23,9c/kg)	0 (+23,9c/kg)	16.5 (+23,9c/kg)
P200710-10	Homogenised preparations - With a sugar content exceeding 13 % by weight	24 (+4,2c/kg)	0	24 (+4,2c/kg)
P200710-91	Homogenised preparations - Other	15	0	5.2
P200799-10	Other - With a sugar content exceeding 30 % by weight	22.4	0	..
P200799-55	Other - With a sugar content exceeding 13 % but not exceeding 30 %	24 (+4,2c/kg)	0	..
P200799-91	Other - Other	24	0	..
P200811-10	Ground nuts - Peanut butter	12.8	0	8.9
P200811-92	Ground nuts - Other, in immediate packings of a net content	11.2	0	7.7
P20082011	Pineapples - Containing added spirit	25,6 (+2,5c/kg)	0	..
P20082051	Pineapples - Not containing added spirit	19.2	0	15.7
P200899-11	Other, incl mixtures - Containing added spirit	10	0	3.5

		DUTY	LOMA	SPGL
P200899-41	Other, incl mixtures - Not containing added spirit	0	..	..
P200911-11	Orange juice frozen - Of a Brix value exceeding 67	33.6 (+20,6c/kg)	0 (+20,6c/kg)	..
P200911-91	Orange juice frozen - Of a Brix value not exceeding 67	15.2 (+20,6c/kg)	0 (+20,6c/kg)	11.7 (+20,6c/kg)
P200912	Not frozen	12.2	0	8.5
P200919-11	Orange juice other - Of a Brix value exceeding 67	33.6 (+20,6c/kg)	0 (+20,6c/kg)	..
P200919-91	Orange juice other - Of a Brix value exceeding 20 but not exceeding 67	15.2 (+20,6c/kg)	0 (+20,6c/kg)	11.7 (+20,6c/kg)
P200980-11	Other Juice - Of a Brix value exceeding 67	33.6 (+20,6c/kg)	0 (+20,6c/kg)	..
P200980-50	Other Juice - Of a Brix value not exceeding 67	19.2	0	15.7
P200990-11	Mixtures of juices - Of a Brix value exceeding 67	33.6 (+20,6c/kg)	0 (+20,6c/kg)	..
P200990-31	Mixtures of juices - Of a Brix value not exceeding 67	20 (+20,6c/kg)	0 (+20,6c/kg)	..
P210410	Soups	11.5	0	8
P210420	Homogenised composite food preparations	14.1	0	9.8
WOOD		DUTY	LOMA	SPGL
P44151010	Cases, boxes, crates, drums and similar packings	4	0	0
P44151090	Cable-drums	3	0	0
P44152020	Pallets, box pallets and other load boards; pallet collars - Flat pallets; pallet collars	3	0	0
P44152090	Pallets, box pallets and other load boards; pallet collars - Other	4	0	0
P441600	Casks, barrels, ...	0	0	..
P441700	Tools, tool bodies,...	0	0	..
P441820-10	Doors and their frames and thresholds - Of tropical wood, as specified in additional note 2 to this Chapter	3	0	0
P441820-50	Doors and their frames and thresholds - Coniferous	0	0	0
P441820-80	Doors and their frames and thresholds - Other	0	0	0
P441830-10	Parquet panels - For mosaic floors	3	0	0
P441830-91	Parquet panels - Other	0	0	0
P441840	Shuttering for concrete constr. Work	0	0	..
P441900	Tableware & kitchenware	..	0	..
P470100	Mechanical wood pulp	0	..	..
P470200	Chemical wood pulp	0	..	..

		DUTY	LOMA	SPGL
P470500	Wood pulp obtained by chemical pulping	0	..	..
P680800	Panels, boards, or other waste of wood	1.7	0	0
P940330	Wooden furniture used in offices	0	0	0
P940340	Wooden furniture used in kitchen	2.7	0	0
P940350	Wooden furniture used in bedroom	0	0	0
ALU		DUTY	LOMA	SPGL
P760310	Aluminium powders and flakes - Powders of non-lamellar structure	5	0	1.5
P760320	Aluminium powders and flakes - Powders of lamellar structure; flakes	5	0	1.5
P7604	Alu bars, rods and profiles	7.5	0	4
P760410	Of aluminium, not alloyed	7.5	0	4
P7605	Aluminium wire	7.5	0	4
P760611	Of aluminium, not alloyed	7.5	0	4
P760612	Of aluminium, alloys	7.5	0	4
P760691	Of aluminium, not alloyed	7.5	0	4
P760692	Of aluminium, alloys	7.5	0	4
P760711	Aluminium foil - Not backed	7.5	0	4
P760720	Aluminium foil - Backed	..	0	..
P760810-10	Tubes of aluminium, not alloyed - With attached fittings, suitable for conducting gases or liquids, for use in civil aircraft	0	0	0
P760810-20	Tubes of aluminium, not alloyed - Other	7.5	0	4
P760820-10	Tubes of aluminium, alloys - With attached fittings, suitable for conducting gases or liquids, for use in civil aircraft	0	0	0
P760820-30	Tubes of aluminium, alloys - Other	7.5	0	4
P760900	Aluminium tubes of pipe fittings	7	0	3.5
P7614	Stranded wire, cables, ...	6	0	2.5
P7615	Tables, kitchen or household articles of alu	6	0	2.5
P761691	Cloth, grill of alu wire	6	0	2.5

III.1.2 SPS and other safety regulations

The other major regulatory constraint faced by Ghanaian exporters deal with standards and technical regulation, especially for raw and processed food commodities, in the form of the Sanitary and Phytosanitary rules (SPS, which are managed by the EC Directorate General in charge of Health and Consumer Protection, DG Sanco, as opposed to the Directorate General in charge of external trade, DG Trade), and the Hazard Analysis and Critical Control Points (HACCP).

The Sanitary and Phytosanitary agreement⁶ states all the measures aimed at protecting people's or animals' life and health as well as flora from risks associated with diseases, parasites, fertilizers, toxins, polluting elements... This agreement however does not provide any rules on how to implement these SPS measures. Thus any level of sanitary protection can be adopted, provided that it based on scientific evidence (in the absence of these proofs, some precautionary measures can be taken for a limited period of time by the importing country). The agreement further relies on two main principles: (1) Non discrimination (i.e. an SPS measure has to create as little hindrance to trade as possible compared to existing alternatives and should not be more restrictive than what is required by the desired protection level) and (2) Scientific justification (which other WTO Members should be entitled to contest before its final settlement).

Several prescriptions under the SPS agreement have been put forward as increasing pressures on ACP, hence Ghanaian exporters:

- Traceability regulations have been reviewed recently, now making the private sector responsible for the proof charges with legal sanctions taken against managers in the production and import sectors of the EU, if they fail to abide by these laws. This will turn into greater pressures on suppliers, to make sure that they are conforming to the European SPS prescriptions in terms of traceability for fresh fruits and vegetables. Small exporters who cannot give out the necessary amount of information will thus be penalised.
- Maximum levels of residue (MLR) of pesticides have been introduced for imported products to the European Union. It has been argued⁷ that too little attention was paid by regulators in setting the limits for a large number of tropical or sub-tropical products. As a consequence, in many instances, the maximum limit has been set at the very restrictive level of detection threshold (i.e. either the pesticide is not detected, or the level will be above the maximum). This is even more penalizing for tropical fruits being transported by sea, as the use of post-harvest protective pesticides or fungicides is a necessity. Moreover, the list of forbidden products as well as the limits are regularly adjusted, making the production management more difficult and increasing the risks taken by local producers

⁶ For more information, see "Les Conséquences de l'application des mesures sanitaires et phytosanitaires (SPS) pour les pays ACP", CTA, May 2003.

⁷ Cf. CTA Report mentioned above

Finally, SPS measures will bring forward necessary infrastructure changes if ACP countries want to comply with them, hence fostering adjustment costs. These costs are associated with insufficient institutions as well as the need of acquiring new infrastructure and/or upgrading existing installations: the ACP countries often lack the resource (scientific and technical knowledge among others) necessary to comply with these measures. They would also require more time for adjustment to avoid production losses and decrease in their market share in the case when they cannot adjust within the schedule set out by the European Union. Information in general on these SPS measures and their proper understanding by local producers and institutions are poor, preventing these countries from developing their export sector further. Finally, countries that do not have domestic SPS rules are less likely to understand the measures imposed by the EU. As a result, ACP countries are facing several needs: national strategies on food control, rules and legislation on food, modernise their control laboratories, improve their scientific and technical abilities. For the private sector exporters, these costs can be associated with the costs of setting up the HACCP system (see below), of new pesticides and of certification.

The HACCP system has been set up in 1997 by the Food and Drug Administration, in charge of assessing food security in the US, and has become a standard norm in all developed markets. Even though it is not technically a SPS regulation, it has been applied by the EU for all processed food products since 1993. It is defined as “a management system in which food safety is addressed through the analysis and control of biological, chemical, and physical hazards from raw material production, procurement and handling, to manufacturing, distribution and consumption of the finished product” and relies on seven principles⁸:

- Analyse hazards. Potential hazards associated with a food and measures to control those hazards are identified. The hazard could be biological, such as a microbe; chemical, such as a toxin; or physical, such as ground glass or metal fragments.
- Identify critical control points. These are points in a food's production--from its raw state through processing and shipping to consumption by the consumer--at which the potential hazard can be controlled or eliminated. Examples are cooking, cooling, packaging, and metal detection.
- Establish preventive measures with critical limits for each control point. For a cooked food, for example, this might include setting the minimum cooking temperature and time required to ensure the elimination of any harmful microbes.
- Establish procedures to monitor the critical control points. Such procedures might include determining how and by whom cooking time and temperature should be monitored.
- Establish corrective actions to be taken when monitoring shows that a critical limit has not been met--for example, reprocessing or disposing of food if the minimum cooking temperature is not met.

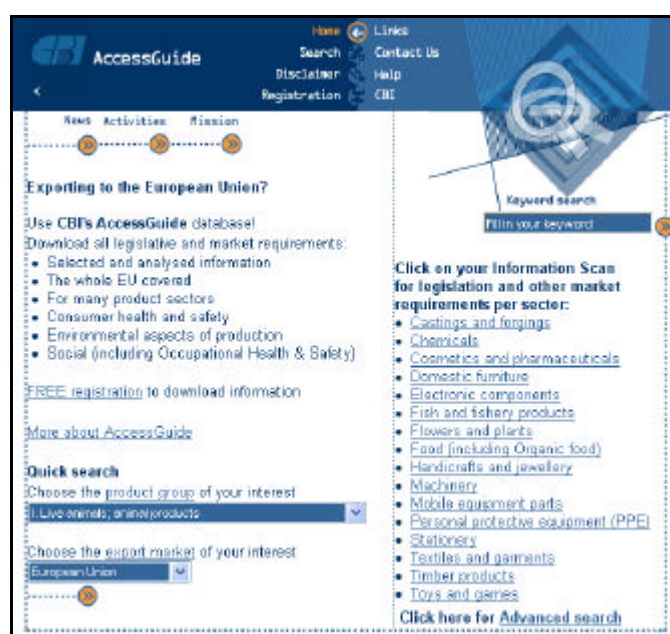
⁸ For more information see the HACCP website, <http://vm.cfsan.fda.gov/~lrd/haccp.html>

- Establish procedures to verify that the system is working properly--for example, testing time-and-temperature recording devices to verify that a cooking unit is working properly.
- Establish effective record-keeping to document the HACCP system. This would include records of hazards and their control methods, the monitoring of safety requirements and action taken to correct potential problems. Each of these principles must be backed by sound scientific knowledge: for example, published microbiological studies on time and temperature factors for controlling food-borne patho gens.

This system is used as a major tool to control for food safety, and the latest revision of the European legislation on hygiene put more emphasis on it, with increasing control points and more sophisticated controlling methods (with the need to hire foreign consultants to install them and train workers). Thus the highest costs associated with this system accrue to monitoring the process of quality control and to the staff in charge of laboratory analyses.

The set of rules covering SPS and HACCP are assumed to be compatible with WTO rules; as they are decided with the objective of health and consumer protection, and considering that this is a very sensitive subject in the European Union, there is not much to be negotiated in the context of the EPA, except for four major aspects:

- **Clarity of, and easiness-of-access to information** on such rules, because most of Ghanaian producers would not be fully aware of the rules and the ways to comply with them. Two initiatives (from the CBI in the Netherlands, and the European Commission itself) have to be more largely publicized, that provide detailed information on such rules:
 - The CBI website (<http://www.cbi.nl/>) helps exporters from developing countries to download freely different Access Guides. Three categories of these guides are available: environment, consumer health and safety and social.



- The DG Trade “helpdesk” website (<http://export-help.cec.eu.int/>) provide information on tariffs (the TARIC database), customs documents, rules of origin and trade statistics.



- **Deepen the analysis for specific pesticides and fungicides used in surface treatment of fruits or vegetables for sea-transport**, with a view of adapting the SPS regulations for such products and treatments.
- **Calendar and schedule of application** of new rules should be defined in order to allow Ghanaian companies to adapt, especially for MLR and use of pesticides.
- **Technical assistance** should be provided on a systematic and structural way so that to enable existing producer to improve their technical capabilities and meet EU requirements. The costs of compliance have been estimated in other studies on ACP countries⁹, and they are usually high both at the country level (institutional strengthening, establishment of control or certification points and bodies) and at the producer level.

III.1.3 Rules of Origin

The last important constraint facing Ghanaian exporters deals with the regulation on Rules of Origin (RoO), i.e. the technical, economic and administrative rules to be followed and observed if an exporter wants to benefit from the preferential trade regime granted to ACP countries, and granted to future beneficiaries of the potential EPA. RoO details applied in the Cotonou Agreement are an integral part of the Agreement, and cover more than 200 pages and are therefore product-specific (type and proportion of inputs that are allowed in the processing) and include specific provisions for inputs coming from South Africa.

A thorough review of these product-specific rules for actual and potential exports from Ghana allows to point towards the following points:

⁹ Cf. CTA Report mentioned above

- As an overall principle, **rules need to be more simple and homogenous**. This homogeneity should also be sought across different trade agreements, including the US initiative AGOA.
- The emphasis should be more clearly put on the development / clustering aspects of value addition in ACP countries and Ghana in particular, even if this value addition is initially small: this would suggest that for manufactured goods (including furniture, aluminium products, processed food), **the maximum percentage share of non-origin products be raised to a higher level, significantly above 50%**¹⁰. In the present agreement, the most frequent percentage is 40%. For countries that have structural transportation impediments and costs, this percentage should also be applied to the FOB price, and not the ex-factory price.
- **For agricultural products, the restriction based on the obligation to have all the products originated from the origin-country should be eased**, in order to allow potential processes of product-combination, or mixes of products, or to allow producers to source some ‘marginal sources of supply’ from elsewhere. The percentage of non-origin products in raw or semi-processed commodities obviously has to remain low to avoid traffic diversion, but a percentage of 5% should be acceptable and allow some flexibility in marketing developments by local producers or exporters.
- **For food products**, a particular attention should be devoted to processed cocoa products and fruits and vegetables. In particular, **the restriction for RoO benefits related to sugar-content / sugar origin should be lifted**, or at least significantly relaxed. As of today, all processed cocoa products and most processed fruit preparation are not eligible for ACP preferences if the ex-factory price includes more than 30% of sugar content (in value terms, and not weight terms) originating from a non-ACP or a non-EU member state.
- **For fish products**, the restrictions on RoO benefits are very strict. Indeed, the concept of origin is more complex as most vessels do fish in international waters. The conditions in the Protocol include:
 - Registration of the vessels in ACP or EU countries
 - **Minimum ownership** of 50% (equity participation) by persons or companies having their head offices in the EU or ACP country, **and board chairman** as well as at least 50% of the board members **from ACP or EU countries**
 - Minimum 50% of the crew originating from an ACP or EU country

In the case of Ghana as for most ACP countries, the second condition is *de facto* a restriction on trade: it is difficult to legitimate that ownership and board chairmanship be a criteria from origin of a product. The first and third condition are much more acceptable as they are clearly fostering local development, but the second one **should be removed**.

¹⁰ percentage of ex-factory price of the processed product

III.2 Other non-regulatory EU constraints

These non-regulatory constraints can take the form of voluntary codes, which give exporting companies further certifications on their production good practices. Two of these voluntary codes are presented below:

The Forest Stewardship Council (FSC) has been set up in 1993 “to support environmentally appropriate, socially beneficial and economically viable management of the world’s forests”. Its activities are: the development of forest management and related standards, communication and education and the accreditation and monitoring of certification bodies working according to FSC’s standards. Thus, FSC operates an independent entity called FSC Accreditation Business Unit, which is in charge of providing accreditation services to Certification Bodies and National Initiatives. However, FSC does not directly certify forest operations or manufacturers. This important step is done by FSC-accredited certification bodies. This maintains FSC's independence between its standards and requirements, and operations seeking certification. There are several types of FSC certificates available from certification bodies: forest management certificates apply to operations managing forestland. Chain of custody certificates ensure that processing operations can track the path of certified forest products through production. Joint forest management-chain of custody certificates are available. All certificates can be for individual forest operations or for groups of forest operations. Thus these types of certifications allow greater consumer awareness in their purchases of wood products and may influence the production/sales of exporters who fail to comply with these types of certifications.

EUREPGAP, the global partnership for safe and sustainable agriculture, provides international verification frameworks across a wide range of agricultural production sectors. The common goal of the members, which have signed the EUREP Terms of Reference is to “respond to consumer concerns on food safety, animal welfare, environmental protection and worker welfare by:

- Encouraging adoption of commercially viable Farm Assurance Schemes, which promotes the minimisation of agrochemical inputs, within Europe and worldwide.
- Developing a Good Agricultural Practice (GAP) Framework for benchmarking existing Farm Assurance Schemes and Standards including traceability.
- Providing guidance for continuous improvement and the development and understanding of best practice
- Establishing a single recognised framework for independent verification.
- Communicating and consult openly with consumers and key partners, including producers, exporters and importers”

Thus the EUREPGAP Protocol for Fresh Fruits and Vegetables sets out a framework for Good Agricultural Practice (GAP) on farms, and growers receive their EUREPGAP approval through independent verification from a verification body approved by EUREP. The Control Points and Compliance Criteria document on Fruit and Vegetables (see appendix 7) highlights the different control points organised around several main issues (traceability, record keeping and internal self-inspection, varieties and rootstocks, site history and site management, soil and substrate management, fertiliser use, irrigation and fertigation, crop protection, harvesting, produce handling, waste and pollution management, recycling and re-use, worker health, safety and welfare and environmental issues) and by which farmers have to abide.

Considering the country of origin of EUREPGAP members be they suppliers or retailers is interesting in showing that ACP countries can also look at other companies which may not belong to this group or try to, on the opposite, enter this group to participate in/influence the decision process. Indeed, the list of participants that are suppliers of fruits and vegetables (either as producing companies, distribution companies, or representative bodies- see appendix 7) indicate that many active fruit and vegetable exporters from developing countries are present, and therefore influencing the decision process and obtaining early information (example of Chile). In the case of Ghana, its “representation” is limited to the UK company Blue Skies, which is a Eurep-Gap member. (details on <http://www.eurep.org>).

III.3 Perceived constraints to Ghana’s exports and potential for diversification

III.3.1 Overall ingredients and conditions for export diversification and expansion

Export diversification and/or promotion have often been presented as the way to overcome difficulties linked to commodity dependency in developing countries and especially in Africa. Indeed the fact that some countries are relying on a limited number of products for their earnings seems to support the idea of export diversification and promotion. Justifications for this development path are manifold:

- Countries with a narrow export base turn out to have more instable export earnings than countries with a wider export base, and this is even more so the case for commodities whose prices tend to fluctuate widely and have shown a declining overall trend since the 1950’s. Such earning instability impairs countries’ development, all the more so if the bulk of their global revenues come from exports (as is the case when the tax base is dismal).
- The concept of comparative dynamic advantages stresses that the comparative advantage of a country may change over time (affected by different economic policies, changes in local resource endowment, adjustment in the productive structure...). Thus changes in underlying conditions impact the pattern of development of a country, hence supporting the export diversification strategy.

- The demand side approach underlines that the global demand of raw materials and commodities tends to decrease over time, due to inelastic income demand for these products, trade barriers and discovery of substitutes. Moreover, terms of trade for many commodity exporters developing countries have tended to deteriorate as well (lower export prices but higher import ones). This means that export revenues linked to these products are bound to decrease (*ceteris paribus*) and would need to be substituted (either by higher production and/or export diversification).
- The debt approach highlights that the countries' ability to repay debts is appreciated by the ratio of debt servicing as a proportion of export earnings. As a result, if export earnings are decreasing, credit ratings are worsening, making it harder and/or more expensive for countries to raise new debt, inducing a reduction in social services among others (generally financed through debt).

However, comparing and considering countries that have implemented export diversification warrant several comments. The large differences from one country to the other underline the fact that diversification does not necessarily brings about export success (in terms of higher market share and/or reduced earning volatility and risk). Moreover, export diversification is a slow process, with no unique path or strategy to achieve it (it can come through industrialisation, but also resource-based manufacturing, commodity processing or trade in services). Finally it seems illusory to believe that trade policy reform by itself will be sufficient to foster large supply responses (larger trade volume, greater number of varieties and higher FDI), if it is not supported by parallel measures to decrease transaction costs and improve local business conditions (better infrastructures, reliable legal environment, lower corruption...).

Indeed, developing countries and their producers are facing several intertwined external and internal constraints that prevent them from fully taking advantage of existing opportunities.

- At the external level, these constraints are caused by tariff escalation, strict sanitary and phytosanitary measures (particularly on agricultural exports), international standards, domestic and export subsidies, technical barriers to trade, competitive disadvantage. These aspects increase the export costs for local producers, making them less profitable and/or attractive to them.
- At the internal/national level, these hindrances are linked to lengthy and costly administrative procedures, corruption, inadequate judicial, banking and financial environments, high production and transaction costs, government policy inadequacy, weakness of private firms. Thus undeveloped domestic markets, with highly fragmented producers, the low degree of reliability in product supply and often a lack of a clear integrated national export strategy at the government level are key obstacles in tapping the export potential of a country.

Promoting export diversification thus require local governments and the international community to take into account several needs:

- Competitiveness in terms of costs, quality and business practices should be enhanced, as well as generic competitiveness of commodities in order to meet the requirements of consumers, supermarkets and large processing and trading firms. This

would be necessary to ensure an effective participation of local producers in international value chains.

- In a similar vein, supply capacities need to be improved as supply side constraints often appear as preventing efforts to develop export production (traditional and non-traditional one).
- A supportive material and institutional environment should be promoted to enhance enterprise-level competitiveness. Indeed, as shown by several studies, transaction costs often caused by bad or unsuited policies, appear as the main hindrance in promoting export diversification.
- Donors and international organisations, which often advocate the need for export diversification also have their role to play in the process. They should secure better market access conditions for developing countries' products. Technical and financial cooperation should also be promoted in order to help these countries develop a more efficient trade and investment support network, address domestic constraints to export development and define a proper trade policy and strategy.

III.3.2 Export constraints and potential by sector

Starting from these observations¹¹, the analysis for Ghana has to take into account the fact that a substantial proportion of both traditional and non-traditional merchandise exports as well as services exports from Ghana go to the European Union (EU) market. Even though the importance of the EU in Ghanaian exports has declined over the last five years, almost 60 percent of non-traditional exports are destined for the EU market.

There is a huge potential for further growth in Ghanaian exports to the EU. There is also a potential for the penetration of the EU market from previously unexported manufactured products such as cassava starch for industrial use. All exporters interviewed acknowledged the existence of this potential. While there is a need for processing to add value to the products, it appears that goods in raw form have a better chance. Increased processing tend to run into additional difficulties in terms of market requirements.

The areas of substantial growth include horticultural products such as pineapples, bananas, and citrus fruits and vegetables, semi-processed agricultural products, fish and processed tuna.

Other resource-based products such as cocoa products, wood products, shea-butter and other oils, and plastic products could follow in terms of potential growth of exports from Ghana into the EU market.

Non-resource based industrial/manufactured products such as aluminium products, textiles and garments, which may depend on imported raw materials, may require longer transitional periods involving the development of certain work disciplines or

¹¹ the following points are derived from an extensive set of interviews with various trade operators, companies and other institutions in Ghana. List of institutions visited will be provided later.

culture to be effectively exploited in the EU markets. Ghana has exported aluminium products to the EU market before. This was however discontinued by the exporting companies for strategic reasons.

However, to take advantage of the potential in the EU market, firms may have to make substantial investments in production and marketing capacity. They will also have to face increasing competition from other developing countries as well as the EU itself. Ghanaian firms are keenly aware of this competition and the sources of the competition. They are also aware of some of the measures required to meet this competition and increase their share of the EU market. Some of the measures may go beyond individual groups of exporters, as they are national. In general, however, the main difficulty in addressing the issues lies in the organizational and resource endowments of firms.

III.3.2 - a Horticultural Products

The sources of competition to Ghanaian exports in the EU market depend on the type of product. In relation to agricultural and semi-processed agricultural products (including fish and processed tuna), the competition comes from the Far East and Asian countries including Thailand, Indonesia, China, Malaysia, Latin American countries, with Brazil and Costa Rica as the leading ones and African countries including La Cote d'Ivoire, Kenya and Uganda. In Europe, Italy, Turkey and Spain may be the main sources of competition.

Ghana's competitive advantage may lie in its nearness to Europe. This could translate into lower freight charges or tariffs. Indeed, for airfreight Ghanaian exports tend to enjoy lower tariffs than Brazil, Costa Rica and the Far Eastern countries. When it comes to sea freight, where volumes are important, the competitive advantage disappears. Ghanaian volumes of exports, particularly pineapples, do not meet the minimum volume of 60,000 metric tons to engage dedicated shipping services. They therefore tend to rely on ships exporting Ivorian or Cameroonian products. This raises the freight charges for Ghanaian exports.

The cost of local labour is also lower than Asian labour. One needs to factor into consideration the productivity of labour. In that case it is the concept of the unit costs of labour that will be relevant. As indicated below, in some cases when you adjust for productivity, unit costs can be higher in Ghana.

The climate of some competitors may also be more conducive to the production of Asian vegetables. Uganda for example, is reported to have a better night time temperature that falls sharply compared with Ghana where it is hot and humid throughout the twenty-four hours.

The dominant constraints in expanding agricultural and food products exports to the EU market are domestic in nature. Domestic supply constraints are the binding ones. However, there a limited number of constraints on the EU side as well.

European Union

The most commonly cited constraint is sanitary and phyto-sanitary (SPS) requirements. These measures are actually in place to protect the health of consumers. Consumers actually need assurances that food is safe to eat. It is however doubtful that reversing these requirements would actually boost exports. In discussions with exporters, the consensus seem to be that these requirements could adversely affect exports to the EU market in at least three ways:

Application of these regulations place small-scale producers at a disadvantage, as they do not have the capacity to absorb the extra costs. Compliance, according to small-scale agricultural farmers, involves additional investments requiring funding which is generally not available.

Ghana does not generally have the monitoring, testing and certification structures in place to assist producers and demonstrate compliance. The approach so far has been ad hoc.

Compliance involves adjustment costs. Time to demonstrate compliance can involve one or two years. Lost revenues and exports can be considerable during this time period.

Concerns have also been raised by other commentators as to the consistency of many of the SPS measures with WTO rules. In addition to public regulations, exporters also complain about increasing private sector-based non-tariff measures (NTM) such as the Eurep-Gap. These are attempts to impose certain standards of agricultural practices on developing country exporters. While these requirements are voluntary, according to exporters one needs Eurep-Gap certification to be successful in exporting. Like the SPS measures, obtaining certification may involve additional investments and other costs associated with relying on European based companies to monitor, test and grant certification. Of the 16 members of Sea Freight Pineapple Exporters of Ghana, only 6 have Eurep-Gap certification.

Export expansion may also be hindered by the lack of knowledge about market and consumer requirements. There is a need for information about product type and changing consumer tastes in order to allow Ghanaian exporters to continually adjust to market demand. In the absence of such market information, changes in market requirements appear sudden and adjustment too late. This can lead to loss of market and orders. Overcoming this may require developing linkages between sellers and buyers. Buyer-Seller links can provide information about consumer tastes and changes, and recommend product types or even production standards and equipment.

Ghanaian exporters need to adapt to changing demand in the EU market. This may require assistance both from the public sector as well as their own associations. For example, there is an increasing shift in the EU market away from Ghana's smooth cayenne pineapple variety to the newly developed MD2 variety from South America. To assist pineapple growers to adjust, the Ghana Government in the 2004 Budget provided resources to import up to 2 million MD2 suckers for the Horticultural Association of Ghana for distribution to its members through some on-lending arrangements. In the long-term, the Association needs to propagate the suckers locally.

Sales of horticultural products to the EU market are on consignment basis. No confirmed letters of credit are established as with other regular exports and imports. Therefore, the prices and values of exports are determined by the buyers either after sales or on arrival of goods. Moreover, Ghanaian exporters have no representation to independently verify the wholesomeness of goods on arrival or price trends at the time. Ghanaian exporters bear all the risks. The buyer deducts all his costs, including his commission, from the calculated price and the exporter gets the residual. Ivorian exporters have such representation that provides them with information of the state of their goods as well as the trends. Ghanaian exporters rely on the same buyers. This has led to arbitrary declaration of values to the disadvantage of Ghanaian exporters. The issue of representation depends also on volume of exports. Small volumes as we currently have cannot support the costs of setting up such a technically competent representation in some European countries.

Domestic Constraints

There is a general lack of infrastructure for packing and storage of horticultural products for exports. One of the Eurep-GAP requirements is to have a pack house. This will facilitate packaging of fruits and vegetables for exporting under hygienic conditions. Large exporters may be able to afford their own pack houses. Smaller producers may not be able to afford the investment involved. There is a need for pack houses to be located at various vantage points. Producers who cannot afford their own facilities may be allowed to use these for a fee.

Storage facilities at the ports are also inadequate and of poor quality. There are no well-ventilated storage facilities at the ports. Therefore, farmers cannot harvest early. To remedy the situation SPEG was able to acquire part of the space last year and will develop this into the appropriate facility for pineapple exporters. However, the rate of development of the facility will depend on the resources available to SPEG.

Poor road network in the pineapple growing areas, predominantly in the Greater Accra Region, tends to cause bruising of the fruits resulting in spoilage. Poor road network also causes delays in transporting produce to the ports for exports. To overcome this, some farmers have to get the produce to the ports at least a day earlier for exports, incurring extra costs and risking the possibility that the produce may arrive at the market past its prime.

Research and development (R&D), especially in planting materials is essential to maintain the productivity and quality of the products. Exporters have indicated that the use of old planting materials result in declining yields after a while. Declining yields as a result of using old planting materials is an increasing problem. Moreover, R&D is essential to stay in the market and adapt to varietal changes in the competitive chain and market place.

It is doubtful that SPEG has the resources to set up such facilities devoted to research and development (R&D). The introduction of the MD2 variety of pineapple in the EU market may force Ghanaian exporters to reconsider their approach to emerging competition and set up facilities for R&D. There is the need for research and development of a naturally braving pineapple with larger shelf life.

There is a need for technical support and assistance to growers. There is need for an independent quality control unit to develop and certify minimum standards for horticultural products. This is essential to maintain consistency of the quality of the products exported to the EU and also to reduce the risks of products exported being neglected. While the Ghana Standards Board could provide assistance in this direction, the Board itself may need strengthening to be able to perform these duties on a continuous basis. In the long-term, export associations may have the responsibility for standards and quality control.

III.3.2 - b Fish and Tuna Processing

Ghana is the third largest exporter of tuna to the EU market in Africa after Seychelles and Mauritius. Fish and tuna exports are the second largest non-traditional merchandise exports after Wood Products. Canned tuna exports have increased from US\$1.1 million in 1993 to over US\$70.0 million in 2002.

Interviews with firms in the industry suggest that there is a huge potential for further exports development in the EU market. However, considerable investment to modernize the industry will be required to take advantage of this potential. There are only two large processing companies. There is a need to increase processing for export. Currently, substantial amounts of fish are sold to processors in the EU in France, Spain and Turkey.

The National Fisheries Association of Ghana is encouraging joint ventures with EU firms to set up processing facilities in Ghana. Strong competition can however be expected from Thailand, South Korea, Malaysia, Taiwan and China. For canned tuna, competition can also be expected within the EU itself. It is recorded that increases in costs of production in European fish canneries are causing some EU partners to put pressure on competitors such as Ghana to meet EU marketplace standards and levels of remuneration (World Bank, 2001).

Compared with Asian countries, Ghana has a competitive advantage in terms of lower freight charges as a result of being nearer the EU. Ghana pays about half the rates that are chargeable from Asian countries.

The costs of local labour are also lower than Asian labour. However, for canning factories, adjustment for labour productivity could imply a disappearance of this advantage.

The type and quality of fish from Ghana is high compared with competitors. In general, Ghana uses bait boats or fish and line vessels, which do selective fishing and ensures that the high quality fish is caught compared with competitors who use Persian fishing methods.

However, the costs of production in Ghana are high and Ghana is therefore able to maintain her exports to the EU market through the preferences she enjoys in the EU market. Ghana's tuna exports enter the EU market duty-free while her Asian competitors pay duties amounting to 25 percent. More recently, the EU reduced the tariff to be paid by Asian competitors to 12.5 percent, thus eroding Ghana's preference margin. This will affect Ghana in at least two ways, according to firms

interviewed. First, Ghana's competitive margin is reduced and the level of competition will intensify. Second, Ghana depends on Asian countries, particularly South Korea, for key personnel – ship captains, engineers and fish masters. As Asian competitiveness increases, such personnel will become difficult to attract.

In addition to the erosion of preference margins, the interpretation of the rules of origin is creating problems for Ghanaian tuna exporters. According to the rules of origin, fishing must be done by Ghanaian-owned boats. In addition, however, the Chairman of the Board of Directors must be a Ghanaian or from the African Caribbean and Pacific (ACP) or the EU. This creates a problem. Most fishing companies in Ghana are joint ventures between Ghanaians and South and East Asians and the board representation reflects the equity shares.

In Southern Europe, administrative practices are used as barriers to trade. It is accepted that health and sanitary conditions must be tested for to ensure consumer safety. However, in Spain and Italy these testing can be prolonged for weeks, forcing companies to incur additional costs, affecting their competitiveness and margins.

The binding constraints in expansion of tuna exports to the EU market are domestic supply limitations. The costs of production of tuna is high in Ghana. This arises first from uncompetitive fuel prices that have to be paid. Fuel constitutes about 70 percent of overheads in fishing. Even though the price of fuel is subsidized, operators still complain of its high price compared with international prices. This sometimes forces companies to import fuel from La Cote d'Ivoire. Second, low labour productivity, lack of company loyalty and therefore disruptive labour practices tend to make labour expensive. Third, intermediate inputs such as cans are supplied at uncompetitive prices (World Bank, 2001).

Institutional support is weak with port facilities publicly managed. Port charges have increased and licensing fees over the last few years have increased by about 800 percent.

Levels of investments are low. Firms complained of lack of long-term loans, high interest rates and inflation. Ghana needs to process more of her fish before exports, instead of selling fish to processors in France, Spain, and Turkey. However, she needs joint venture partners to be able to do this.

III.3.2 - c Wood Processing

The share of wood products exports in total Ghanaian exports has stagnated at about 5 percent for the last five years. In spite of this, firms interviewed think there is a potential but challenging market in the EU. Over the last few years, product prices have been falling in the industry. This means the industry will have to re-organize to cut costs drastically in the face of falling world market prices and also increasing domestic overheads. Wood products consist largely of furniture and furniture parts, builders' wood, plywood and veneer.

Companies face intense competition from China, Indonesia, Malaysia and other Asian and Far East countries and the EU itself. Ghana now has no special advantage in wood processing, as forest resources recede (and firms are expected to adopt

sustainable forest management practices), and commercially exploitable stocks diminish.

In the EU market, some importers and retailers may require that the wood products they purchase must come from certified forests. Environmental purchasing requires sustainable forest resource management and certification involving not only planned sustainable forest resource utilization, but also effective protection for both timber and wildlife resources. In interviews one furniture company indicated that this could create problems for them in the EU market. Unless policies are put in place, this requirement may create problems for all of Ghana's wood products exports to the EU market.

Meeting the technical and safety standards of the EU market is not a major market constraint, as most firms are already compliant.

As with the other non-traditional exports, the main limitations to expansion are domestic supply constraints. The supply of the raw material – wood – is diminishing and the cost of this critical input is increasing. There have been serious complaints by firms about the system of awarding concessions for firms to exploit particular areas of the forests. As a result, the system of allocation was to be changed and the process based on Timber Utilization Contracts (TUC) in which firms could bid for concessions. Concessions would be for a period of time and the utilization would be based on certain criteria including sustainable utilization of forests.

However, in our interviews, one firm indicated that some concession holders do not have the equipment for effective processing and therefore export lumber while some of those who have the equipment do not have the concessions. As a result, Ghana now imports some of her logs and lumber from other African countries such as Cameroon for processing. In order to assist firms, the government removed import duties on the import of round logs in 2001. In the 2004 Budget Statement, this tax relief is extended to include lumber imports for domestic processing (Republic of Ghana, 2004).

The lack of skilled labour could be one of the major problems facing the wood processing industry, particularly the production and export of furniture and furniture parts. There is shortage of technicians to handle certain types of equipment. One company indicated that they have had to import technicians from La Cote d'Ivoire on certain occasions to handle their equipment.

Poor infrastructure for the transportation of logs in concession areas tends to make operations expensive. The network in most forest areas is poor. Not only does this make operations in the areas difficult, it also tends to result in frequent breakdowns of vehicles and operating equipment. Coupled with unreliable utility supplies and increasing utility tariffs, overheads, and therefore overall costs tend to be high compared with Ghana's competitors.

III.3.2 - d Aluminium, Plastic and Hair Products

Ghana could also graduate from the efficient import substituting manufactures that are doing well in the ECOWAS market to exploit opportunities in the EU market. These may include aluminium, plastic and hair products (cosmetics). At least one firm in

these industries has exported to the USA and the EU – United Kingdom, Denmark and Germany – before but stopped for strategic reasons.

While companies in this group will assess the potential for the EU market to be positive, they are keenly aware of the stiff competition that they will face in the EU market. The Ghanaian firms will have to face competition from multinational companies such as ALCAN, ALCOA, NORANDA and VAW. These are companies with huge establishments and experience enjoying economies of scale. Marketing margins can therefore be expected to be low. At the same time these companies will also have the latest operating technologies. The technology gap could create both costs and product quality differences to the disadvantage of Ghanaian firms. Furthermore, product demand will be much more sophisticated. These are also the levels of processing at which issues of tariff escalation become relevant. There will also be competition from Cameroon, Nigeria, South Africa, India and China.

To diversify into the EU market and exploit the potentials, companies will have to expand their productive capacity. One firm interviewed indicated they had expanded their capacity by 50 percent in anticipation of going into the EU and US markets. This could allow for some economies of scale and lower costs.

In the case of aluminium products there will also be competition in product type and the various uses of the product relative to other intermediation such as steel. The sources of competition are:

1. fierce competition between the use of Aluminium or Steel, specifically in the manufacture of coking utensils;
2. aluminium and Steel cooking utensils imported from India and China; and
3. Competition in the roofing business, i.e., the use of either aluminium sheets or concrete tiles, or even galvanized tiles in the roofing of houses.

Ghanaian companies may enjoy a competitive advantage in terms of local supply of their raw materials. Nearness to the source of supply could confer costs-savings benefits in terms of lower prices of raw materials. This will however be set off against high utility prices and the poor infrastructure for transportation.

Most of the Ghanaian companies in this group already produce to very high international standard. They are compliant within the ISO 9001. This will ensure that the companies will not encounter any difficulties in the sale of their produce.

In the case of non-perishable goods such as aluminium and plastic products destined for the ECOWAS markets, sometimes the goods have to go through Europe before being transported back to the ECOWAS markets, necessitating delays and higher costs.

III.3.2 - e Garments, cassava starch etc.

There are a number of new companies targeting the EU and USA markets. These companies are into garments production and the production of industrial starch from

cassava. They also include offshore companies involved in certain aspects of clothing and wearing apparel.

The main advantage of these companies is that they are light and labour intensive manufactures with widespread multiplier effects with substantial raw material supply base in some cases such as cassava starch. In those cases where they are resource-intensive, there is an added advantage for Ghana.

A second advantage is that these companies are setting up in a new environment in Ghana in which exporting is a major concern of emerging firms and is encouraged by public policy. These companies are therefore aware of the competition in terms of quality of products, price of product, and delivery schedules. They therefore start with technologies and management practices conducive to global competition.

In the case of garments the competition could intensify with the gradual phasing out of the multi-fibre agreement.

III.3.2 - f Services

One potential area for export diversification is services, particularly tourism and data processing. Tourism for instance became the third largest export earner after cocoa and gold in the second half of the 1990s. It also has considerable multiplier effects, estimated at 3.5 and 3.4 respectively for employment and income.

Interviews with the Ghana Tourist Board and firms in the industry suggest that the EU market could be promising provided we have a well-developed package. The main limitation in getting to the EU market is language. Apart from the United Kingdom and Ireland other countries within the EU speak different languages and developing packages for such countries could be difficult.

Ghana will however face competition from other African countries in every aspect of her tourist attraction. As far as her traditional heritage sites are concerned she will face competition from Benin and Senegal. In leisure tourism she will face competition from The Gambia and La Cote d'Ivoire, and in eco-tourism much higher levels of competition can be expected from East African countries.

However, Ghana has a much more stable political climate and is much more secured than several of the countries. Her economic system is much more liberalized allowing greater freedom to tourists in currency conversion and use.

A major constraint is that Ghana is an expensive destination in terms of accommodation and meals and air transport. The number of hotel rooms is very limited. As a result, room rates are very high and uncompetitive. According to the Ghana Tourist Board, they have restricted themselves to eco-tourists and business tourists instead of encouraging leisure tourists, partly because of the limited amount of hotel space.

High royalties and landing costs and low levels of competition among airlines result in high fares from Ghana. As a result, the prices of tour packages according to operators are uncompetitive compared with neighbours such as Senegal, La Cote

d'Ivoire and Benin. One tour operator estimates that the difference can be as much as US\$300.

Moreover, most of our tourists' sites are still in their raw stages. Thus while the Tourist Development Board may list several attractions in her brochures, most of these are underdeveloped in terms of providing accommodation, meals, entertainment and educational facilities at sites. Some limited funds were provided under the HIPC for the development of some of these sites. The larger investments may have to come from the private sector. There is a need for a calendar of cultural events that tour operators can incorporate into their packages.

The human resource base for the development of the tourism industry is limited. According to the Ghana Tourist Board, of the 120,000 people working in the tourism industry in Ghana, only 20 percent have gone through some tourism training. The lack of skilled personnel hampers the provision of quality services.

Some regional arrangements involving other West African countries could be beneficial to Ghana. As in Asia, one could promote West Africa as the tourist destination and use a multi-visa regime. According to the Ghana Tourist Board some initiatives and discussions have taken place along these lines. The major problem in promoting the concept in West Africa is the issue of political instability.

IV Simulation tool for Ghana's export to the EU

The objective of a quantitative simulation tool on Ghana's export is to be able to assess the impact of demand, supply, prices, tariffs and exchange rates on Ghana's exports to the EU, and to highlight the common or different sensitivities of the various products' exports to such explaining factors.

It was initially thought that a clear relationship could be established between the regulatory obstacles for market access by Ghanaian products to the EU, but the fact that most products exported today by Ghana do not face significant tariff obstacles or specific non-tariff restrictions has prevented such quantitative estimations. However, it is important to realize that the inability to establish such a statistical relation because of the 'zero-protection' on actual exports does not imply that such constraints do not exist; indeed, it could also indicate that such constraints are so successful that they have prevented any significant exports.

Considering the statistical limitations and the objectives of the tool, it was decided to construct two different sets of econometric relations:

- A model on volumes and values of the major exported products by Ghana to the EU, called GHANEX;
- A model on Ghana's market shares against the most important competitors in the EU, by products, called GHANSHARE.

Both models have been statistically estimated through the Dynamic Panel Estimate (DPE) techniques, allowing to combine time and panel estimations through a single

Least Square Estimate (LSE). They are applied to HS6 products grouped into five major items (cocoa and cocoa products, fruits, vegetables, wood, and fish and fish preparations).

IV.1 *GHANEX, a model of Ghana's exports to the EU by products*

GHANEX is based on a standard set of econometric equations relating Ghana's exports to the EU to (1) demand factors (total EU imports for the same product), (2) supply factors (proxied by the GDP or agricultural GDP), and (3) price factors (import prices, computed by deflating values by volumes in the Eurostat database, and real exchange rate). Estimations are made on the period 1975-2001 or 1980-2001, and through dynamic panel estimate techniques allowing simultaneous estimations of all sub-products within five large groups of products¹² (cocoa, fruits, vegetables, wood and fish – see table below). Simulations can therefore be run at the 6-digit level of HS classification and covers 25 different products:

- Cocoa

Description of the sub-products	HS6
Cocoa beans	P180100
Cocoa shells / cocoa waste	P180200
Cocoa paste not defatted	P180310
Cocoa paste wholly or partly defatted	P180320
Cocoa butter, fat and oil	P180400

- Fruits

Description of the sub-products	HS6
Bananas, including plantains, fresh or dried	P080300
Pineapples	P080430

- Vegetables

Description of the sub-products	HS6
Other vegetables, fresh or chilled	P070990
Other manioc or similar roots	P071490
Other oil seeds & oleaginous fruits	P120799
Other vegetable fat and oils	P151590

- Wood

Description of the sub-products	HS6
---------------------------------	-----

¹² In such DPE techniques, elasticities and coefficients of explanatory variables are assumed to be identical for each sub-product with the same group, and the differences between sub-products is related only to the different values of the constant term in the equations.

Virola, mahogany, imbuia and balsa	P440724
Wood sawn, other	P440729
Wood sawn, other	P440799
Other wood sheets for veneering	P440839
Other wood sheets for veneering	P440890
Non-coniferous wood	P440920
Plywood with at least one outer ply of tropical wood	P441213
Plywood with at least one outer ply of non-coniferous wood	P441214

- Fish

Description of the sub-products	HS6
Yellowfin tunas	P030342
Skipjack or stripe-bellied bonito	P030343
Other molluscs	P030749
Other molluscs	P030759
Tunas, skipjack and bonito	P160414
Other prepared or preserved fish	P160420

And for each of these five groups, we did panel estimates of the following econometric equations:

$$(1) \quad \text{Log}(X_g) = a \log(\text{RXR}) + b \log(\text{GDP}) + c \log(\text{M}) + d \log(\text{P}) + e \log(\text{Duty})$$

$$(2) \quad \text{Log}(X_g) = a \log(\text{RXR}) + b \log(\text{GDP}) + c \log(\text{M}) + d \log(\text{P})$$

where

X is the volume of the Ghana's exports to EU,

RXR the real exchange rate of Ghana / EUR (1995=100),

GDP is the real gross domestic product of Ghana (1995=100),

M are the total imports of the EU (in EUR mn),

P are the import prices of the related sub-product (calculated from Eurostat: values of exports / volumes of exports)

Duty is the EU tariff on the product.

Because the LOMA tariff rates were zero for most of the products, we were not able to obtain good results for the equation (1). The equation (2) gave satisfactory results after testing for the best combination of variables. The results obtained from these estimations are statistically significant and robust over the period 1993-2002.

The detailed estimated values are presented in the following table and are used in the Excel tool constructed to create simulation and different forecast scenarios from 2003 to 2007.

Table 4.1. Econometric estimates of Ghana's exports to EU

(all the variables are logarithms)

Products	Real Exchange Rate (1995=100)	real GDP in agriculture (1995=100)	EU import volumes (1995=100)	EU imports prices (1995=100)	Constant	R2	Observations
COCOA	-0.50		0.87	-0.10	<i>not specified</i>	0.79	50
t-values	-1.39		5.26	-0.37			
FRUITS		6.01		-1.51	<i>not specified</i>	0.82	20
t-values		8.09		-4.43			
VEGETABLES		8.18		-4.40	<i>not specified</i>	0.91	38
t-values		6.32		-13.20			
WOOD			0.88	-0.21	<i>not specified</i>	0.62	65
t-values			2.53	-0.38			
FISH		6.18	2.05	-1.05	<i>not specified</i>	0.71	59
t-values		3.27	2.89	-1.48			

Explained variables: Ghana's exports of the products indicated to the EU, at constant prices in Euros, broken down into HS6 sub-products

The statistical results highlight interesting characteristics for export development:

- For **fruits and vegetables**, the demand variable (total imports of the product by the EU) is always statistically rejected, suggesting that Ghana is a too small supplier to be directly influenced by total external demand from the EU. Conversely, the elasticity to supply conditions, as expressed by the agriculture GDP, is both very high in value and very significant on statistical ground. Fruit exports differ from vegetable export by their much lower sensitivity to price changes, even though it remains much higher than one for fruits.
- The other groups of products (**cocoa, wood, fish**) exhibit a statistically significant elasticity to EU demand, but with a value lower than one for wood products and cocoa, and conversely higher than two for fish products. This would indicate a stronger ability to gain market share and enhance total exports for such products, and therefore suggest that a very specific attention be given to the supply side issues in the fishing industry. Indeed, the proxy variable for overall supply condition (admittedly less convincing in the case of fishing), i.e. agriculture GDP has a very high coefficient value, and the elasticity of exports to prices is slightly above one. Symmetrically, price sensitivity appears much lower for cocoa and wood, but with a lower statistical significance.

IV.2 *GHANSHARE, a supply side model on Ghana's market share in the EU*

GHANSHARE is a tool that tries to identify the most important 'enabling' factors for market-share gains in the EU, by comparing Ghana with a sample of other key

competitors, and estimating the market shares of each producers (for each product) on the basis of supply-side variables. This is a complex exercise, both in terms of data identified as relevant for supply-side factors, as well as for estimation techniques (Dynamic Panel Estimates across countries and products).

The variables included in the estimation cover both a broad proxy indicator for overall production and supply side conditions (real GDP) and two synthetic indexes or proxies for supply-side ‘enabling factors’: one is a synthetic ‘Facility’ index derived from World Bank indicators of business environment; the second is a specific ‘SPS/standard & quality’ indirect variable, in the form of the number of offices run by the two largest international inspection companies (Veritas and SGS).

The estimations were based on Dynamic Panel Estimate techniques, here crossing both sub-products within each broad category of exports (cocoa, wood, fish, vegetables, and fruits), and competitors’ market shares and supply side indicators. The base econometric equation is the following:

$$MS = a MS(T-1) + b GDP + c VSGS + d FACILITY$$

where

MS is the market share of the product for the country into the EU market. MS for the period T is the explained variable, and MS for the period T-1 is used as an explanatory variable to capture the inertia of market share evolution;

GDP is the real gross domestic product of the country (1995=100)

VSGS is a ‘SPS/standard & quality index’ calculated as the number of Veritas & SGS offices in the country

FACILITY measures the quality of the business environment (low FACILITY index = favourable business environment).

The last variable FACILITY is a composite index computed as an average of five indicators extracted from the World Bank Report “Doing Business in 2004”. There is no attempt here to give a judgement of the way these World Bank indicators are computed and estimated, and we take them as acceptable proxies for the overall business conditions that are favouring supply development, covering costs of operation, administrative complexity, and financing environment. The five World Bank indicators used in the FACILITY variable are:

- Operating cost as % of income per capita
- Employment Laws Index
- Procedural Complexity Index
- Extensiveness of Public Credit Registries Index
- Goals of Insolvency Index.

The last two indicators are assumed to illustrate the need for a proper financial and bankruptcy regulation to encourage relationships between lenders and borrowers, and therefore to capture some of the basic institutional requirements for a ‘developing’ financial intermediation.

The countries included in the DPE estimation are derived from the previous analysis of competition faced by Ghana in the EU (page 47), and include: Ivory Coast, Cameroon, Senegal, Nigeria, Kenya, Costa Rica and Morocco.

The chart and table give the values of the two supply-side variables for each of countries included in the sample.

Chart 4.1. FACILITY variable

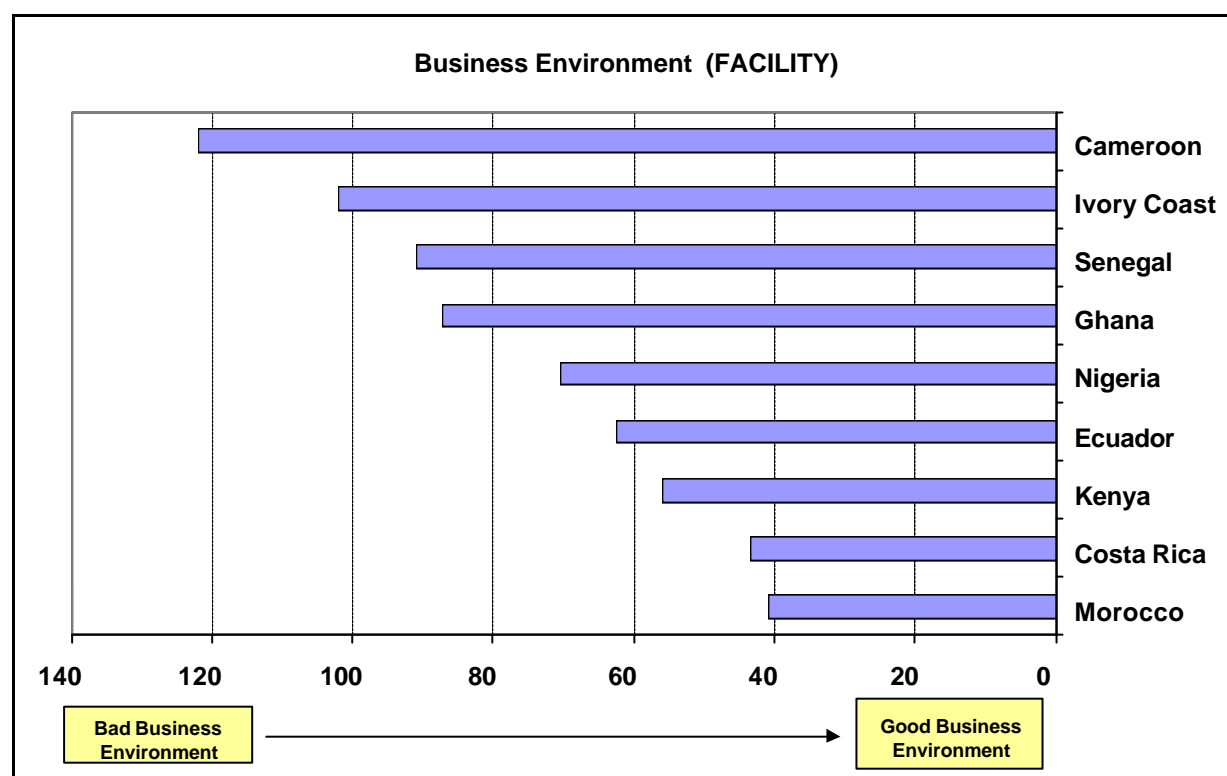
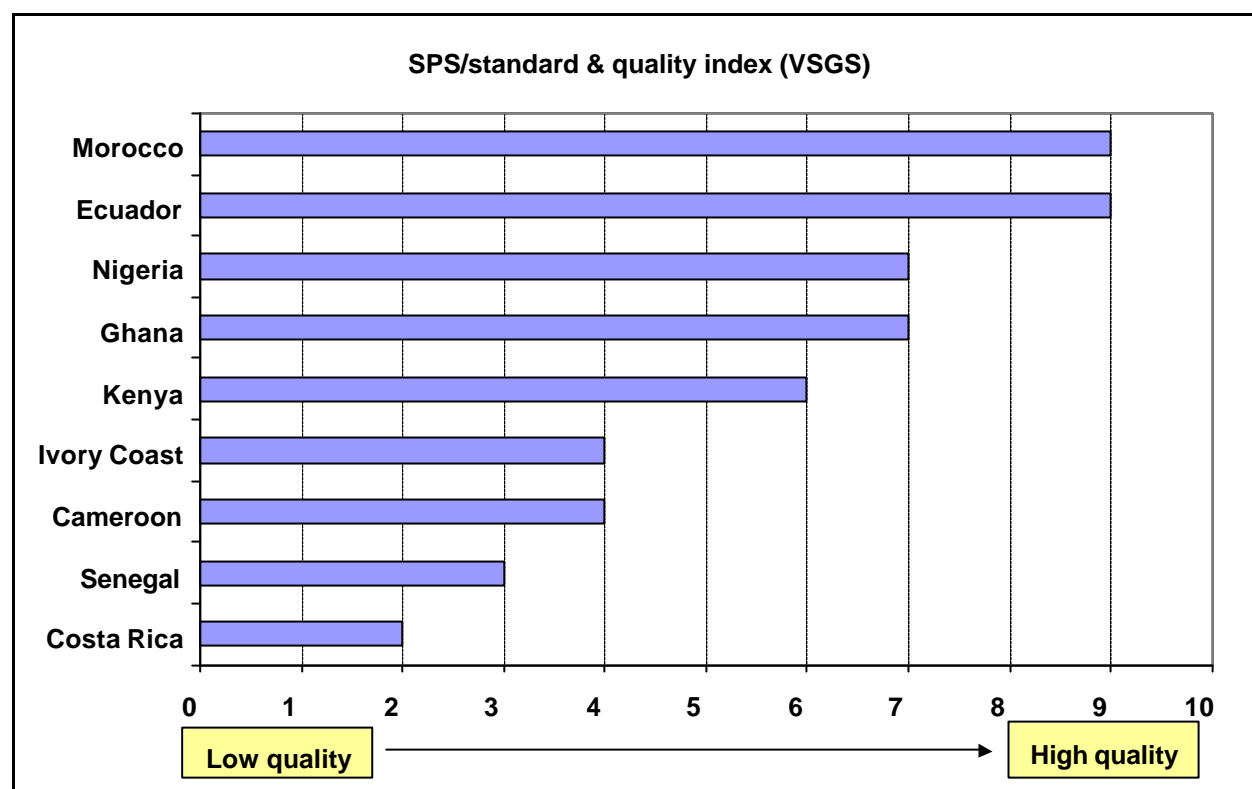


Table 4.2. VSGS variable

	Number of offices in each country		Variable used in the equation
	VERITAS	SGS	VSGS
Cameroon	1	3	4
Costa Rica	1	1	2
Ecuador	4	5	9
Gabon	3	1	4
Ghana	3	4	7
Ivory Coast	2	2	4
Kenya	2	4	6
Morocco	4	5	9
Nigeria	4	3	7
Senegal	1	2	3
Seychelles	1	1	2

Chart 4.2. VSGS variable



The following table provides the main results of the econometric DPE equations:

Table 4.3. Econometric estimates of Ghana's market share in EU

Products	Mkt Share (T-1)	real GDP (1995=100)	VSGS	FACILITY	Constant	R2	Observations
COCOA	0.31	0.02	2.72	-0.10	<i>not specified</i>	0.91	172
t-values	3.79	0.42	3.41	-1.96			
FRUITS	1.01	-0.01	1.07	-0.06	<i>not specified</i>	0.99	90
t-values	16.00	-0.51	1.53	-1.25			
VEGETABLES	0.39	0.01	0.38	-0.01	<i>not specified</i>	0.94	127
t-values	3.99	0.50	1.12	-0.61			
FISH	0.48	0.01	3.28	-0.22	<i>not specified</i>	0.91	208
t-values	7.40	0.59	7.09	-5.86			

Explained variables: Ghana's market share in the EU for the products indicated, broken down into HS6 sub-products

The characteristics highlighted by the statistical exercise can be summarized around the following points:

- We were not able to obtain any satisfactory estimation for **wood** and wood products, and we had to drop the equation for such market shares. Explanations range from the very specific supply side constraints weighing on wood production because of conservation and forest management policies, and the complex nature of competition between countries because of swings between different types of wood. Otherwise, the statistical quality of the other products' estimations is fairly good, with correlation coefficient R^2 above 0.9. GDP as a broad proxy variable for overall supply side conditions is not statistically significant, but its retrieval from the equation induces a very large overall deterioration in the estimation parameters.
- The lagged market share variable, used as a measurement of the importance of inertia, or conversely the high volatility in supply sources, suggests that fruit exports are much more likely to keep market share once it is gained than the other products. This would indicate that switching from one supplier to the other is very easy and common in cocoa, fish and vegetables, pointing to the specific issues of product differentiation strategies and branding and marketing efforts for such products.
- The proxy variable for sanitary and phyto-sanitary expertise and products quality VSGS has an extremely high coefficient value for fish products' market share in the EU. This is clearly comforting the emphasis put by both European Commission officials and Ghanaian authorities on the importance of complying with the regulations allowing Ghana to be in the so-called category 1 fish exporting countries, offering the best access conditions to the EU from the sanitary control perspective. The coefficient value is strong for cocoa and fruits, but is conversely much lower for vegetables.
- The coefficients of the FACILITY variable are systematically negative, as expected (low index meaning a favourable business environment); the sensitivity of vegetable market share to such supply side indicators are low and not very significant from a statistical perspective; conversely, it is much higher for fish products, and still large for cocoa and fruits.

IV.3 Simulations 2004-2007

The two models GHANEX and GHANSHARE are constructed to allow simple simulation exercises for the next few years, with entering the exogenous variables and obtaining results, for export values and market shares. It is important to stress that such tools are not *forecasting* instruments, but *simulation* ones enabling to test the changes in results when changing the assumptions, and deriving from such scenarios where are the main risks and the major opportunities.

The two models have been tested in Ghana and installed on the Ministries' computers. The simulation exercises presented below are designed only to provide examples on how the model can be used to test various (and credible) assumptions.

IV.3.1 Simulation with GHANEX

Making a simulation with GHANEX requires to run the Excel file named ghana-exports-simtool.xls. This file contains 6 different sheets:

- *Summary*: this sheet is used to change the assumptions (exogenous variables) on Ghana's agricultural GDP, inflation and exchange rate, and to provide the aggregate results on export values and the percentage structure of total exports for the five groups of products (to have this structure in percentage, exogenous assumptions have to be made on the exports that are not included in the model, i.e. gold, aluminium, diamonds, and others; all these products accounted for 38% of total Ghana's exports to the EU in 2002, of which 27% for gold and aluminium).
- *Cocoa, fruits, vegetables, wood, fish*: each of these five sheets is used to change the assumptions on EU demand (annual rate of growth of total EU imports for each sub-product) and on the EU import price (in percentage annual change, for each sub-product). On the same sheet is provided the detailed results by groups of products at the 6-digit level and the associated prices for Ghana exports.

The following is an example of a simulation, based on "conservative" assumptions.

Assumptions on exogenous macroeconomic variables

- GDP agriculture: annual growth rate of 3.3 (average 2000-02)
- Inflation: annual growth rate of 24.3 (average 2000-02)
- Exchange rate: calculated to maintain a stable real exchange rate, therefore compensating fully for the inflation rate

Assumptions on exogenous product-specific variables (here, based on a similar assumption for all sub-products)

- EU imports, by sub-products, at constant prices: 2003-2007 annual growth rate is the average observed for each sub-product during the three years 2000-2002
- EU import prices for each sub-product: 2003-2007 annual growth rate is the average observed for each sub-product during the three years 2000-2002, except for 2003 and cocoa products (-25% as an exogenous assumption)

Table 4.4. GHANEX simulation - summary table : assumptions

Exogenous variables	2001	2002	2003	2004	2005	2006	2007
Real GDP growth rate in agriculture (%)	3.7	4.1	3.3	3.3	3.3	3.3	3.3
Inflation rate (%)	32.9	14.8	24.3	24.3	24.3	24.3	24.3
Exchange rate	7 170.8	7 932.7	9 860.7	12 257.4	15 236.5	18 939.8	23 543.0

Intermediate variables (computed)	2001	2002	2003	2004	2005	2006	2007
Consumer prices (1995=100)	401.8	461.4	573.5	712.9	886.1	1 101.5	1 369.3
Real exchange rate	67.3	69.8	69.8	69.8	69.8	69.8	69.8
Real exchange rate growth	1.1	3.8	0.0	-0.0	0.0	-0.0	0.0

Table 4.5. GHANEX simulation - summary table : results

Exports Values (EUR th)	2002	2003	2004	2005	2006	2007
Cocoa	405 242	307 092	329 744	354 870	382 895	414 339
Vegetables	26 896	33 139	40 873	50 461	62 357	77 128
Fruits	44 515	48 199	52 194	56 529	61 233	66 338
Wood	121 855	126 292	131 007	136 019	141 352	147 030
Fish	93 897	122 335	160 009	210 036	276 606	365 360
Gold (710812)	149 236	150 000	150 000	150 000	150 000	150 000
Unwrought Aluminium (760110)	148 928	150 000	150 000	150 000	150 000	150 000
Diamonds (710231)	22 709	23 000	23 000	23 000	23 000	23 000
Other	102 551	105 000	105 000	105 000	105 000	105 000
TOTAL	1 115 830	1 065 057	1 141 827	1 235 914	1 352 442	1 498 195

Exports Structure (% of the total)	2002	2003	2004	2005	2006	2007
Cocoa	36.3	28.8	28.9	28.7	28.3	27.7
Vegetables	2.4	3.1	3.6	4.1	4.6	5.1
Fruits	4.0	4.5	4.6	4.6	4.5	4.4
Wood	10.9	11.9	11.5	11.0	10.5	9.8
Fish	8.4	11.5	14.0	17.0	20.5	24.4
Gold (710812)	13.4	14.1	13.1	12.1	11.1	10.0
Unwrought Aluminium (760110)	13.3	14.1	13.1	12.1	11.1	10.0
Diamonds (710231)	2.0	2.2	2.0	1.9	1.7	1.5
Other	9.2	9.9	9.2	8.5	7.8	7.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

Table 4.6. GHANEX simulation - details on Cocoa : assumptions

EU import volumes from all countries - growth (%)	HS6	2002	2003	2004	2005	2006	2007
Cocoa beans	P180100	-2.9	-4.1	-4.1	-4.1	-4.1	-4.1
Cocoa shells / cocoa waste	P180200	27.7	18.7	18.7	18.7	18.7	18.7
Cocoa paste not defatted	P180310	9.6	6.3	6.3	6.3	6.3	6.3
Cocoa paste wholly or partly defatted	P180320	-0.3	-1.9	-1.9	-1.9	-1.9	-1.9
Cocoa butter, fat and oil	P180400	56.0	18.2	18.2	18.2	18.2	18.2

EU import prices from Ghana growth (%)	HS6	2002	2003	2004	2005	2006	2007
Cocoa beans	P180100	36.5	-25.0	10.0	10.0	10.0	10.0
Cocoa shells / cocoa waste	P180200	4.3	-25.0	20.0	20.0	20.0	20.0
Cocoa paste not defatted	P180310	29.6	-25.0	15.0	15.0	15.0	15.0
Cocoa paste wholly or partly defatted	P180320	77.5	-25.0	30.0	30.0	30.0	30.0
Cocoa butter, fat and oil	P180400	2.7	-25.0	0.0	0.0	0.0	0.0

Table 4.7. GHANEX simulation - details on Cocoa: results

Exports Volumes - growth (%)	HS6	2002	2003	2004	2005	2006	2007
Cocoa beans	P180100	8.0	-1.0	-4.5	-4.5	-4.5	-4.5
Cocoa shells / cocoa waste	P180200	-23.2	18.7	14.2	14.2	14.2	14.2
Cocoa paste not defatted	P180310	93.3	8.0	3.9	3.9	3.9	3.9
Cocoa paste wholly or partly defatted	P180320	-49.7	0.9	-4.7	-4.7	-4.7	-4.7
Cocoa butter, fat and oil	P180400	-5.7	18.3	15.8	15.8	15.8	15.8

Exports Values (EUR th)	HS6	2002	2003	2004	2005	2006	2007
Cocoa beans	P180100	356 796	264 009	278 487	293 759	309 869	326 862
Cocoa shells / cocoa waste	P180200	3 772	3 536	4 746	6 371	8 551	11 478
Cocoa paste not defatted	P180310	9 749	8 088	9 621	11 443	13 612	16 191
Cocoa paste wholly or partly defatted	P180320	6 431	4 879	6 115	7 665	9 608	12 044
Cocoa butter, fat and oil	P180400	28 494	26 581	30 775	35 632	41 254	47 764
TOTAL		405 242	307 092	329 744	354 870	382 895	414 339

In this simulation, it is easy to see that the medium-term demand and price perspective would be much more favourable for fish products (share of total Ghanaian exports to the EU increasing from 8.4% in 2002 to 24.4% (corresponding to EUR 93.9 mn in 2002 and EUR 365 mn in 2007); conversely the total value of cocoa exports in 2007 would be only slightly better than for the very favourable 2002 performance (EUR 414 mn in 2007 against EUR 405 mn in 2002), hence a much declining share in the total (from 36.3% to 27.7%), and a significant shift from beans to semi-processed products.

IV.3.2 Simulation with GHANSHARE

Making a simulation with GHANSHARE requires to run the Excel file named ghanamshares-simtool.xls. This file contains only one sheet, used for both assumptions and results presentation.

Command variables include GDP growth, the number of Veritas & SGS offices in Ghana, and the World Bank business environment indicators.

The following is an example of a simulation, based on “positive supply-side push” assumptions, mostly in order to engineer a catch-up of Ghana on some of its

competitors in the areas of business environment where the local performances are poor.

Assumptions on exogenous macroeconomic variables

- Ghana's GDP: annual growth rate of 4.1% (average 2000-02)

Assumptions on exogenous supply-side variables

SPS/standard & quality index

- Veritas & SGS offices: 8 (one more)

Business environment

- costs (% of income per capita): 92 (improvement to Nigeria's level)
- employment laws index: 35 (unchanged)
- procedural complexity index: 33 (unchanged)
- extensiveness of public credit registries index : 22 (improvement to Ivory Coast's level)
- goals of insolvency index: 44 (improvement to Ivory Coast's level)

Table 4.8. GHANSHARE simulation- results by HS6 products

COCOA							
Market Shares (% into EU imports of this product)	HS6	2002	2003	2004	2005	2006	2007
Cocoa beans	P180100	19	24	25	26	26	26
Cocoa shells / cocoa waste	P180200	35	42	45	46	47	48
Cocoa paste not defatted	P180310	5	6	6	6	6	6
Cocoa paste wholly or partly defatted	P180320	9	11	11	12	12	12
Cocoa butter, fat and oil	P180400	9	12	12	12	12	12

FISH							
Market Shares (% into EU imports of this product)	HS6	2002	2003	2004	2005	2006	2007
Yellowfin tunas	P030342	3	7	7	8	8	8
Skipjack or stripe-bellied bonito	P030343	13	21	25	27	28	29
Other molluscs	P030749	1	3	3	3	3	3
Other molluscs	P030759	1	2	2	3	3	3
Tunas, skipjack and bonito	P160414	6	11	13	14	14	14
Other prepared or preserved fish	P160420	3	6	7	7	7	7

VEGETABLES							
Market Shares (% into EU imports of this product)	HS6	2002	2003	2004	2005	2006	2007
Other vegetables, fresh or chilled	P070990	1	2	2	2	2	2
Other manioc or similar roots	P071490	24	25	27	28	28	29
Other oil seeds & oleaginous fruits	P120799	13	14	15	15	16	16
Other vegetable fat and oils	P151590	6	7	7	7	8	8

FRUITS							
Market Shares (% into EU imports of this product)	HS6	2002	2003	2004	2005	2006	2007
Bananas, including plantains, fresh or dried	P080300	0	1	1	1	1	1
Pineapples	P080430	13	15	16	18	20	21

The increase in Ghana's market shares under this set of assumptions is quite significant across all products; it is particularly spectacular for fish products (more than doubling over the 2003-2007 period), but also for pineapples, and to a lesser extent for cocoa and vegetable products.

V Conclusion and policy options

The following conclusions and policy options have benefited from a very intense and interesting debate during the "Official Workshop" held in Accra, Ghana, on March 17th, 2004, and from comments and remarks made at the "Broader Workshop" (Accra, March 18th, 2004) where more than 45 persons representing diverse sections of the civil society have participated.

The conclusions are grouped under four broad headings (general trade issues, macroeconomic issues, market access issues, and supply-side issues), even though many of the recommendations and policy options are inter-related.

➤ general trade issues

- *EPA and potential adjustment and review of WTO* Article XXIV, especially in the context of the Doha Development Agenda. Indeed, much of pressure to negotiate for such EPA originated from the non-conformity to WTO regulations, in particular the article XXIV, but the interpretation of this article and the potential inflexion in the course of the Doha round should be factored in, especially the points regarding the degree of symmetry in trade liberalization, and the schedule of application
- *EPA and future bilateral trade agreements between the EU and other countries or regions*: indeed, any preferential treatment that ACP / ECOWAS countries may obtain for market access to the EU has to be measured against the same types of advantages granted by the EU in its other trade agreement, especially when dealing with countries or regions that are significant competitors for Ghana or other ECOWAS countries (in particular EuroMed, Mercosur, ASEAN)
- *EPA and the EC – EBA initiative*, of which most ECOWAS members are beneficiaries. This is a complex element to be integrated into future negotiations. On one hand, the EBA initiative is non-symmetric and therefore more appealing for least developed countries. Conversely,

being a unilateral initiative, it does not have the same strength (and life span) as an international agreement. It is revealing that most eligible countries in ECOWAS are not formally using the mechanism, possibly because of difficult administrative or marketing changes. Therefore, it is suggested that the complex relation with EBA/EPA, within ECOWAS countries, be used “tactically” for insisting on the non-trade component of the EPA. In other words, the EC should be convinced that, to make the EPA more attractive for ECOWAS than the EBA, the EPA should be a clear “trade-plus” agreement, with the “plus” side being the core element of the agreement.

➤ **Macroeconomic issues**

- *Difficulties for developing countries’ exports to benefit from trade liberalization when human and technical capital is insufficient*: this should warrant a request for financial and institutional support for the conduct of a so-called ‘Integrated Programme’, led by the World Bank and associating other donors, and emphasizing the dual and parallel nature of development and trade.

➤ **Market access issues**

- *Tariff issues*
 - Reduction in/ elimination of tariff rates for fresh vegetables
 - Removal of tariff escalation in cocoa powder and preserved / processed fruits and vegetables
- *Other regulatory issues*
 - Details for the phasing-out of banana quotas and clarification of the future tariff protection (issue of “tariff quotas”)
 - Review of SPS rules on residue levels (MLR) to take into account post-harvest surface treatments for fresh fruits or vegetables.
 - Inclusion / examination by EC SPS authorities of products / pesticides used in Ghana but not included in the EC lists of products
 - Improved availability and dissemination of information on SPS rules
 - Time schedule for implementation of new rules, notably MLR
 - Homogenisation of Rules of Origin (RoO) regulation across products and with other trade agreements

- Higher percentage of non-origin inputs: the threshold for percentage of non-ACP and non-EU inputs to keep the ACP origin should be substantially lifted, and possibly associated with a planned decrease over a transition period (e.g.: 80% of non-origin inputs, declining to 50% over 12 years).
- Removal of conditions on vessel ownership for RoO on fish products
- **Other non-regulatory issues**
 - Improved availability and dissemination of information on EU voluntary codes of practice
 - Support for Ghana's participation in self-regulating bodies (Eurep-GAP)

➤ **Supply-side issues and technical assistance**

- **Integration of trade issues and technical assistance programmes in the country NIP** (National Indicative Programme of the European Commission)
- **Institutional strengthening**, in order to improve areas of the supply-side environment, in the form of technical assistance to designated bodies and administrations, including:
 - Official bodies, laboratories
 - Professional organisations and business representative bodies, for logistic issues
 - Marketing network and info-points
- **Support for private sector upgrading**, complementing or reinforcing current programmes, and focusing on both the critical issues for export expansion (SPS, quality issues, marketing issues) and on most promising sectors or industries (downstream cocoa processing, fruits and vegetables with initial processing, some areas of wood and wood products, fish and marine products, but also tourism, and light manufacturing in aluminium and other materials, see previous sections).
 - Cost sharing or support for SPS and other voluntary-code requirements
 - Extended support through existing facilities (CDE, CTA, COLEACP)

Appendix 1: Ghana: Merchandise Exports by Product, 1995-2001 (USD)

Product - HS 2 Digit Classification	Year						
	2001	2000	1999	1998	1997	1996	1995
	Value (US\$)	Value (US\$)	Value (US\$)	Value (US\$)	Value (US\$)	Value (US\$)	Value (US\$)
LIVE ANIMALS	309,033	242,846	252,450	283,758	223,792	243,529	106,483
MEAT AND EDIBLE MEAT OFFALS	79,519	77,329	1,236	445	309	25,049	77
FISH AND CRUSTACEANS, MOLLUSCS AND OTHER AQUATIC INVERTEBRATES	20,835,912	18,227,963	15,837,378	19,034,319	31,359,782	16,851,811	81,952,543
DAIRY PRODUCE; BIRD'S EGGS; NATURAL HONEY; EDIBLE PRODUCTS OF ANIMAL ORIGIN, NOT ELSEWHERE SPECIFIED OR INCLUDED	282,733	702,943	74,196	56,266	70,549	196,953	10,993
PRODUCTS OF ANIMAL ORIGIN, NOT ELSEWHERE SPECIFIED OR INCLUDED	129,142	50,685	1,395	39,100	33,006	4,312	8,429
LIVE TREES AND OTHER PLANTS; BULBS, ROOTS AND THE LIKE; CUT FLOWERS AND ORNAMENTAL FOLIAGE	54,576	121,535	67,113	5,166	2,201	3,557	1,936
EDIBLE VEGETABLES AND CERTAIN ROOTS AND TUBERS	7,350,941	7,490,855	5,588,630	22,098,886	6,714,010	8,883,487	3,309,217
EDIBLE FRUIT AND NUTS; PEEL OF CITRUS FRUIT OR MELONS	25,640,428	32,177,546	90,391,602	20,055,142	21,172,937	15,577,444	4,835,875
COFFEE, TEA, MATE AND SPICES	3,755,608	6,861,284	6,184,709	8,356,004	4,747,723	2,677,848	19,141,104
CEREALS	631,105	403,764	1,873,448	5,025,819	458,701	6,463,554	159,407
PRODUCTS OF THE MILLING INDUSRY; MALT; STARCHES; INULIN; WHEAT GLUTEN	985,673	758,417	968,318	3,956,735	1,272,246	1,597,983	255,601
OIL SEEDS AND OLEAGINOUS FRUITS; MISCELLANEOUS GRAINS, SEEDS AND FRUIT; INDUSTRIAL OR MEDICINAL PLANTS; STRAW AND FODDER	6,008,823	9,927,726	3,485,994	7,367,603	6,885,497	12,186,526	1,905,064
LAC; GUMS, RESINS AND OTHER VEGETABLE SAPS AND EXTRACTS	-	-	1,250	-	1,558	6,103	8,777
VEGETABLE PLAITING MATERIALS; VEGETABLE PRODUCTS NOT ELSEWHERE SPECIFIED OR INCLUDED	811,274	6,719,325	5,615,564	170,032	1,845	1,659	1,445,026
ANIMAL OR VEGETABLE FATS AND OILS AND THEIR CLEAVAGE PRODUCTS ETC.	9,899,217	5,479,075	6,535,560	15,238,874	8,623,569	10,741,896	180,677

PREPARATION OF MEAT, OF FISH OR CRUSTACEANS, MOLLUSCS OR OTHER AQUATIC INVERTEBRATES	64,258,438	56,397,743	53,578,032	55,218,140	65,496,168	42,546,387	22,554,882
SUGARS AND SUGAR CONFECTIONERY	452,430	1,209,501	766,023	309,852	183,723	723,131	-
COCOA AND COCOA PREPARATIONS	319,493,684	303,407,992	458,455,543	542,464,233	458,665,423	850,332,965	354,848,832
PREPARATIONS OF CEREALS, FLOUR, STARCH OR MILK; PASTRYCOOKS' PRODUCTS	656,719	386,559	476,074	725,192	861,464	460,519	34,963
PREPARATION OF VEGETABLES, FRUIT, NUTS OR OTHER PARTS OF PLANTS	10,606,406	45,543,050	861,340	327,725	334,615	2,222,464	5,308,372
MISCELLANEOUS EDIBLE PREPARATIONS	1,580,697	1,222,442	387,699	370,027	756,743	599,985	164,600
BEVERAGES, SPIRITS, AND VINEGAR	690,470	1,574,157	152,429	157,348	359,865	171,506	136,382
RESIDUES AND WASTE FROM THE FOOD INDUSTRIES; PREPARED ANIMAL FODDER	1,096,989	359,150	398,391	836,371	956,746	82,653	110,568
TOBACCO AND MANUFACTURED TOBACCO SUBSTITUTES	26,064,784	12,794,931	1,270,420	910,761	1,324,210	3,125,107	381,153
SALT; SULPHUR; EARTHS AND STONES; PLASTERING MATERIALS, LIME AND CEMENT	1,291,537	4,700,654	3,448,183	11,296,062	3,933,994	5,389,600	35,744
ORES, SLAG AND ASH	38,899,898	35,989,674	25,742,957	26,368,073	33,362,398	37,839,376	19,860,198
MINERAL FUELS, MINERAL OILS AND PRODUCTS OF THEIR DISTILLATION; BITUMINOUS SUBSTANCES; MINERAL WAXES	123,859,599	80,263,533	56,069,434	48,845,995	52,270,601	80,969,795	32,276,473
INORGANIC CHEMICALS; ORGANIC OR INORGANIC COMPOUNDS OF PRECIOUS METALS, OF RARE-EARTH METALS OF RADIOACTIVE ELEMENTS OR OF ISOTOPES	989,013	856,457	336,387	171,287	700,717	433,519	290,814
ORGANIC CHEMICALS	1,098,544	543,168	856,843	2,572	88,465	54,788	3,072
PHARMACEUTICAL PRODUCTS	3,640,710	780,194	555,366	216,328	316,603	299,351	6,249
FERTILISERS	940,219	250,594	755,149	25,057	5,965	392,671	-
TANNING OR DYEING EXTRACTS ETC.	980,245	548,326	67,429	84,269	139,441	130,919	1,001
ESSENTIAL OILS AND RESINOIDS; PERFUMERY, COSMETIC OR TOILET PREPARATIONS	8,069,584	4,010,548	2,425,206	968,432	714,152	696,196	13,799

SOAP, ORGANIC SURFACE-AGENTS, WASHING PREPARATIONS, LUBRICATING PREPARATIONS ETC.	917,448	1,733,966	1,050,967	191,614	433,733	244,735	4,908
ALBUMINOIDAL SUBSTANCES; MODIFIED STARCHES; GLUES ENZYMES	29,946	26,625	958	3,927	18,362	4,585	50
EXPLOSIVES; PYROTECHNIC PRODUCTS; MATCHES; PYROPHORIC ALLOYS; CERTAIN COMBUSTIBLE PREPARATIONS	154,818	186,130	352,849	85,886	362,147	93,154	91
PHOTOGRAPHIC OR CINEMATOGRAPHIC GOODS	82,579	72,054	1,759	743	6,889	2,080	-
MISCELLANEOUS CHEMICAL PRODUCTS	463,489	263,596	4,515,911	128,441	125,385	264,054	339,073
PLASTICS AND ARTICLES THEREOF	18,404,943	25,156,431	3,989,136	2,497,314	2,646,948	1,098,950	51,683
RUBBER AND ARTICLES THEREOF	5,250,615	5,586,147	7,036,934	4,862,075	9,424,302	24,652,140	5,369,246
RAW HIDES AND SKINS (OTHER THAN FURSKINS) AND LEATHER	884	34,255	136	2,641	6,588	12,198	289
ARTICLES OF LEATHER ETC. (OTHER THAN SILK-WORK GUT)	46,739	32,991	21,630	32,376	62,175	63,914	28,988
WOOD AND ARTICLES OF WOOD; WOOD CHARCOAL	183,105,834	148,180,046	183,292,726	147,110,748	163,935,975	399,037,047	116,511,131
CORK AND ARTICLES OF CORK	12,272	-	8,742	3,712	543	1,909	-
MANUFACTURES OF STRAW, OF ESPARTO OR OF OTHER PLAITING MATERIALS; BASKET WARE AND WICKERWORK	7,243,125	1,178,218	3,323,675	5,896,018	742,934	1,046,842	272,307
PULP OF WOOD OR OF OTHER FIBROUS CELLULOSIC MATERIAL ETC.	1,119,065	260,190	1,276	1,862	3,307	11,852	152
PAPER AND PAPERBOARD; ARTICLES OF PAPER PULP, OF PAPER OR OF PAPERBOARD	1,069,347	3,282,970	881,658	417,580	9,905,517	911,344	31,195
PRINTED BOOKS, NEWSPAPERS, PICTURES AND OTHER PRODUCTS OF THE PRINTING INDUSTRY ETC.	734,769	240,041	573,536	234,320	152,859	61,726	15,444
SILK	-	18,942	1,274	-	-	3,402	-
WOOL, FINE OR COARSE ANIMAL HAIR; HORSEHAIR YARN AND WOVEN FABRIC	-	4,069	204	-	2,461	33,490	-
COTTON	6,564,325	8,936,668	3,496,507	3,638,488	14,945,791	1,593,895	70,015

OTHER VEGETABLE TEXTILE FIBRES; PAPER YARN AND WOVEN FABRICS OF PAPER YARN	316,242	237,526	73,031	90,035	26,551	19,796	15,095
MAN-MADE FILAMENTS	279,614	56,923	1,986	15,291	304,258	48,203	647
MAN-MADE STAPLE FIBRES	2,802,254	4,675,540	595,111	462,786	29,215	4,963	448,317
WADDING, FELT AND NONWOVENS; SPECIAL YARNS; TWINE, CORDAGE, ROPES ETC.	251,845	629,026	707,095	104,004	289,570	1,382,538	4,106
CARPETS AND OTHER TEXTILES FLOOR COVERINGS	1,598	-	489	585	102	3,617	-
SPECIAL WOVEN FABRICS ETC.	143,513	3,972	503,617	34,557	94,807	42,814	-
IMPREGNATED, COATED, COVERED OR LAMINATED TEXTILE FABRICS ETC.	393,452	208,119	12,416	4,855	13,894	153,719	-
KNITTED OR CROCHETED FABRICS	40,114	-	376	101	248	20,518	-
ARTICLES OF APPAREL AND CLOTHING ACCESSORIES, KNITTED OR CROCHETED	342,151	530,580	3,001,086	3,872,887	579,616	165,726	1,318,509
ARTICLES OF APPAREL AND CLOTHING ACCESSORIES, NOT KNITTED OR CROCHETED	272,873	189,532	38,136	173,695	117,793	65,404	33,883
OTHER MADE UP TEXTILE ARTICLES ETC.	583,505	719,534	3,290,864	3,759,415	1,665,551	1,264,890	3,162
FOOTWEAR, GAITERS AND THE LIKE; PARTS OF SUCH ARTICLES	1,220,313	424,506	161,363	277,608	255,209	412,605	52,883
HEADGEAR AND PARTS THEREOF	199	652	95	1,152	5,477	7,270	1,653
UMBRELLA, SUN UMBRELLAS, WALKING-STICKS ETC.	160	1,866	446	1,446	52	2,285	39
PREPARED FEATHERS AND DOWN AND ARTICLES MADE OF FEATHERS OF DOWN ETC.	48,548	9,970	11,393	2,360	5,267	683	23
ARTICLES OF STONE, PLASTER, CEMENT, MICA OR SIMILAR MATERIALS	35,260	183,242	164,722	18,715	147,650	167,796	4,551
CERAMIC PRODUCTS	228,331	543,514	1,822,000	35,315	60,989	145,794	23,334
GLASS AND GLASSWARE	239,616	202,047	80,873	73,617	89,266	240,540	7,751
NATURAL OR CULTURED PEARLS, PRECIOUS OR SEMI-PRECIOUS STONES, PRECIOUS METALS ETC.	639,898,224	615,280,190	607,746,085	648,874,744	555,290,839	749,110,701	314,248,453

IRON AND STEEL	5,223,505	3,496,429	35,780,527	1,489,421	6,452,922	9,944,273	458,835
ARTICLES OF IRON AND STEEL	2,003,250	1,187,203	1,757,141	9,485,990	2,308,537	821,273	4,476,109
COPPER AND ARTICLES THEREOF	1,612,190	1,344,907	1,851,875	2,394,459	2,474,702	1,950,249	2,306,480
NICKEL AND ARTICLES THEREOF	-	-	9,950	-	-	-	-
ALUMINIUM AND ARTICLES THEREOF	133,534,883	155,342,627	37,925,747	29,693,829	138,023,840	90,521,047	279,194,369
LEAD AND ARTICLES THEREOF	234,688	414,802	170,198	204,664	159,209	21,891	6,498
ZINC AND ARTICLES THEREOF	46,967	50,132	14,710	10,140	20,709	8,100	-
OTHER BASE METALS; CERMETS; ARTICLES THEREOF	62	-	4,118	231	6,802	2,065	102
TOOLS, IMPLEMENTS, CUTLERY, SPOONS AND FORKS, OF BASE METAL; PARTS THEREOF OF BASE METAL	368,060	388,614	272,605	260,478	714,219	970,758	24,159
MISCELLANEOUS ARTICLES OF BASE METAL	165,825	464,080	18,031	102,341	166,500	88,049	1,745
NUCLEAR REACTORS, BOILERS, MACHINERY AND MECHANICAL APPLIANCES; PARTS THEREOF	6,928,443	9,735,821	3,847,923	3,573,241	6,016,610	7,043,779	9,352,569
ELECTRICAL MACHINERY AND EQUIPMENT AND PARTS THEREOF ETC.	1,080,139	4,106,500	579,341	2,850,074	569,259	1,210,105	10,247,610
RAILWAY AND TRAMWAY LOCOMOTIVES, ROLLING-STOCK AND PARTS THEREOF ETC.	530	12,577	21,384	1,193	1,778	490,410	299,894
VEHICLES OTHER THAN RAILWAY OR TRAMWAY ROLLING STOCK, AND PARTS AND ACCESSORIES THEREOF	2,830,025	5,061,074	3,131,111	1,900,944	2,469,594	3,732,583	1,617,364
AIRCRAFT, SPACECRAFT, AND PARTS THEREOF	622,525	15,106	27,186,028	49,413	1,467	14,852	51,295
SHIPS, BOATS AND FLOATING STRUCTURES	137,289	68,064	22,499	29,461	122,655	2,036	718,916
OPTICAL, PHOTOGRAPHIC, CINEMATOGRAPHIC, MEASURING, CHECKING, PRECISION, MEDICAL OR SURGICAL INSTRUMENTS AND APARATUS ETC.	617,476	215,714	104,560	230,073	43,443	209,332	356,024
CLOCKS AND WATCHES AND PARTS THEREOF	122	209	29,881	1,216	1,680	40,681	-

MUSICAL INSTRUMENTS; PARTS AND ACCESSORIES OF SUCH ARTICLES	68,707	114,460	130,412	92,078	426,059	124,402	4,887,419
ARMS AND AMMUNITION; PARTS AND ACCESSORIES THEREOF	207	-	-	201	30,609	202	-
FURNITURE; BEDDING MATTRESSES, MATTRESS SUPPORTS, CUSHIONS AND SIMILAR STUFFED FURNISHINGS ETC.	21,569,011	9,128,577	10,111,790	14,073,178	8,337,070	7,948,602	-
TOYS, GAMES AND SPORTS REQUISITES; PARTS AND ACCESSORIES THEREOF	19,576	109,946	99,128	127,223	17,694	92,502	3,751
MISCELLANEOUS MANUFACTURED ARTICLES	595,254	197,133	181,279	111,428	189,732	39,442	7,714
WORKS OF ART, COLLECTORS' PIECES AND ANTIQUES	284,405	733,513	512,888	358,429	281,068	497,785	102,223
OTHER	20,931	117,010	1,602,433	50,971	23,281	38,181	2,262
Grand Total	1,731,706,033	1,651,474,541	1,695,608,368	1,680,987,462	1,632,650,733	2,410,142,421	1,302,320,627

Appendix 2: Ghana's Non-Traditional Exports, 1995-2002 (US dollars)

	1995	1996	1997	1998	1999	2000	2001	2002
Total Non-Traditional Exports	159,665,572	276,235,650	329,061,611	401,710,333	404,410,858	400,659,679	459,603,423	504,251,753
Excluding Cocoa Products	146,992,197	215,873,092	237,426,249	327,364,914	347,813,998	340,124,879	390,588,418	418,210,642
Excluding Cocoa & Wood Products	109,450,506	148,982,044	166,453,217	242,773,385	262,249,391	231,837,744	279,146,934	310,650,343
Agricultural Products	27,383,777	50,274,097	57,404,937	77,803,323	84,502,880	74,539,389	82,183,710	85,730,637
Horticultural Products	11,531,270	20,712,028	19,161,889	19,773,354	27,211,530	28,082,159	29,988,913	33,614,080
Of which Pineapples	5,629,762	10,986,886	9,631,469	8,769,405	13,055,416	11,853,128	13,316,459	15,519,990
Banana	1,018,974	1,722,192	1,834,476	2,688,020	3,219,668	3,694,998	3,188,647	3,250,021
Fish and Sea Foods	7,344,987	12,389,349	18,705,264	21,021,449	20,938,700	18,581,603	23,848,091	24,480,924
Game and Wildlife	228,336	260,542	285,701	398,248	393,327	361,419	379,747	1,923,150
Medicinal Plants	144,324	1,543,060	801,609	2,098,524	751,573	467,131	1,335,724	3,155,959
Kola Nuts	1,082,017	1,109,465	809,473	771,166	1,151,340	755,155	862,848	1,122,076
Cocoa Waste	1,090,813	1,014,068	2,241,243	3,607,779	3,713,148	2,020,987	4,738,514	2,728,187
Other Agricultural Products	5,962,030	13,245,586	15,399,758	30,132,802	30,343,262	24,270,936	21,029,873	18,706,262
Processed & Semi-Processed	130,207,985	223,039,029	266,937,406	317,519,433	313,304,201	321,157,936	362,725,228	406,210,266
Wood Products	37,541,691	66,891,048	70,973,032	84,591,529	85,564,608	108,287,134	111,441,484	107,560,300
Aluminium Products	7,653,819	1,940,709	5,755,177	12,188,382	14,806,243	12,319,379	12,519,187	32,848,106
Common Salt	4,325,116	3,171,532	1,851,779	2,776,770	3,389,927	2,913,273	2,347,321	1,820,812
Non-Ferrous Metal Scrap	390,227	2,207,002	2,591,781	3,116,154	2,161,200	3,741,540	2,743,040	1,796,926
Natural Rubber (Processed)	8,890,019	7,739,037	8,817,615	5,463,961	4,796,464	6,111,250	4,785,977	8,825,472
Processed & Semi-Proc. Foods	71,407,114	141,089,700	176,948,022	209,382,638	202,585,760	187,785,359	228,888,220	253,358,650
Handicrafts	2,073,809	2,922,524	4,719,268	6,389,576	6,655,791	4,977,655	14,892,584	11,310,850
Cane Products	217,832	978,644	751,268	3,105,187	3,782,353	1,118,711	4,982,495	590,618
Wood Carvings	67,596	165,467	240,570	589,442	436,313	384,955	471,776	230,982
Kente Products	498,915	91,860	66,251	71,565	29,060	11,267	13,954	223,807
Batik Products	17,933	55,507	80,060	140,834	129,985	229,801	297,316	660,891
Assorted Handicrafts 1/	1,271,532	1,631,046	3,581,119	2,482,547	2,278,080	3,232,920	9,127,043	9,604,552

Source : Ghana Export Promotion Council (GEPC, Accra)

Notes: 1/. Includes beads, earthenware bowls, hides and skins, imitation jewellery and musical instruments

Appendix Table 3: Trade In Services By Mode Of Supply – Total

Years	Total Mode 1 (US\$ Millions)	Total Mode 2 (US\$ Millions)	Total Mode 3 (US\$ Millions)	Total Mode 4 (US\$ Millions)
1987	215.9			
1988	242	13.5	N.A.	17.9
1989	251.2	14.7	N.A.	18
1990	264.3	16.1	N.A.	19.6
1991	301.1	17.7	316	22.2
1992	351.6	20.2	N.A.	24.2
1993	435.1	24.3	418	24.3
1994	424.1	30.3	N.A.	24.3
1995	439.2	30.9	N.A.	27.5
1996	472.9	31.6	823	N.A.
1997	508.6	35.1	943	N.A.
1998	606.5	38	1024	N.A.
1999	634.8	369.2	1069	N.A.
2000	582.1	395.3	1450	N.A.
		445	1612	N.A.

Source: International Monetary Fund – Balance of Payments Yearbook 2001/2002,
UNCTAD World Investment Report 2002

NOTES:

Total Mode 1 = Mode 1 Exports + Mode 1 Imports

Total Mode 2 = Mode 2 Exports + Mode 2 Imports

Total Mode 3 = Mode 3 Exports (Outward Stock) + Mode 3 Imports (Inward Stock)

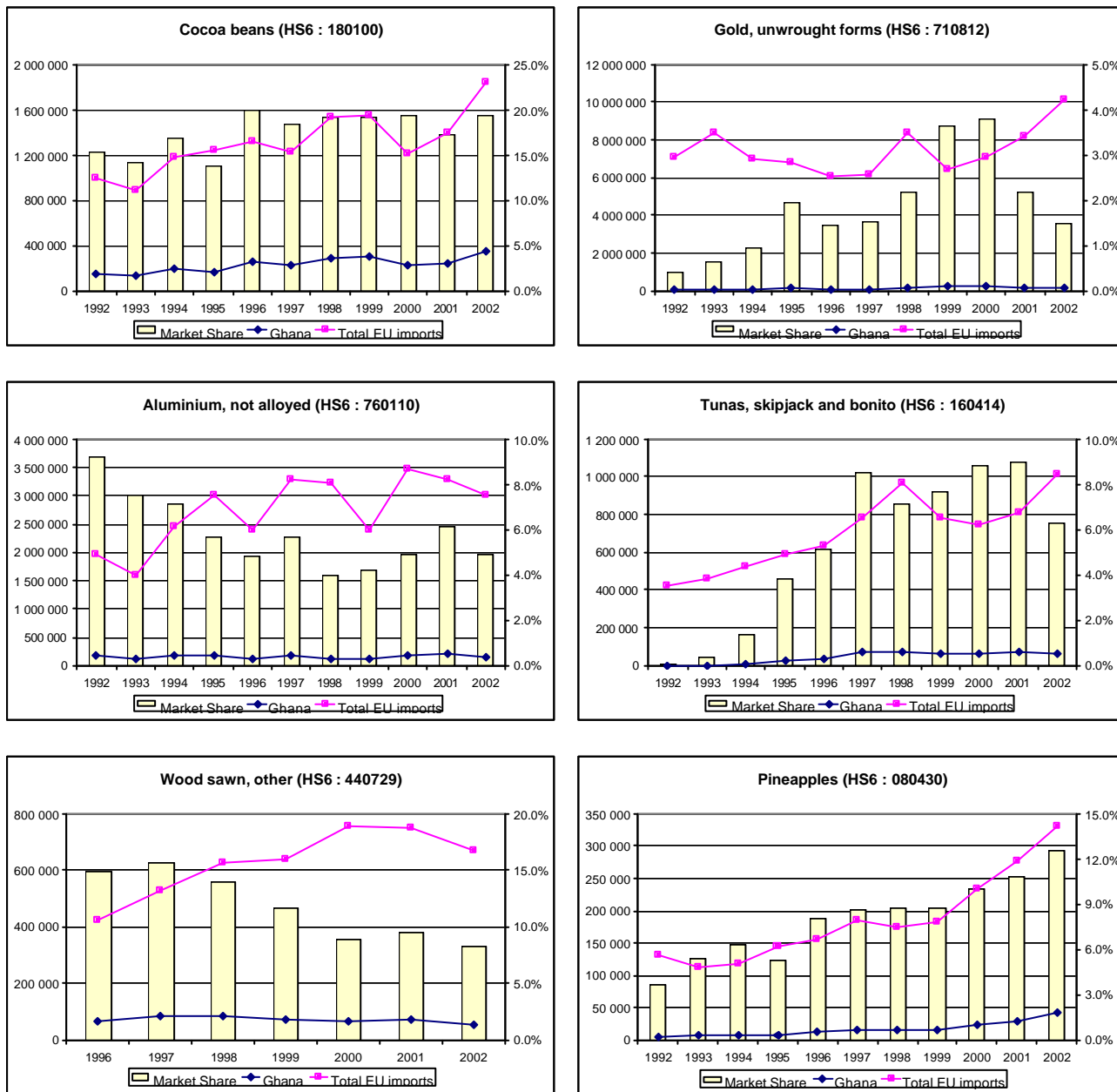
Total Mode 4 = Mode 4 Exports + Mode 4 Imports

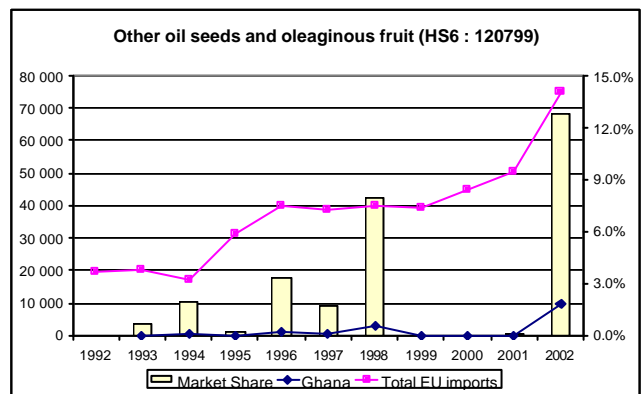
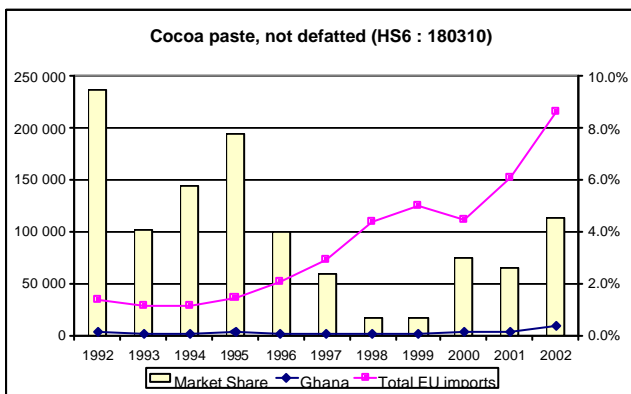
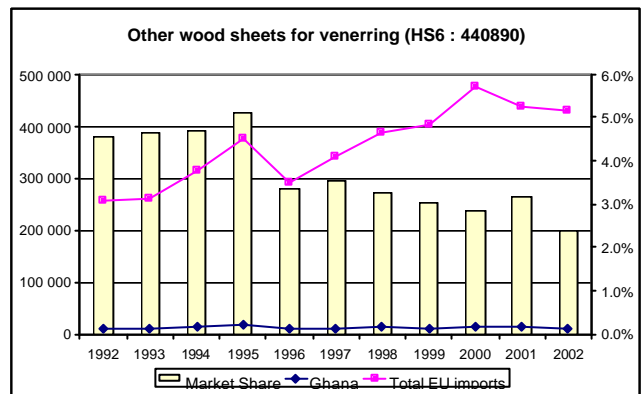
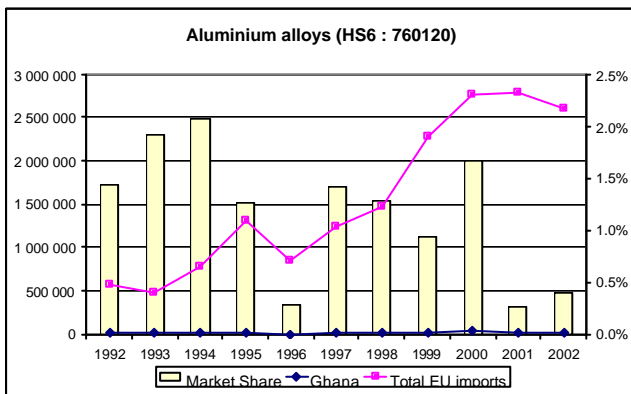
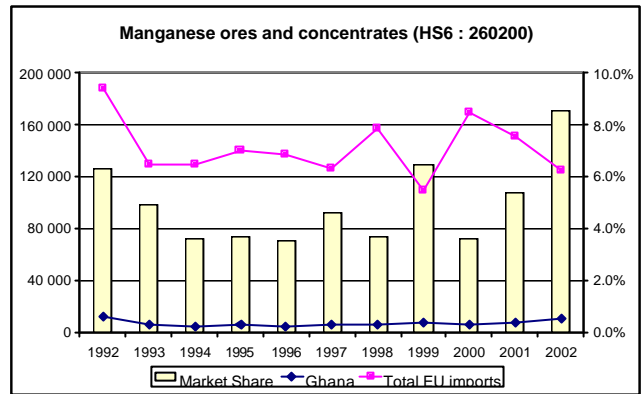
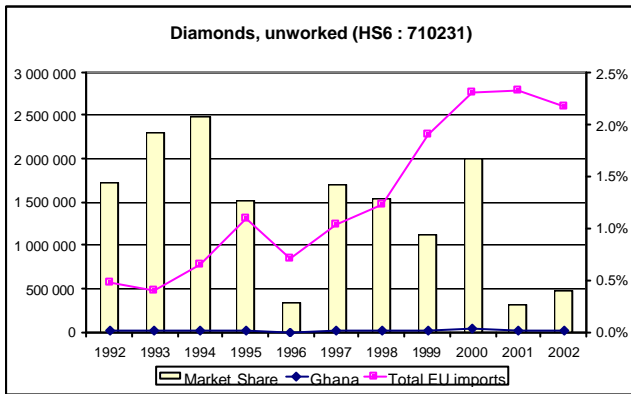
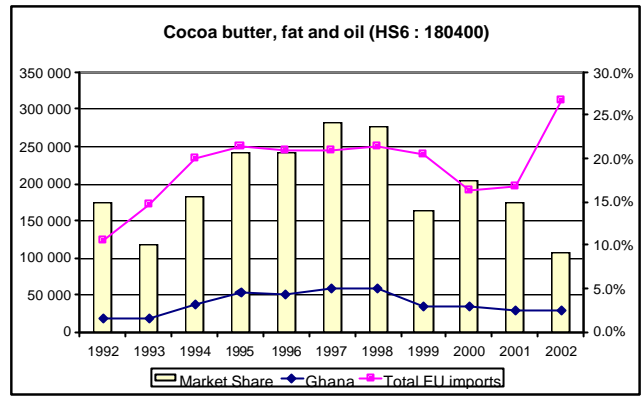
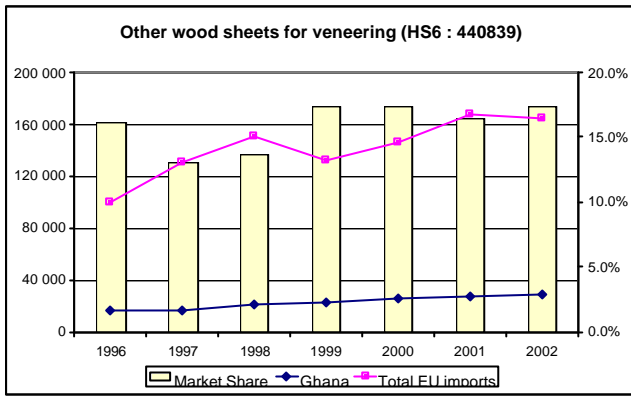
Total Trade = Exports Of Goods And Services + Imports Of Goods And Services

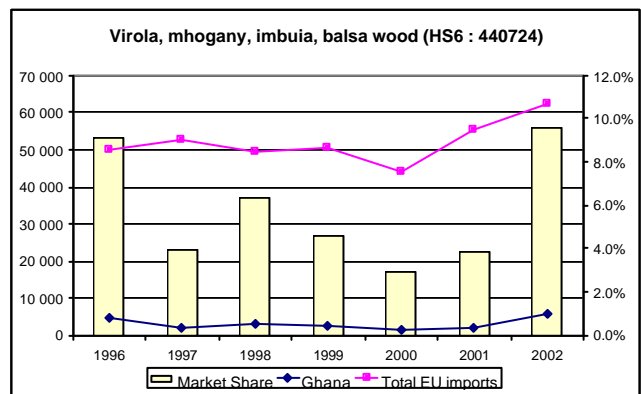
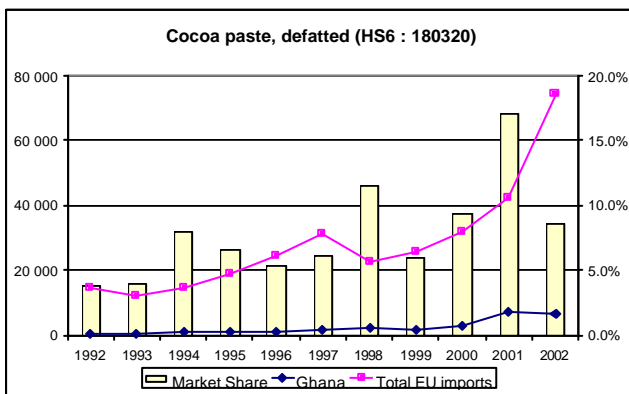
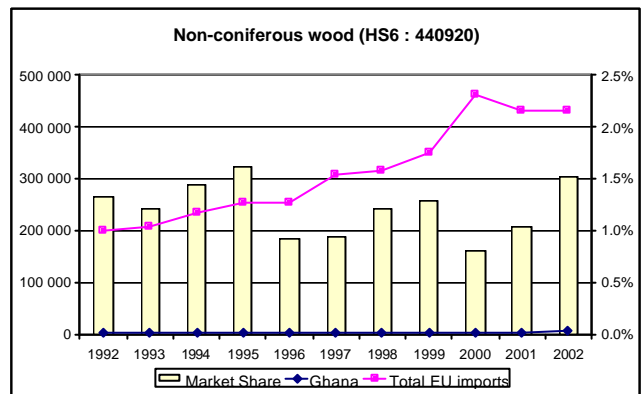
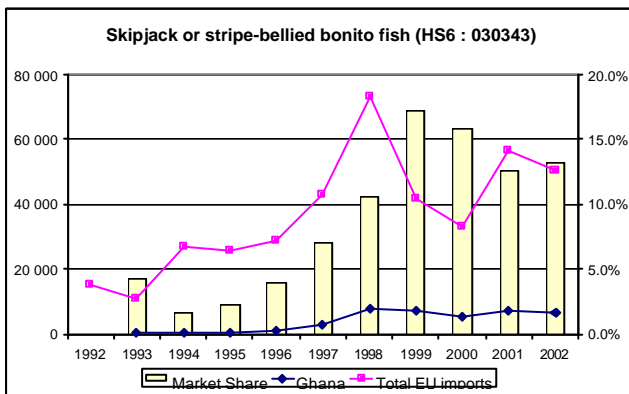
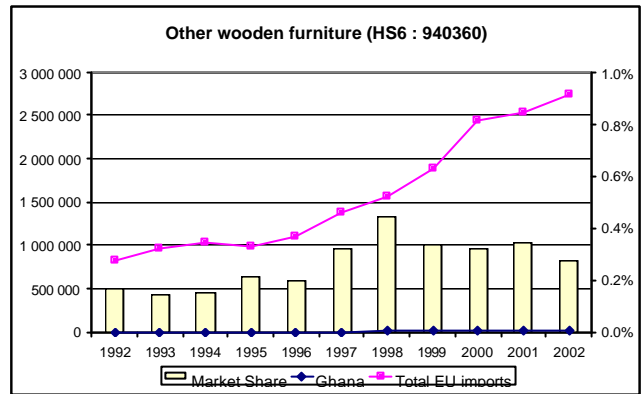
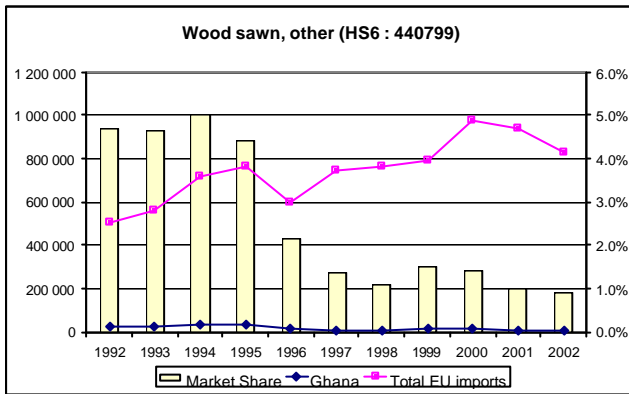
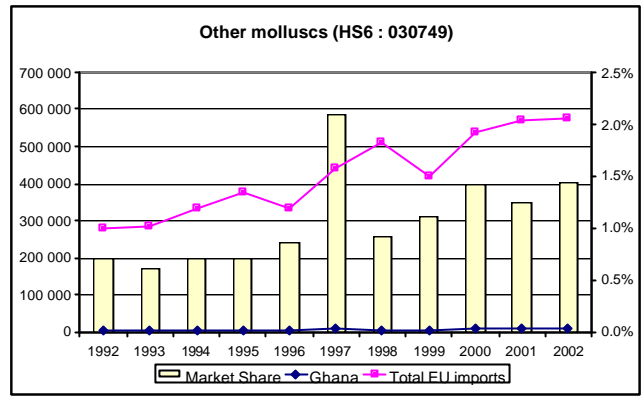
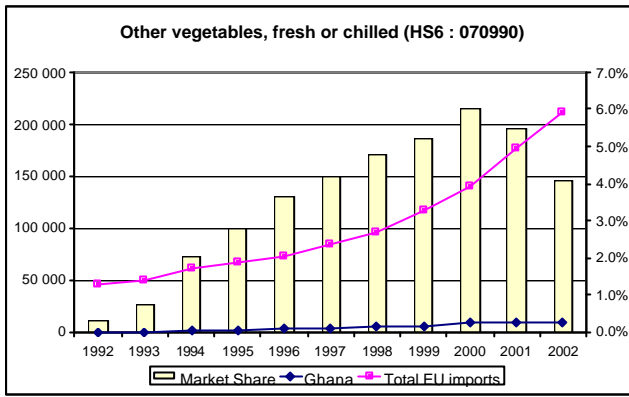
Appendix 3: EU imports, Ghana's exports and Ghana's market shares in the EU, by products at a 6-digit level of classification

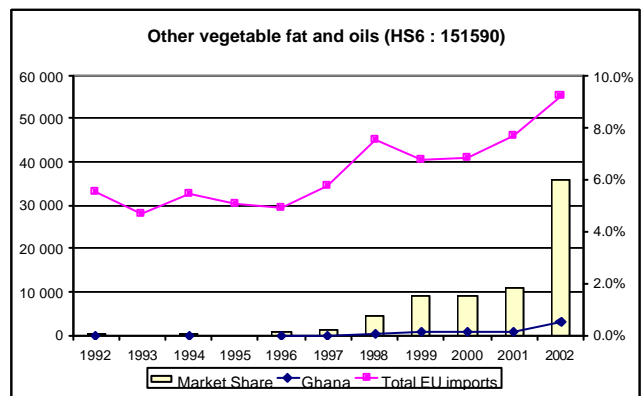
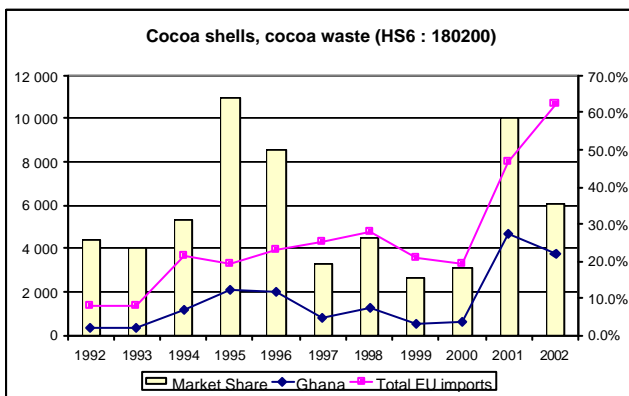
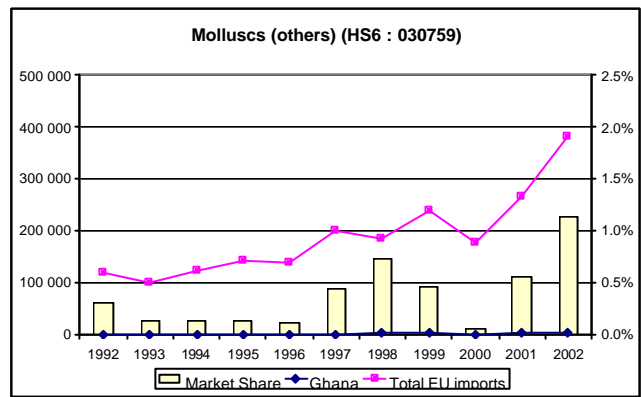
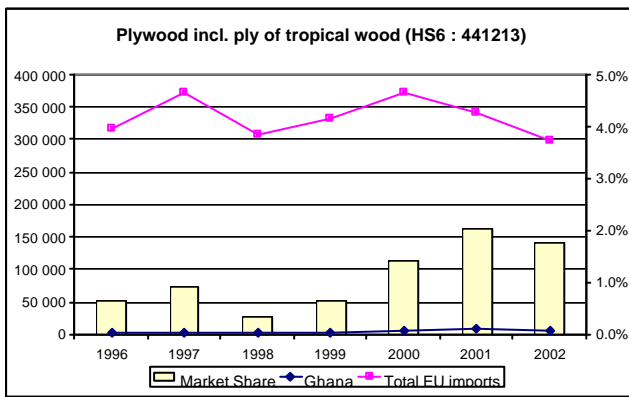
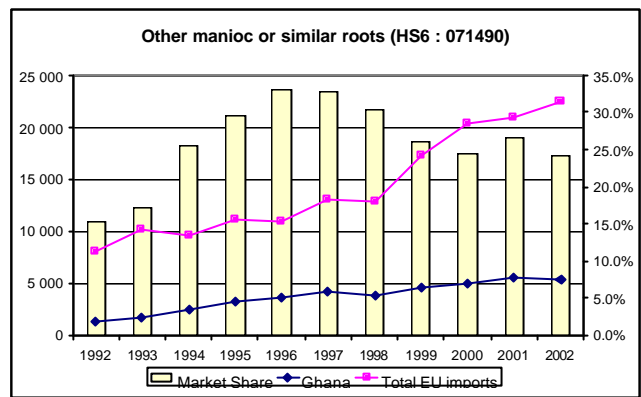
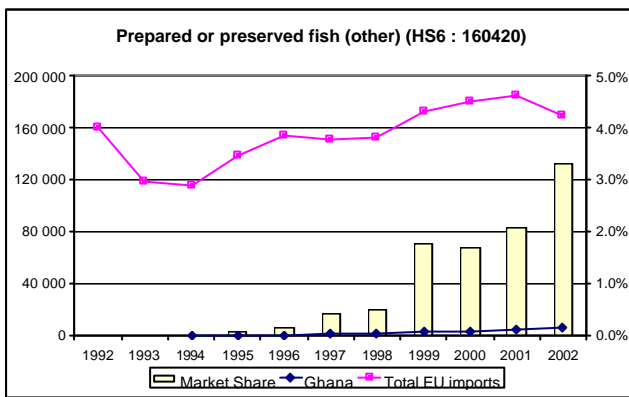
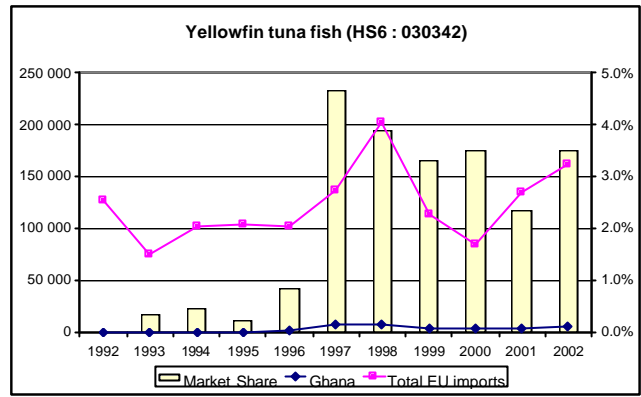
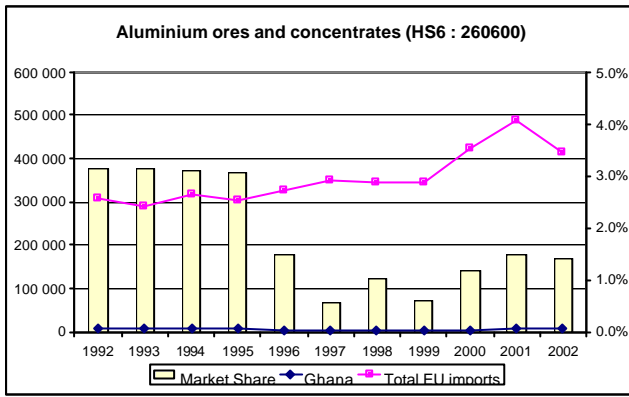
Products are presented in descending order of importance in Ghana's exports to the EU, and a table with data is presented at the end of the appendix

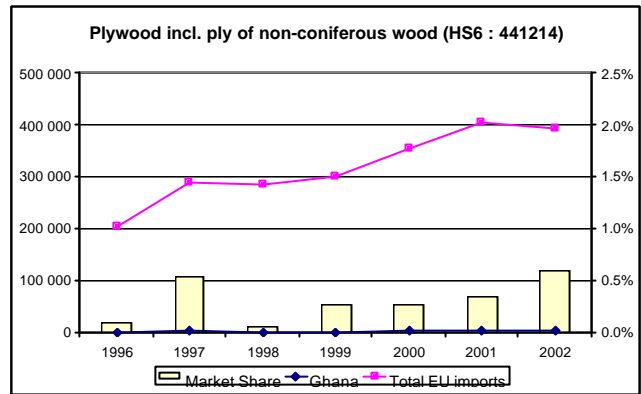
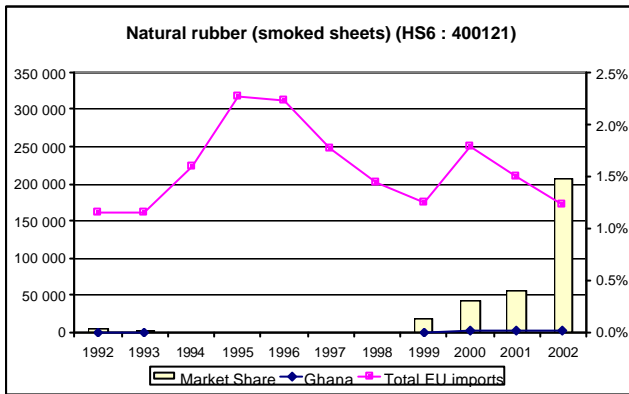
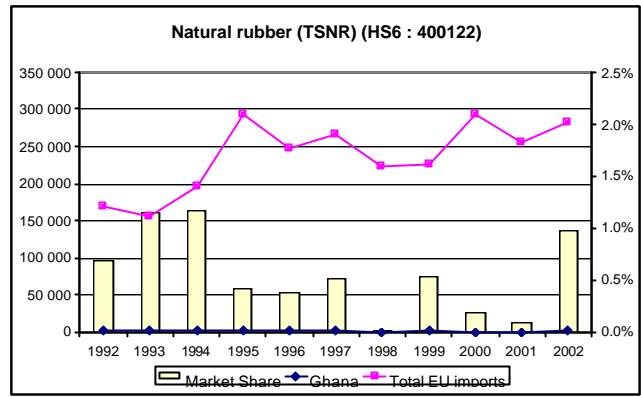
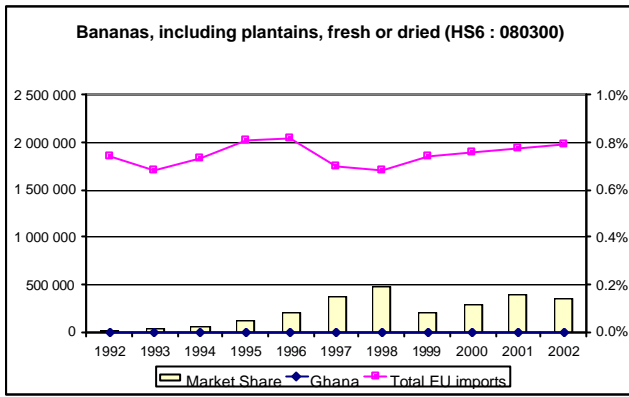
Chart A.1. Ghana's exports and market shares in EU, by products











Source: Eurostat, computation by TAC

EU imports for the 35 most important export products of Ghana, Ghana's market share, and EU import growth (in €) between 2000 and 2002

HS6 code	Description	EU imports (mn €)		Ghana's market share in 2002	EU import growth (2000-02)
		2000	2002		
180200	Cocoa shells / cocoa waste	3.3	10.7	35.2%	220.1%
180320	Cocoa paste wholly or partly defatted	31.8	74.6	8.6%	134.4%
30759	Other molluscs	174.6	382.0	1.1%	118.8%
30342	Yellowfin tunas	83.4	160.6	3.5%	92.6%
180310	Cocoa paste not defatted	111.5	214.3	4.5%	92.2%
120799	Other oil seeds & oleaginous fruits	44.6	75.0	12.8%	68.0%
180400	Cocoa butter, fat and oil	191.1	312.7	9.1%	63.6%
180100	Cocoa beans	1206.8	1847.1	19.3%	53.1%
30343	Skipjack or stripe-bellied bonito	33.2	50.4	13.2%	51.7%
70990	Other vegetables, fresh or chilled	139.9	211.1	4.1%	50.9%
440724	Virola, mahogany, imbuia and balsa	43.8	62.5	9.6%	42.8%
710812	Gold, other unwrought forms	7110.3	10119.6	1.5%	42.3%
80430	Pineapples	233.4	330.8	12.6%	41.7%
160414	Tunas, skipjack and bonito	745.9	1009.8	6.3%	35.4%
151590	Other vegetable fat and oils	41.0	55.4	6.0%	35.0%
940360	Other wooden furniture	2440.5	2747.9	0.3%	12.6%
440839	Other wood sheets for veneering	146.1	164.4	17.3%	12.5%
441214	Plywood / ply of non-coniferous wood	354.0	393.1	0.6%	11.0%
71490	Other manioc or similar roots	20.4	22.4	24.2%	9.8%
30749	Other molluscs	536.2	577.4	1.4%	7.7%
80300	Bananas, fresh or dried	1899.2	1986.4	0.1%	4.6%
260600	Aluminium ores and concentrates	425.8	415.8	1.4%	-2.3%
400122	Technically spec. nat. rubber (TSNR)	293.3	281.3	1.0%	-4.1%
760120	Aluminium alloys	2758.8	2610.1	0.4%	-5.4%
160420	Other prepared or preserved fish	179.5	169.3	3.3%	-5.7%
440920	Non-coniferous wood	461.7	429.3	1.5%	-7.0%
440890	Other wood sheets for veneering	475.4	430.9	2.4%	-9.4%
440729	Wood sawn, other	754.4	670.0	8.3%	-11.2%
760110	Aluminium, not alloyed	3469.6	3012.5	4.9%	-13.2%
440799	Wood sawn, other	978.2	824.9	0.9%	-15.7%
710231	Unworked diamonds	10971.4	9237.9	0.2%	-15.8%
441213	Plywood / ply of tropical wood	371.2	296.6	1.8%	-20.1%
260200	Manganese ores and concentrates	168.2	125.0	8.5%	-25.7%
400121	Smoked sheets natural rubber	249.3	171.0	1.5%	-31.4%
271011	Light bituminous oils and preparations	0.0	3723.2	0.2%	
	Average			6.5%	30.4%
	median			3.5%	11.8%

Source Eurostat

Appendix 4: Main competitors for Ghana in the EU, by products at a 6-digit level of classification (market shares in %)

Cocoa beans (HS6: 180100)		Gold, unwrought forms (HS6: 710812)		Aluminium, not alloyed (HS6: 760110)	
PARTNERNAME	Mkt.Share	PARTNERNAME	Mkt.Share	PARTNERNAME	Mkt.Share
Ivory Coast	49.7	South Africa	26.3	Russia	22.8
Ghana	19.3	Switzerland	25.4	Norway	15.6
Nigeria	14.4	Peru	8.9	Mozambique	14.2
Cameroon	6.5	Russia	8.4	Iceland	7.6
Ecuador	2.3	Uzbekistan	5.2	Brazil	7.1
Indonesia	1.9	Australia	4.1	Ghana	4.9
Papua N.G.	0.9	Chile	2.8	Canada	4.7
Togo	0.6	USA	2.7	Romania	4.0
Dominican R.	0.6	Hong Kong	1.9	Serb.Monten.	3.8
Venezuela	0.5	Bulgaria	1.8	Bosnia and Herz	3.1
Madagascar	0.4	Saudi Arabia	1.5	South Africa	2.3
Tanzania	0.4	Ghana	1.5	Cameroon	1.9
Malta	0.2	Romania	1.3	Venezuela	1.6
Uganda	0.2	Canada	1.2	Egypt	1.6
S.Tome,Princ	0.2	Brazil	1.1	U.A.Emirates	1.0

Tunas, skipjack and bonito (HS6: 160414)		Wood sawn, other (HS6: 440729)		Pineapples (HS6: 080430)	
PARTNERNAME	Mkt.Share	PARTNERNAME	Mkt.Share	PARTNERNAME	Mkt.Share
Seychelles	18.2	Cameroon	30.4	Costa Rica	44.6
Ivory Coast	15.2	Ivory Coast	17.2	Ivory Coast	31.5
Ecuador	14.4	Brazil	13.0	Ghana	12.6
Thailand	9.9	Malaysia	10.7	Honduras	4.1
Philippines	7.6	Ghana	8.3	Ecuador	2.5
Mauritius	7.0	Congo	4.0	South Africa	1.7
Colombia	6.7	Myanmar	3.1	Thailand	0.7
Ghana	6.3	Gabon	2.9	Cameroon	0.5
Madagascar	3.7	Indonesia	2.3	Benin	0.5
Senegal	2.2	Congo Dem. Rep	1.5	Mauritius	0.2
Indonesia	1.8	Centr.Africa	1.2	Dominican R.	0.2
Venezuela	1.3	Thailand	1.0	Togo	0.2
Papua N.G.	1.3	Singapore	0.8	Guinea	0.2
Maldives	1.2	Nigeria	0.5	Sri Lanka	0.1
Costa Rica	1.1	USA	0.4	Guatemala	0.1

Other wood sheets for veneeding (HS6: 440839)		Cocoa butter, fat and oil (HS6: 180400)		Unworked diamonds (HS6: 710231)	
PARTNERNAME	Mkt.Share	PARTNERNAME	Mkt.Share	PARTNERNAME	Mkt.Share
Gabon	26.5	Ivory Coast	39.2	Secr.Extra	34.5
Ivory Coast	24.2	Indonesia	13.7	South Africa	12.7
Ghana	17.3	Ghana	9.1	Congo Dem. Rep	10.5
Cameroon	7.9	Malaysia	7.2	Israel	9.8
Equat.Guinea	5.9	Brazil	5.5	Angola	5.7
Thailand	3.6	Nigeria	5.4	Hong Kong	4.1
USA	3.5	Singapore	5.3	Russia	3.0
Brazil	2.1	Turkey	2.4	Australia	2.7
South Africa	1.5	Ecuador	2.3	Botswana	2.5

Indonesia	1.0	Peru	2.2	Canada	1.8
Turkey	0.9	China	1.9	U.A.Emirates	1.5
Slovenia	0.8	Colombia	0.9	Centr.Africa	1.4
China	0.5	Philippines	0.9	India	1.2
India	0.5	Algeria	0.7	USA	1.2
Romania	0.5	Switzerland	0.7	Switzerland	1.1

Manganese ores and concentrates (HS6: 260200)		Aluminium alloys (HS6: 760120)		Other wood sheets for veneering (HS6: 440890)	
PARTNERNAME	Mkt.Share	PARTNERNAME	Mkt.Share	PARTNERNAME	Mkt.Share
Gabon	30.5	Norway	54.6	USA	40.6
Brazil	27.4	Iceland	6.1	Slovenia	6.7
South Africa	19.3	Slovakia	5.8	Poland	6.2
Ghana	8.5	Slovenia	4.7	Croatia	4.5
Australia	6.3	U.A.Emirates	4.0	Hungary	4.4
Morocco	3.0	Russia	3.6	Switzerland	3.7
India	1.7	Romania	2.2	Canada	3.6
Bahamas	1.2	Egypt	2.1	Romania	3.4
USA	1.1	Brazil	2.0	Czech Rep.	3.1
Norway	0.4	Latvia	1.8	Cameroon	3.0
Georgia	0.3	Czech Rep.	1.7	Ghana	2.4
Mexico	0.1	Poland	1.5	Turkey	2.3
Japan	0.1	Ukraine	1.3	Ivory Coast	1.9
China	0.0	Mozambique	1.3	Estonia	1.8
Poland	0.0	Canada	1.0	Latvia	1.7

Cocoa paste not defatted (HS6: 180310)		Other oil seeds and oleaginous fruits (HS6: 120799)		Other vegetables, fresh or chilled (HS6: 070990)	
PARTNERNAME	Mkt.Share	PARTNERNAME	Mkt.Share	PARTNERNAME	Mkt.Share
Ivory Coast	77.0	China	26.9	Kenya	27.8
Cameroon	16.5	Hungary	21.1	Morocco	13.8
Ghana	4.5	Ghana	12.8	Thailand	11.8
Ecuador	0.6	Lithuania	5.5	Israel	5.4
Switzerland	0.5	Malaysia	4.4	Zambia	4.3
Nigeria	0.3	USA	3.6	Ghana	4.1
Peru	0.3	Indonesia	3.2	USA	3.6
South Korea	0.1	Canada	3.0	Zimbabwe	3.5
Indonesia	0.1	India	2.3	Bangladesh	3.5
Dominican R.	0.1	Burkina Faso	2.0	Turkey	2.0
Algeria	0.0	Zimbabwe	1.6	Guatemala	2.0
Malaysia	0.0	Ukraine	1.6	Uganda	1.6
Panama	0.0	Latvia	1.3	South Africa	1.4
Colombia	0.0	New Zealand	1.2	Mexico	1.3
Canada	0.0	Ethiopia	1.2	India	1.3

Other molluscs (HS6: 030749)		Wood sawn, other (HS6: 440799)		Other wooden furniture (HS6: 940360)	
PARTNERNAME	Mkt.Share	PARTNERNAME	Mkt.Share	PARTNERNAME	Mkt.Share
India	20.3	USA	25.7	Poland	17.7
Thailand	15.2	Brazil	13.3	Indonesia	12.8
Morocco	14.7	Canada	10.7	China	10.7
Falkland Is.	8.2	Latvia	6.3	Romania	10.5

South Africa	6.3	Ivory Coast	5.4	Malaysia	4.4
China	5.6	Cameroon	4.5	Brazil	4.0
Mauritania	3.9	Hungary	4.1	Vietnam	3.8
Senegal	2.9	Lithuania	3.9	Czech Rep.	3.2
USA	2.8	Romania	2.7	India	3.2
Tunisia	2.7	Croatia	2.6	Lithuania	3.1
New Zealand	2.6	Estonia	2.1	Switzerland	2.7
Vietnam	2.2	Russia	1.9	Slovakia	2.4
Peru	1.8	Poland	1.8	Slovenia	2.3
Ghana	1.4	Slovenia	1.4	Thailand	2.0
Angola	1.4	Bulgaria	1.0	Estonia	1.9

Skipjack or stripe-bellied bonito (HS6: 030343)		Non-coniferous wood (HS6: 440920)		Cocoa paste wholly or partly defatted (HS6: 180320)	
PARTNERNAME	Mkt.Share	PARTNERNAME	Mkt.Share	PARTNERNAME	Mkt.Share
Guatemala	18.4	Indonesia	23.0	Ivory Coast	55.6
NI Antilles	16.7	Malaysia	8.0	Indonesia	26.4
Seychelles	14.9	China	7.8	Ghana	8.6
Ghana	13.2	Poland	7.8	Malaysia	5.2
Panama	10.0	Canada	5.7	Peru	1.9
Taiwan	6.7	Brazil	5.4	Nigeria	1.1
Venezuela	6.5	Romania	3.9	Brazil	0.5
El Salvador	6.3	Croatia	3.4	Honduras	0.2
Morocco	3.8	Ivory Coast	3.3	Cuba	0.1
Brazil	1.5	USA	3.0	Ecuador	0.1
Solomon Is.	1.0	Nigeria	2.9	China	0.1
South Africa	0.3	Thailand	2.1	Panama	0.1
Mexico	0.2	Cameroon	2.1	Dominican R.	0.0
Maldives	0.1	Hungary	2.1	USA	0.0
South Korea	0.1	Myanmar	1.9	Switzerland	0.0

Light bituminous oils and preparations (HS6: 271011)		Virola, mahogany, imbuia and balsa (HS6: 440724)		Aluminium ores and concentrates (HS6: 260600)	
PARTNERNAME	Mkt.Share	PARTNERNAME	Mkt.Share	PARTNERNAME	Mkt.Share
Russia	19.3	Cameroon	26.0	Guinea	60.4
Algeria	18.0	Ivory Coast	18.7	Australia	17.5
Libya	15.7	USA	17.9	China	9.2
Norway	15.5	Ghana	9.6	Brazil	8.7
Egypt	8.6	Brazil	8.9	Ghana	1.4
Turkey	3.0	Liberia	6.1	USA	0.8
Slovakia	1.8	Gabon	3.8	Chile	0.8
Poland	1.7	Ecuador	2.6	Canada	0.6
Hungary	1.6	Papua N.G.	1.0	Guyana	0.4
Estonia	1.3	Nicaragua	1.0	South Africa	0.1
Trinidad,Tob	1.3	Congo	0.7	Poland	0.0
Romania	1.1	Peru	0.7	India	0.0
Saudi Arabia	1.1	Malaysia	0.5	Uruguay	0.0
USA	1.0	Canada	0.3	Switzerland	0.0
U.A.Emirates	0.9	Slovakia	0.3	Hungary	0.0

Yellowfin tunas (HS6: 030342)		Other prepared or preserved fish (HS6: 160420)		Other manioc or similar roots (HS6: 071490)	
PARTNERNAME	Mkt.Share	PARTNERNAME	Mkt.Share	PARTNERNAME	Mkt.Share
Venezuela	19.0	South Korea	21.8	Ghana	24.2
South Korea	10.8	Thailand	20.4	China	17.3
Taiwan	9.2	Morocco	11.0	Costa Rica	12.4
Panama	9.2	Lithuania	7.2	Brazil	12.2
Mexico	8.2	Malaysia	5.5	Jamaica	10.6
Ni Antilles	8.2	China	3.6	India	4.2
Seychelles	7.6	Norway	3.6	Cyprus	4.0
Ecuador	4.3	Ghana	3.3	Surinam	1.9
Guatemala	4.2	Ecuador	2.4	St Vincent	1.8
Ghana	3.5	Poland	2.1	Dominica	1.5
Colombia	3.3	Seychelles	1.9	Venezuela	1.1
El Salvador	2.5	Ivory Coast	1.8	Niger	1.0
Morocco	2.2	USA	1.7	Thailand	0.9
Costa Rica	1.9	Philippines	1.5	Vietnam	0.8
Iran	1.1	Peru	1.3	Nigeria	0.8

Plywood with ply of tropical wood (HS6: 441213)		Other molluscs (HS6: 030759)		Cocoa shells, cocoa waste (HS6: 180200)	
PARTNERNAME	Mkt.Share	PARTNERNAME	Mkt.Share	PARTNERNAME	Mkt.Share
Indonesia	54.7	Morocco	46.1	Ivory Coast	45.1
Brazil	8.1	Senegal	14.1	Ghana	35.2
China	7.9	Mauritania	10.4	USA	12.5
Secr.Extra	6.7	Mexico	8.1	Indonesia	1.6
Malaysia	6.2	China	3.1	Dominican R.	1.5
Gabon	4.4	Tunisia	2.9	Peru	1.2
Morocco	3.2	Philippines	2.3	Papua N.G.	0.6
Ivory Coast	2.4	Thailand	2.3	Ecuador	0.6
Ghana	1.8	Vietnam	1.6	Malaysia	0.3
Cameroon	1.2	India	1.2	Equat. Guinea	0.3
Guyana	0.6	Ghana	1.1	Czech Rep.	0.3
USA	0.4	Tanzania	0.9	Switzerland	0.2
Poland	0.4	Peru	0.8	Bolivia	0.2
Russia	0.4	Chile	0.7	Grenada	0.1
Singapore	0.4	Indonesia	0.5	Singapore	0.1

Other vegetable fat and oils (HS6: 151590)		Bananas, including Plantains, fresh or dried (HS6: 080300)		Natural rubber (TSNR) (HS6: 400122)	
PARTNERNAME	Mkt.Share	PARTNERNAME	Mkt.Share	PARTNERNAME	Mkt.Share
USA	30.5	Ecuador	25.2	Malaysia	31.7
Turkey	7.7	Costa Rica	22.8	Ivory Coast	17.8
China	6.5	Colombia	18.0	Indonesia	15.0
Ghana	6.0	Panama	9.1	Thailand	11.1
Switzerland	6.0	Cameroon	7.0	Vietnam	8.8
Israel	5.8	Ivory Coast	5.9	Cameroon	5.0
South Africa	5.0	Dominican R.	3.1	Liberia	3.5
India	5.0	St Lucia	1.8	Singapore	2.3
Togo	3.9	Jamaica	1.5	Nigeria	1.9
Canada	3.9	St Vincent	1.2	Ghana	1.0
Argentina	3.5	Belize	1.1	Sri Lanka	0.7
Malaysia	2.8	Brazil	0.9	Papua N.G.	0.5

Japan	1.6	Honduras	0.8	Cambodia	0.3
Peru	1.4	Dominica	0.6	Gabon	0.2
Chile	1.4	Venezuela	0.4	Philippines	0.2

Natural rubber (smoked sheets) (HS6: 400121)		Plywood with ply of non-coniferous wood (HS6: 441214)	
PARTNERNAME	Mkt.Share	PARTNERNAME	Mkt.Share
Thailand	71.5	Russia	24.8
Malaysia	7.9	Brazil	18.5
Ivory Coast	5.4	Indonesia	17.8
Cameroon	3.8	Latvia	10.6
Indonesia	3.8	Poland	4.2
Liberia	2.1	Malaysia	4.0
Ghana	1.5	Estonia	2.9
Singapore	1.3	Belarus	2.8
Vietnam	1.3	Ukraine	2.8
Sri Lanka	0.4	Czech Rep.	1.5
USA	0.3	Lithuania	1.2
N.det.Extra	0.1	Romania	1.1
India	0.1	China	1.0
Cambodia	0.1	Hungary	0.9
Antigua, Barb	0.1	Switzerland	0.7

Source: Eurostat

Overall list of all competitors¹³ for Ghana
and their respective 'Synthetic Index of Competition'

country	Synthetic Index	country	Synthetic Index	country	Synthetic Index
Ivory Coast	100.0	Colombia	7.0	Equat.Guinea	1.2
Brazil	44.7	Mauritius	6.7	Guyana	1.0
Peru	44.1	Bosnia Herz.	6.4	Benin	0.9
Cameroon	37.3	Senegal	6.1	Sri Lanka	0.9
Seychelles	36.5	Hungary	5.7	Liberia	0.7
Indonesia	30.3	Slovakia	5.6	Zambia	0.7
Dominican R.	29.5	Angola	5.5	Trinidad,Tob	0.6
Togo	25.5	South Korea	5.4	Zimbabwe	0.6
Ecuador	25.0	Latvia	4.6	El Salvador	0.5
Uzbekistan	25.0	Algeria	4.0	Uruguay	0.5
S.Tome,Princ	24.7	Turkey	3.9	Jamaica	0.4
Thailand	22.6	Centr.Africa	3.8	Bangladesh	0.4
Mozambique	21.6	Croatia	3.7	St Lucia	0.4
Venezuela	20.5	Kenya	3.5	Bahamas	0.3
Chile	19.2	Lithuania	3.4	St Vincent	0.3
Hong Kong	18.2	Uganda	3.4	Belarus	0.3
Poland	17.1	Congo	3.3	Belize	0.2
Malaysia	16.9	Czech Rep.	3.3	Georgia	0.2
China	15.0	Myanmar	3.2	Dominica	0.2
India	13.4	Guatemala	3.2	Iran	0.2
Bulgaria	13.2	Singapore	2.9	Cambodia	0.2
Papua N.G.	13.0	Botswana	2.8	Burkina Faso	0.2
Costa Rica	12.9	Vietnam	2.8	Solomon Is.	0.1
Tanzania	12.6	Maldives	2.6	Nicaragua	0.1
Gabon	12.2	Honduras	2.5	Cuba	0.1
R.D. Congo	10.3	Panama	2.3	Ethiopia	0.1
Morocco	10.3	Libya	2.3	Argentina	0.1
Slovenia	8.6	Estonia	2.2	Antigua,Barb	0.0
Philippines	8.3	Mauritania	2.2	Cyprus	0.0
Madagascar	8.0	Mexico	2.2	Surinam	0.0
Nigeria	7.6	Falkland Is.	2.0	Bolivia	0.0
Egypt	7.5	Taiwan	1.6	Grenada	0.0
Israel	7.3	NI Antilles	1.5	Niger	0.0
Guinea	7.2	Tunisia	1.3		
Serb.Monten.	7.1	Ukraine	1.3		

Source: computation by TAC from Eurostat data

¹³ Except industrialized countries and competitors for gold and diamond exports

Appendix 5: Ghana's export to the EU, by country of destination (1993-2002, th Euros)

	France	Bel-Lux	NL	Germany	Italy	UK	Ireland	Denmark	Greece	Portugal	Spain	Belg.	Lux.	Sweden	Finland	Austria	EU
1993	44 206	31 813	36 586	142 681	26 608	129 601	15 290	2 929	1 979	2 633	18 011	..	..	0	0	0	452 337
1994	69 091	48 061	64 901	165 292	64 212	231 657	14 774	2 690	909	6 192	29 238	..	..	0	0	0	697 017
1995	85 546	56 332	59 988	115 887	41 848	308 054	13 828	2 989	979	5 053	35 727	..	..	906	1 085	14 989	743 211
1996	110 784	46 999	73 274	117 766	121 307	302 189	33 881	4 218	2 545	3 475	30 516	..	..	667	573	8 672	856 865
1997	102 191	52 128	162 752	149 707	50 829	271 406	45 353	6 539	3 443	6 000	64 921	..	..	655	1 419	6 883	924 226
1998	73 068	62 551	207 053	116 377	208 989	405 431	46 603	7 486	5 219	13 892	33 487	..	..	860	1 822	9 897	1 192 734
1999	79 067	..	199 383	74 367	174 882	446 170	25 864	6 250	3 992	7 060	41 280	71 211	4 398	589	1 227	14 987	1 150 724
2000	74 358	..	301 475	86 191	84 286	417 560	29 194	5 701	4 521	5 099	40 851	61 845	2 929	1 131	2 335	17 102	1 134 579
2001	86 193	..	262 804	88 271	75 889	382 813	27 345	3 992	5 061	3 537	47 251	51 505	2 327	886	1 243	8 544	1 047 660
2002	111 970	..	289 027	80 192	80 226	330 045	29 284	3 751	5 445	6 871	70 487	86 175	2 021	8 818	2 385	1 058	1 107 754

Source: Eurostat

% of EU total

	France	Bel-Lux	NL	Germany	Italy	UK	Ireland	Denmark	Greece	Portugal	Spain	Belg.	Lux.	Sweden	Finland	Austria
1993	9.8%	7.0%	8.1%	31.5%	5.9%	28.7%	3.4%	0.6%	0.4%	0.6%	4.0%	..	..	0.0%	0.0%	0.0%
1994	9.9%	6.9%	9.3%	23.7%	9.2%	33.2%	2.1%	0.4%	0.1%	0.9%	4.2%	..	..	0.0%	0.0%	0.0%
1995	11.5%	7.6%	8.1%	15.6%	5.6%	41.4%	1.9%	0.4%	0.1%	0.7%	4.8%	..	..	0.1%	0.1%	2.0%
1996	12.9%	5.5%	8.6%	13.7%	14.2%	35.3%	4.0%	0.5%	0.3%	0.4%	3.6%	..	..	0.1%	0.1%	1.0%
1997	11.1%	5.6%	17.6%	16.2%	5.5%	29.4%	4.9%	0.7%	0.4%	0.6%	7.0%	..	..	0.1%	0.2%	0.7%
1998	6.1%	5.2%	17.4%	9.8%	17.5%	34.0%	3.9%	0.6%	0.4%	1.2%	2.8%	..	..	0.1%	0.2%	0.8%
1999	6.9%	..	17.3%	6.5%	15.2%	38.8%	2.2%	0.5%	0.3%	0.6%	3.6%	6.2%	0.4%	0.1%	0.1%	1.3%
2000	6.6%	..	26.6%	7.6%	7.4%	36.8%	2.6%	0.5%	0.4%	0.4%	3.6%	5.5%	0.3%	0.1%	0.2%	1.5%
2001	8.2%	..	25.1%	8.4%	7.2%	36.5%	2.6%	0.4%	0.5%	0.3%	4.5%	4.9%	0.2%	0.1%	0.1%	0.8%
2002	10.1%	..	26.1%	7.2%	7.2%	29.8%	2.6%	0.3%	0.5%	0.6%	6.4%	7.8%	0.2%	0.8%	0.2%	0.1%

Source: Eurostat, computation by TAC

Appendix 6: Ghana's export to the EU, by products and country of destination

HS6	HS6desc	France	EU	Product Share in EU Imports from Ghana	Product Share in 'Country X' Imports from Ghana
1801 00	Cocoa beans	54 793.2	356 796.3	32.0%	48.9%
4407 29	Wood sawn, other	14 997.5	55 291.6	5.0%	13.4%
1604 14	Tunas, skipjack and bonito	14 560.7	63 366.3	5.7%	13.0%
0804 30	Pineapples	7 590.8	41 717.3	3.7%	6.8%
1804 00	Cocoa butter, fat and oil	6 065.4	28 493.5	2.6%	5.4%
4408 39	Other wood sheets for veneering	4 226.9	28 495.8	2.6%	3.8%
1803 10	Cocoa paste not defatted	2 667.8	9 749.2	0.9%	2.4%
2602 00	Manganese ores and concentrates	1 898.0	10 668.0	1.0%	1.7%
4001 22	Technically specified natural rubber (TSNR)	1 368.5	2 746.9	0.2%	1.2%
5201 00	Cotton, not carded or combed	977.9	2 221.6	0.2%	0.9%

HS6	HS6desc	Netherlands	EU	Product Share in EU Imports from Ghana	Product Share in 'Country X' Imports from Ghana
7601 10	Aluminium, not alloyed	133 353.6	148 927.6	13.3%	46.1%
1801 00	Cocoa beans	111 362.1	356 796.3	32.0%	38.5%
2710 11	Light bituminous oils and preparations	6 202.1	6 202.1	0.6%	2.1%
1804 00	Cocoa butter, fat and oil	5 739.0	28 493.5	2.6%	2.0%
7601 20	Aluminium alloys	4 774.0	10 439.4	0.9%	1.7%
1803 10	Cocoa paste not defatted	4 587.6	9 749.2	0.9%	1.6%
1515 90	Other vegetable fat and oils	3 305.7	3 327.3	0.3%	1.1%
1802 00	Cocoa shells / cocoa waste	2 924.6	3 772.1	0.3%	1.0%
4407 29	Wood sawn, other	2 653.8	55 291.6	5.0%	0.9%
1604 14	Tunas, skipjack and bonito	1 610.2	63 366.3	5.7%	0.6%

HS6	HS6desc	Germany	EU	Product Share in EU Imports from Ghana	Product Share in 'Country X' Imports from Ghana
1801 00	Cocoa beans	27 593.6	356 796.3	32.0%	34.4%
4407 29	Wood sawn, other	16 014.9	55 291.6	5.0%	20.0%
7601 10	Aluminium, not alloyed	15 142.4	148 927.6	13.3%	18.9%
4408 39	Other wood sheets for veneering	4 459.4	28 495.8	2.6%	5.6%
1804 00	Cocoa butter, fat and oil	2 575.0	28 493.5	2.6%	3.2%
4001 21	Smoked sheets natural rubber	1 635.8	2 509.0	0.2%	2.0%
7404 00	Copper waste and scrap	1 494.5	1 615.1	0.1%	1.9%
1604 14	Tunas, skipjack and bonito	1 429.2	63 366.3	5.7%	1.8%
4408 90	Other wood sheets for veneering	1 238.0	10 325.7	0.9%	1.5%
4412 13	Plywood with at least one outer ply of tropical wood	893.0	5 241.0	0.5%	1.1%

HS6	HS6desc	Italy	EU	Product Share in EU Imports from Ghana	Product Share in 'Country X' Imports from Ghana
1801 00	Cocoa beans	25 359.7	356 796.3	32.0%	31.6%
4408 39	Other wood sheets for veneering	11 932.5	28 495.8	2.6%	14.9%
0804 30	Pineapples	8 965.7	41 717.3	3.7%	11.2%
4407 29	Wood sawn, other	7 594.3	55 291.6	5.0%	9.5%
4409 20	Non-coniferous wood	3 972.5	6 475.1	0.6%	5.0%
4407 99	Wood sawn, other	3 938.3	7 661.1	0.7%	4.9%
4408 90	Other wood sheets for veneering	3 188.8	10 325.7	0.9%	4.0%
1804 00	Cocoa butter, fat and oil	2 606.1	28 493.5	2.6%	3.2%
4418 90	Builders' joinery and carpentry of wood, including cellular wood panels, assembled parquet panels, shingles and shakes	1 290.9	1 408.5	0.1%	1.6%
1604 14	Tunas, skipjack and bonito	1 245.3	63 366.3	5.7%	1.6%
HS6	HS6desc	UK	EU	Product Share in EU Imports from Ghana	Product Share in 'Country X' Imports from Ghana
7108 12	Gold, other unwrought forms	149 158.3	149 236.3	13.4%	45.2%
1801 00	Cocoa beans	74 492.0	356 796.3	32.0%	22.6%
1604 14	Tunas, skipjack and bonito	41 565.6	63 366.3	5.7%	12.6%
1804 00	Cocoa butter, fat and oil	9 654.5	28 493.5	2.6%	2.9%
0709 90	Other vegetables, fresh or chilled	7 977.1	8 588.9	0.8%	2.4%
9403 60	Other wooden furniture	7 232.8	7 574.0	0.7%	2.2%
1604 20	Other prepared or preserved fish	5 584.2	5 584.2	0.5%	1.7%
4407 24	Virola, mahogany, imbuia and balsa	4 794.4	6 010.2	0.5%	1.5%
4407 29	Wood sawn, other	4 165.1	55 291.6	5.0%	1.3%
0714 90	Other manioc or similar roots	3 591.1	5 417.5	0.5%	1.1%
HS6	HS6desc	Ireland	EU	Product Share in EU Imports from Ghana	Product Share in 'Country X' Imports from Ghana
1801 00	Cocoa beans	16 350.5	356 796.3	32.0%	55.8%
2602 00	Manganese ores and concentrates	3 915.6	10 668.0	1.0%	13.4%
4407 29	Wood sawn, other	3 455.2	55 291.6	5.0%	11.8%
2606 00	Aluminium ores and concentrates	3 137.5	5 948.9	0.5%	10.7%
4403 99	Wood in the rough, whether or not stripped of bark or sapwood, or roughly squared	1 266.9	1 329.1	0.1%	4.3%
4407 99	Wood sawn, other	355.4	7 661.1	0.7%	1.2%
1803 10	Cocoa paste not defatted	220.5	9 749.2	0.9%	0.8%
7601 10	Aluminium, not alloyed	145.3	148 927.6	13.3%	0.5%

	Wood sawn or chipped lengthwise, sliced or peeled, whether or not planed, sanded or end-jointed, of a thickness exceeding 6 mm	129.9	274.0	0.0%	0.4%
9403 60	Other wooden furniture	113.0	7 574.0	0.7%	0.4%

HS6	HS6desc	Denmark	EU	Product Share in EU Imports from Ghana	Product Share in 'Country X' Imports from Ghana
1207 99	Other oil seeds & oleaginous fruits	1 598.8	9 562.1	0.9%	42.6%
4407 29	Wood sawn, other	819.8	55 291.6	5.0%	21.9%
1801 00	Cocoa beans	539.0	356 796.3	32.0%	14.4%
4412 13	Plywood with at least one outer ply of tropical wood	159.7	5 241.0	0.5%	4.3%
1604 14	Tunas, skipjack and bonito	94.7	63 366.3	5.7%	2.5%
4407 24	Virola, mahogany, imbuia and balsa	92.7	6 010.2	0.5%	2.5%
4408 90	Other wood sheets for veneering	92.1	10 325.7	0.9%	2.5%
9015 80	Surveying (including photogrammetrical surveying), hydrographic, oceanographic, hydrological, meteorological or geophysical instruments and appliances, excluding compasses; rangefinders	73.4	278.9	0.0%	2.0%
4417 00	Tools, tool bodies, tool handles, broom or brush bodies and handles, of wood; boot or shoe lasts and trees, of wood	69.7	392.3	0.0%	1.9%
4407 99	Wood sawn, other	42.0	7 661.1	0.7%	1.1%

HS6	HS6desc	Greece	EU	Product Share in EU Imports from Ghana	Product Share in 'Country X' Imports from Ghana
0307 59	Other molluscs	1 006.0	4 340.4	0.4%	18.5%
1604 14	Tunas, skipjack and bonito	872.2	63 366.3	5.7%	16.0%
1801 00	Cocoa beans	729.2	356 796.3	32.0%	13.4%
0303 79	Fish, frozen, excluding fish fillets and other fish meat of heading 0304	676.9	1 691.8	0.2%	12.4%
4408 90	Other wood sheets for veneering	432.4	10 325.7	0.9%	7.9%
0307 49	Other molluscs	279.1	8 345.8	0.7%	5.1%
4408 10	Sheets for veneering (including those obtained by slicing laminated wood), for plywood or for other similar laminated wood and other wood, sawn lengthwise, sliced or peeled, whether or not planed, sanded, spliced or	264.7	1 028.0	0.1%	4.9%

	end-jointed, of a thickness not exceeding 6 mm				
4407 99	Wood sawn, other	211.9	7 661.1	0.7%	3.9%
4412 13	Plywood with at least one outer ply of tropical wood	207.1	5 241.0	0.5%	3.8%
4412 19	Plywood, veneered panels and similar laminated wood	144.0	594.3	0.1%	2.6%

HS6	HS6desc	Portugal	EU	Product Share in EU Imports from Ghana	Product Share in 'Country X' Imports from Ghana
0303 43	Skipjack or stripe-bellied bonito	3 120.0	6 660.9	0.6%	45.4%
0303 42	Yellowfin tunas	1 464.4	5 599.3	0.5%	21.3%
1604 14	Tunas, skipjack and bonito	1 024.0	63 366.3	5.7%	14.9%
4408 39	Other wood sheets for veneering	512.2	28 495.8	2.6%	7.5%
1803 10	Cocoa paste not defatted	215.3	9 749.2	0.9%	3.1%
4408 90	Other wood sheets for veneering	160.2	10 325.7	0.9%	2.3%
0304 90	Fish fillets and other fish meat (whether or not minced), fresh, chilled or frozen	155.0	173.9	0.0%	2.3%
1801 00	Cocoa beans	140.5	356 796.3	32.0%	2.0%
4412 14	Plywood with at least one outer ply of non-coniferous wood	19.9	2 354.7	0.2%	0.3%
4420 10	Wood marquetry and inlaid wood; caskets and cases for jewellery or cutlery, and similar articles, of wood; statuettes and other ornaments, of wood; wooden articles of furniture not falling in Chapter 94	12.2	500.4	0.0%	0.2%

HS6	HS6desc	Spain	EU	Product Share in EU Imports from Ghana	Product Share in 'Country X' Imports from Ghana
1801 00	Cocoa beans	20 005.0	356 796.3	32.0%	28.4%
0307 49	Other molluscs	7 404.8	8 345.8	0.7%	10.5%
7601 20	Aluminium alloys	5 665.4	10 439.4	0.9%	8.0%
1803 20	Cocoa paste wholly or partly defatted	5 282.4	6 431.1	0.6%	7.5%
0303 42	Yellowfin tunas	4 132.7	5 599.3	0.5%	5.9%
4408 39	Other wood sheets for veneering	3 764.9	28 495.8	2.6%	5.3%
0303 43	Skipjack or stripe-bellied bonito	3 540.9	6 660.9	0.6%	5.0%
4408 90	Other wood sheets for veneering	3 405.5	10 325.7	0.9%	4.8%
2602 00	Manganese ores and concentrates	3 349.0	10 668.0	1.0%	4.8%
0307 59	Other molluscs	3 078.8	4 340.4	0.4%	4.4%

HS6	HS6desc	Belgium	EU	Product Share in EU Imports from Ghana	Product Share in 'Country X' Imports from Ghana
1801 00	Cocoa beans	24 941.0	356 796.3	32.0%	28.9%
7102 31	Unworked diamonds	22 709.0	22 709.0	2.0%	26.4%
0804 30	Pineapples	19 579.2	41 717.3	3.7%	22.7%
4407 29	Wood sawn, other	4 312.8	55 291.6	5.0%	5.0%
4412 13	Plywood with at least one outer ply of tropical wood	2 490.8	5 241.0	0.5%	2.9%
4412 14	Plywood with at least one outer ply of non-coniferous wood	2 145.9	2 354.7	0.2%	2.5%
4408 39	Other wood sheets for veneering	2 103.3	28 495.8	2.6%	2.4%
4408 90	Other wood sheets for veneering	1 792.0	10 325.7	0.9%	2.1%
1804 00	Cocoa butter, fat and oil	1 135.4	28 493.5	2.6%	1.3%
1604 14	Tunas, skipjack and bonito	823.2	63 366.3	5.7%	1.0%

HS6	HS6desc	Luxembourg	EU	Product Share in EU Imports from Ghana	Product Share in 'Country X' Imports from Ghana
0804 30	Pineapples	1 555.1	41 717.3	3.7%	77.0%
0807 20	Melons (including watermelons) and papaws (papayas), fresh	429.2	1 836.0	0.2%	21.2%
0804 50	Dates, figs, pineapples, avocados, guavas, mangoes and mangosteens, fresh or dried	17.0	79.6	0.0%	0.8%
5305 19	Coconut, abaca (Manila hemp or Musa textilis Nee), ramie and other vegetable textile fibres, not elsewhere specified or included, raw or processed but not spun; tow, noils and waste of these fibres (including yarn waste and garneted stock)	10.5	216.0	0.0%	0.5%
0306 22	Crustaceans, whether in shell or not, live, fresh, chilled, frozen, dried, salted or in brine; crustaceans, in shell, cooked by steaming or by boiling in water, whether or not chilled, frozen, dried, salted or in brine; flours, meals and pellets of crustaceans, fit for human consumption	2.0	16.2	0.0%	0.1%
0709 90	Other vegetables, fresh or chilled	1.2	8 588.9	0.8%	0.1%
0810 90	Other fruit, fresh	1.0	15.8	0.0%	0.0%
0710 80	Vegetables (uncooked or cooked by steaming or boiling)	0.9	42.5	0.0%	0.0%

	in water), frozen				
0709 70	Other vegetables, fresh or chilled	0.9	2.8	0.0%	0.0%
4420 10	Wood marquetry and inlaid wood; caskets and cases for jewellery or cutlery, and similar articles, of wood; statuettes and other ornaments, of wood; wooden articles of furniture not falling in Chapter 94	0.7	500.4	0.0%	0.0%

HS6	HS6desc	Sweden	EU	Product Share in EU Imports from Ghana	Product Share in 'Country X' Imports from Ghana
1207 99	Other oil seeds & oleaginous fruits	7 409.5	9 562.1	0.9%	84.0%
4407 29	Wood sawn, other	472.0	55 291.6	5.0%	5.4%
2401 10	Unmanufactured tobacco; tobacco refuse	307.4	406.8	0.0%	3.5%
8431 49	Parts suitable for use solely or principally with the machinery of headings 8425 to 8430	128.4	543.9	0.0%	1.5%
8431 43	Parts suitable for use solely or principally with the machinery of headings 8425 to 8430	115.5	119.2	0.0%	1.3%
8207 13	Interchangeable tools for hand tools, whether or not power-operated, or for machine-tools (for example, for pressing, stamping, punching, tapping, threading, drilling, boring, broaching, milling, turning or screw driving), including dies for drawing or extruding metal, and rock drilling or earth boring tools	102.3	102.3	0.0%	1.2%
1805 00	Cocoa powder, not containing added sugar or other sweetening matter	80.2	401.5	0.0%	0.9%
0303 79	Fish, frozen, excluding fish fillets and other fish meat of heading 0304	46.9	1 691.8	0.2%	0.5%
4408 39	Other wood sheets for veneering	41.1	28 495.8	2.6%	0.5%
4407 99	Wood sawn, other	32.0	7 661.1	0.7%	0.4%

HS6	HS6desc	Finland	EU	Product Share in EU Imports from Ghana	Product Share in 'Country X' Imports from Ghana
2602 00	Manganese ores and concentrates	1 505.4	10 668.0	1.0%	63.1%
8431 49	Parts suitable for use solely or principally with the machinery of headings 8425 to 8430	382.5	543.9	0.0%	16.0%
4408 39	Other wood sheets for	294.1	28 495.8	2.6%	12.3%

	veneering				
4407 29	Wood sawn, other	58.2	55 291.6	5.0%	2.4%
8412 29	Other engines and motors	38.7	38.7	0.0%	1.6%
	Transmission shafts (including cam shafts and crank shafts) and cranks; bearing housings and plain shaft bearings; gears and gearing; ball or roller screws; gear boxes and other speed changers, including torque converters; flywheels and pulleys, including pulley blocks; clutches and shaft couplings				
8483 40	(including universal joints)	24.3	31.5	0.0%	1.0%
4409 20	Non-coniferous wood	15.8	6 475.1	0.6%	0.7%
4407 99	Wood sawn, other	15.3	7 661.1	0.7%	0.6%
	Transmission shafts (including cam shafts and crank shafts) and cranks; bearing housings and plain shaft bearings; gears and gearing; ball or roller screws; gear boxes and other speed changers, including torque converters; flywheels and pulleys, including pulley blocks; clutches and shaft couplings				
8483 10	(including universal joints)	14.0	18.3	0.0%	0.6%
0804 30	Pineapples	9.5	41 717.3	3.7%	0.4%

HS6	HS6desc	Austria	EU	Product Share in EU Imports from Ghana	Product Share in 'Country X' Imports from Ghana
1801 00	Cocoa beans	490.4	356 796.3	32.0%	46.4%
1804 00	Cocoa butter, fat and oil	167.1	28 493.5	2.6%	15.8%
7601 10	Aluminium, not alloyed	151.7	148 927.6	13.3%	14.3%
	Percussion musical instruments (for example, drums, xylophones, cymbals, castanets, maracas)				
9206 00	Basketwork, wickerwork and other articles, made directly to shape from plaiting materials or made-up from goods of heading No 4601; articles of	47.2	550.1	0.0%	4.5%
4602 10	loofah	37.4	892.3	0.1%	3.5%
0709 60	Other vegetables, fresh or chilled	28.6	1 150.2	0.1%	2.7%
4407 99	Wood sawn, other	20.9	7 661.1	0.7%	2.0%
4408 90	Other wood sheets for veneering	16.7	10 325.7	0.9%	1.6%
	Machine-tools (including way-type unit head machines) for drilling, boring, milling, threading or tapping by				
8459 69	removing metal, other than	14.8	14.8	0.0%	1.4%

	lathes (including turning centres) of heading No 8458				
	Wood marquetry and inlaid wood; caskets and cases for jewellery or cutlery, and similar articles, of wood; statuettes and other ornaments, of wood; wooden articles of furniture not falling in Chapter 94	13.8	500.4	0.0%	1.3%
4420 10					

Source :Eurostat

Appendix 7: List of supplier institutions and companies members of Eurep-Gap

(as of March 2004)

RSA

Citrus Growers Association
Deciduous Fruit Producer's Trust

Morocco

Delassus S.A
Les Domaines
Société de gestion des exportations des produits agricoles

Egypt

Horticulture Export Import Association
Maco-Pico
Magrabi Agriculture

Brazil

Renar Macas

Chile

Chilean Exporters Association
Copefrut
FDF Fundacion Para Desarrollo Fruticola

Colombia

Uniban

USA

Castlerock Farming and Transport
Chiquita Brands International
Driscoll Strawberry Associates
Del Monte Fresh Produce

Israel

Agrexco
Atzmona Potatoes
Israel Mehadrin Export Ltd.

Saudi Arabia

NADEC / Nat. Agricultural Dev. Comp.

Turkey

Alara Tarim
Bamex A.S. Europe

Australia

Tasmanian Quality Assured

New Zealand

Enza Ltd.

Pipfruit Growers New Zealand

ZESPRI Group Limited

Austria

Agros Markt Austria Marketing

Obsterzeuger Steiermark

Verband der Südtiroler Obstgenossenschaften Gen

Spain

Fepex

A. Munoz

Anecoop

Coato S.C.L.

Fruta Del Pacifico

Grupactel

Lomanoryas S.L.

Orchard Fruit S.L.

Italy

Apo Conerpo

Apofruit

Didonna Trade s.r.l

Messina Francesco S.r.l.

Coop. Terremerse

Belgium

Ardo

Veiling Brava

Centre Maraîcher de Hesbaye

Greenpartners

Lava cvba

Potato Masters

Reo Veiling

S.H.A.F.F.E

Veiling Borgloon C.V.

Veiling Haspengouw

Veiling Hoogstraten cv

Vlam

Mechelse Veilingen

UK

Assured Produce

Blue Skies

Capespan

Flamingo Holdings UK
Grapes Direct
Hoche International
KG Fruits Ltd
Mack-Multiples Division
Marshalls
Medi & Sons
Utopia

The Netherlands

Bakker Beheer
Citronas B.V.
Coöperatieve Tuinbouwveiling
Coöperative Fruitmasters Fp
DPA
Dutch Farmers Union LTO
MPS Milieu Programma Sierteelt
The Greenery International B.V.
T. van Noort
Vers Direct Nederlands
Zon Services

France

Amana Fruits et Légumes
Blue Whale
Bassin Rhone Mediterranee
Comité National Interprofessionel de la Pomme de Terre
Fontjuliane Distribution
Loire Export
Pomanjou International
Prince de Bretagne
Section National Pomme
Vergers De France

Germany

DFM Direct Fruit Marketing GmbH

Ireland

Fyffes

Cyprus

Groexport
Lanitis Farm Ltd.

Poland

Usługi Posrednictwa w Handlu

Appendix 8: Historical Data for Simulations on Exports

General variables					
	Real GDP growth rate of Ghana (%)	Real GDP growth rate in agriculture (%)	Inflation rate (%)	Exchange rate	Consumer prices (1995=100)
1993	..	..	..	649.1	50.2
1994	3.3	1.9	24.9	956.7	62.7
1995	4.0	3.7	59.5	1200.4	100.0
1996	4.6	5.2	46.6	1637.2	146.6
1997	4.2	4.3	27.9	2050.2	187.4
1998	4.7	5.1	14.6	2314.2	214.8
1999	4.4	3.9	12.4	2669.3	241.5
2000	3.7	2.1	25.2	5455.1	302.3
2001	4.0	3.7	32.9	7170.8	401.8
2002	4.5	4.1	14.8	7932.7	461.4

Cocoa						
		EU import values from all countries (EUR th)	EU import volumes from all countries (1995=base 100)	EU import prices from Ghana - growth (%)	Exports Volumes (EUR th)	Exports Values (EUR th)
P180100 Cocoa beans	1993	891 959	89	..	134 358	127 405
	1994	1 185 616	99	19.6	175 770	199 266
	1995	1 239 531	100	3.6	146 194	171 671
	1996	1 326 818	110	-2.5	231 978	265 492
	1997	1 232 551	91	12.7	176 559	227 778
	1998	1 539 293	95	18.7	193 151	295 682
	1999	1 551 240	111	-13.6	224 082	296 537
	2000	1 206 821	103	-16.0	209 773	233 109
	2001	1 393 600	101	17.7	185 012	242 078
	2002	1 847 133	98	36.5	199 787	356 796
P180200 Cocoa shells / Cocoa waste	1993	1 365	17	..	1 332	321
	1994	3 714	63	-25.0	6 414	1 159
	1995	3 320	100	-43.8	20 980	2 133
	1996	3 963	73	63.5	11 856	1 970
	1997	4 304	86	-8.0	5 478	837
	1998	4 810	73	31.9	6 231	1 256
	1999	3 612	57	-4.2	2 900	560
	2000	3 347	63	-15.5	3 750	612
	2001	8 048	75	102.2	14 269	4 708
	2002	10 716	95	4.3	10 963	3 772
P180310 Cocoa paste not defatted	1993	28 881	81	..	847	1 176
	1994	29 060	69	18.7	1 017	1 677
	1995	36 763	100	-13.0	1 994	2 859
	1996	51 055	133	4.4	1 368	2 048
	1997	72 146	182	3.1	1 113	1 719
	1998	109 554	240	15.4	413	736
	1999	124 561	361	-24.5	614	825
	2000	111 504	346	-6.5	2 663	3 348
	2001	150 947	393	19.2	2 596	3 891
	2002	214 343	430	29.6	5 020	9 749
P180320 Cocoa paste	1993	12 434	83	..	949	500
	1994	14 880	105	-5.0	2 359	1 181

wholly or partly defatted	1995	18 908	100	33.1	1 874	1 248
	1996	24 594	245	-46.9	3 756	1 328
	1997	31 153	720	-56.9	12 506	1 907
	1998	22 623	370	41.2	12 025	2 588
	1999	25 843	433	-2.3	7 251	1 525
	2000	31 817	542	-1.7	14 285	2 955
	2001	42 145	376	90.8	18 260	7 206
	2002	74 584	375	77.5	9 178	6 431
D180400 Cocoa butter, fat and oil	1993	172 006	84	..	7 800	17 334
	1994	234 217	104	10.1	14 921	36 492
	1995	250 913	100	11.6	19 104	52 151
	1996	243 328	96	1.2	18 222	50 320
	1997	245 693	89	9.1	19 767	59 566
	1998	248 547	84	6.3	18 343	58 746
	1999	240 353	93	-11.9	11 955	33 733
	2000	191 101	91	-19.3	14 605	33 267
	2001	195 154	91	1.9	12 665	29 396
	2002	312 718	143	2.7	11 948	28 494

Fish						
		EU import values from all countries (EUR th)	EU import volumes from all countries (1995=base 100)	EU import prices from Ghana - growth (%)	Exports Volumes (EUR th)	Exports Values (EUR th)
P030342 Yellowfin tunas	1993	74 641	71	..	284	244
	1994	100 883	94	3.1	510	451
	1995	103 095	100	-4.4	266	225
	1996	101 327	95	3.0	992	864
	1997	135 370	97	32.0	5 491	6 307
	1998	202 384	137	5.8	6 461	7 849
	1999	113 987	118	-34.9	4 753	3 757
	2000	83 369	93	-6.7	3 945	2 908
	2001	134 911	100	50.0	2 864	3 167
	2002	160 598	125	-5.0	5 328	5 599
P030343 Skipjack or stripe-bellied bonito	1993	11 081	42	..	629	477
	1994	26 717	88	14.2	516	446
	1995	25 904	100	-15.0	772	568
	1996	28 639	122	-9.3	1 715	1 145
	1997	42 754	142	28.1	3 544	3 030
	1998	72 832	192	25.8	7 129	7 667
	1999	41 564	174	-36.8	10 551	7 166
	2000	33 200	182	-23.9	10 168	5 258
	2001	56 581	179	73.7	7 962	7 150
	2002	50 358	165	-3.7	7 699	6 661
P030749 Other molluscs	1993	284 005	70	..	682	1 725
	1994	330 703	85	-5.0	970	2 330
	1995	375 102	100	-3.1	1 141	2 658
	1996	330 782	91	-3.3	1 274	2 870
	1997	439 513	89	36.5	3 000	9 226
	1998	510 297	126	-18.2	1 878	4 725
	1999	418 369	126	-18.2	2 264	4 659
	2000	536 196	144	12.2	3 279	7 572
	2001	568 416	137	11.3	2 740	7 044
	2002	577 387	128	8.6	2 989	8 346
P030759 Other	1993	99 562	105	..	69	122
	1994	121 833	97	32.2	68	160

molluscs	1995	142 639	100	13.7	72	193
	1996	135 672	89	7.3	53	152
	1997	198 535	94	38.2	216	855
	1998	184 197	95	-8.6	367	1 330
	1999	239 128	151	-18.0	360	1 071
	2000	174 589	153	-27.8	48	102
	2001	264 928	165	40.5	494	1 489
	2002	381 971	147	61.1	893	4 340
P160414 Tunas, Skipjack and bonito	1993	456 399	80	..	745	1 642
	1994	523 639	82	12.2	2 911	7 202
	1995	587 898	100	-7.9	9 901	22 567
	1996	639 563	95	14.4	12 568	32 778
	1997	784 775	100	16.2	22 079	66 901
	1998	970 247	122	1.9	22 463	69 325
	1999	782 563	118	-16.7	23 302	59 884
	2000	745 938	108	4.6	24 578	66 077
	2001	806 702	114	1.8	26 500	72 517
2002	1 009 774	143	0.1	23 124	63 366	
P160420 Other prepared or preserved fish	1993	118 036	..	..	..	..
	1994	115 681	35	..	0	1
	1995	138 730	100	-58.3	32	69
	1996	153 436	98	12.5	79	193
	1997	151 122	105	-7.8	270	608
	1998	152 326	112	-5.6	344	730
	1999	172 757	139	-8.6	1 558	3 021
	2000	179 504	154	-5.9	1 646	3 002
	2001	184 799	126	25.3	1 687	3 857
2002	169 271	120	-3.3	2 527	5 584	

Vegetables						
		EU import values from all countries (EUR th)	EU import volumes from all countries (1995=base 100)	EU import prices from Ghana - growth (%)	Exports Volumes (EUR th)	Exports Values (EUR th)
P070990 Other vegetables, fresh or chilled	1993	49 520	58	..	269	371
	1994	61 838	59	23.3	747	1 270
	1995	67 492	84	-24.1	1 455	1 878
	1996	73 182	100	-8.5	2 249	2 655
	1997	84 953	104	11.5	2 721	3 582
	1998	96 086	121	-3.0	3 606	4 602
	1999	116 891	137	8.2	4 398	6 075
	2000	139 922	148	10.3	5 520	8 411
	2001	177 173	191	-1.8	6 511	9 746
	2002	211 141	236	-3.6	5 950	8 589
P071490 Other manioc or similar roots	1993	10 104	97	..	2 900	1 736
	1994	9 543	92	0.3	4 064	2 442
	1995	11 148	116	-7.3	5 933	3 303
	1996	10 869	100	12.8	5 723	3 593
	1997	12 951	110	7.9	6 289	4 261
	1998	12 758	110	-0.7	5 749	3 869
	1999	17 356	153	-2.7	6 913	4 528
	2000	20 391	186	-3.3	7 850	4 972
	2001	20 840	175	8.8	8 045	5 546
	2002	22 391	194	-3.4	8 136	5 417
P120799	1993	19 932	49	..	575	135

Other oil seeds & oleaginous fruits	1994	17 024	41	0.3	1 357	320
	1995	30 972	80	-5.9	247	55
	1996	39 592	100	2.2	5 700	1 293
	1997	38 362	96	1.3	2 930	673
	1998	39 654	87	13.5	12 121	3 162
	1999	39 120	14	523.8	1	2
	2000	44 633	17	-7.8	1	2
	2001	50 608	49	-60.3	54	32
	2002	74 995	114	-36.7	25 361	9 562
P151590 Other vegetable fat and oil	1993	28 114	..	..	..	..
	1994	32 520	98	..	5	12
	1995	30 586	..	..	..	..
	1996	29 272	100	..	20	38
	1997	34 496	120	-1.7	43	82
	1998	45 152	296	-47.0	322	325
	1999	40 330	254	4.1	585	614
	2000	41 010	284	-9.1	666	636
	2001	46 295	350	-8.2	955	837
	2002	55 356	327	28.1	2 965	3 327

Fruits						
		EU import values from all countries (EUR th)	EU import volumes from all countries (1995=base 100)	EU import prices from Ghana - growth (%)	Exports Volumes (EUR th)	Exports Values (EUR th)
P080300 Bananas, including plaintains, fresh or dried	1993	1 698 958	36	..	218	290
	1994	1 826 678	64	-40.5	526	416
	1995	2 009 947	100	-29.2	1 646	922
	1996	2 044 387	100	1.7	3 015	1 717
	1997	1 753 013	64	33.5	3 452	2 625
	1998	1 709 235	64	-2.0	4 328	3 223
	1999	1 849 218	90	-23.0	2 668	1 529
	2000	1 899 244	77	20.3	3 112	2 146
	2001	1 936 637	62	26.0	3 543	3 079
	2002	1 986 423	69	-7.7	3 488	2 798
P080430 Pineapples	1993	112 068	73	..	10 971	6 090
	1994	117 598	79	-3.1	13 746	7 394
	1995	144 577	82	19.0	11 916	7 624
	1996	154 360	100	-12.9	22 191	12 374
	1997	186 054	100	20.2	23 912	16 031
	1998	174 027	78	20.3	18 968	15 301
	1999	181 371	106	-23.3	25 659	15 875
	2000	233 397	106	28.6	29 321	23 331
	2001	276 069	105	18.8	31 742	30 016
	2002	330 753	104	21.9	36 198	41 717

Wood						
		EU import values from all countries (EUR th)	EU import volumes from all countries (1995=base 100)	EU import prices from Ghana - growth (%)	Exports Volumes (EUR th)	Exports Values (EUR th)
P440724	1993	..	..	..	..	..

Virola, mahogany, imbuia and balsa	1994	..	..	..	..	..
	1995	..	..	..	..	..
	1996	49 813	100	..	7 133	4 530
	1997	52 615	137	-23.1	4 225	2 063
	1998	49 539	115	12.7	5 756	3 169
	1999	50 538	117	-0.3	4 204	2 306
	2000	43 788	124	-17.9	2 897	1 304
	2001	55 124	108	44.4	3 274	2 128
	2002	62 526	97	26.5	7 307	6 010
P440729 Wood sawn, other	1993	..	..	..	..	..
	1994	..	..	..	..	..
	1995	..	..	..	..	..
	1996	426 342	100	..	112 057	63 669
	1997	529 508	115	7.7	135 668	83 013
	1998	625 498	130	5.1	136 301	87 628
	1999	639 009	127	4.0	111 815	74 767
	2000	754 394	134	12.1	89 831	67 360
	2001	747 294	127	4.3	91 465	71 525
2002	669 991	113	1.4	69 710	55 292	
P440799 Wood sawn, other	1993	564 165	111	..	57 263	26 259
	1994	722 296	121	17.4	67 305	36 226
	1995	768 402	128	0.8	62 975	34 154
	1996	599 375	108	-7.2	25 953	13 060
	1997	747 491	141	-4.4	21 267	10 232
	1998	762 746	135	6.4	16 256	8 325
	1999	794 747	130	7.9	21 553	11 909
	2000	978 215	155	3.6	24 581	14 074
	2001	935 842	134	10.4	14 723	9 302
2002	824 943	114	3.7	11 694	7 661	
P440839 Other wood sheets for veneering	1993	..	..	..	..	..
	1994	..	..	..	..	..
	1995	..	..	..	..	..
	1996	100 009	100	..	13 933	16 059
	1997	130 942	116	12.8	13 088	17 016
	1998	150 086	124	7.5	14 669	20 509
	1999	131 246	113	-4.4	16 976	22 687
	2000	146 134	126	-0.1	18 996	25 370
	2001	168 094	130	11.4	18 581	27 636
2002	164 381	124	2.5	18 683	28 496	
P440890 Other wood sheets for veneering	1993	261 518	109	..	11 112	12 155
	1994	312 886	117	11.8	12 037	14 716
	1995	375 369	129	8.8	14 383	19 138
	1996	291 771	102	-2.0	7 565	9 868
	1997	340 232	120	-0.7	9 269	12 002
	1998	388 168	120	14.4	8 578	12 706
	1999	404 344	152	-17.9	10 034	12 197
	2000	475 357	165	8.3	10 309	13 577
	2001	437 575	131	16.0	9 094	13 899
2002	430 854	146	-11.8	7 658	10 326	
P440920 Non- coniferous wood	1993	207 681	91	..	1 920	2 519
	1994	233 346	97	5.3	2 437	3 367
	1995	254 533	100	5.5	2 821	4 114
	1996	253 762	100	0.2	1 600	2 339
	1997	308 667	142	-14.5	2 327	2 908
	1998	315 286	131	11.0	2 763	3 832
	1999	350 213	159	-9.0	3 568	4 503
	2000	461 749	208	1.3	2 934	3 750
2001	430 015	220	-12.1	3 979	4 471	

	2002	429 314	272	-19.3	7 137	6 475
P441213 Plywood with at least one outer ply of tropical wood	1993	..	..	..	..	..
	1994	..	..	..	..	..
	1995	..	..	..	..	..
	1996	315 791	100	..	2 814	2 076
	1997	371 362	113	4.1	4 452	3 419
	1998	307 395	96	-3.0	1 431	1 066
	1999	332 037	105	-0.5	2 899	2 149
	2000	371 223	91	28.1	5 586	5 304
	2001	340 686	84	-0.7	7 321	6 903
	2002	296 625	95	-23.0	7 221	5 241
	P441214 Plywood with at least one outer ply of non- coniferous wood	1993
1994		..	..	..	..	..
1995		..	..	..	..	..
1996		203 633	100	..	321	198
1997		287 836	106	33.4	1 873	1 544
1998		284 969	99	5.6	186	162
1999		297 563	126	-17.8	1 103	789
2000		353 953	152	-0.9	1 318	934
2001		404 178	172	0.7	1 936	1 382
2002		393 060	191	-12.5	3 770	2 355

Appendix 9: Historical Data for Simulations on Market Shares

2002	Veritas	SGS	FACILITY	Cost (% of income per capita)	Employment Laws Index	Procedural Complexity Index	Extensiveness of Public Credit Registries Index	Goals of Insolvency
Ghana	3	4	87	112	35	33	0	17
Cameroon	1	3	122	191	44	63	49	44
Costa Rica	1	1	43	21	63	86	44	43
Ecuador	4	5	63	63	55	72	55	24
Gabon	3	1	..	..	..	..	..	..
Ivory Coast	2	2	102	143	53	57	22	44
Kenya	2	4	56	54	34	44	0	47
Morocco	4	5	41	19	51	69	33	36
Nigeria	4	3	71	92	43	52	55	45
Senegal	1	2	91	124	54	75	22	73
Seychelles	1	1	..	..	..	..	..	..

Real GDP (1995=100):

	Ghana	Cameroon	Costa Rica	Ecuador	Gabon	Ivory Coast	Kenya	Morocco	Nigeria	Senegal	Seychelles
1993	93	99	92	94	92	92	93	97	97	92	102
1994	96	97	96	98	95	93	96	107	98	95	101
1995	100	100	100	100	100	100	100	100	100	100	100
1996	105	105	101	102	104	107	104	112	104	105	105
1997	109	110	107	105	110	114	107	109	107	110	110
1998	114	116	115	106	113	120	108	118	110	116	116
1999	119	121	125	98	101	122	110	118	113	122	114
2000	124	126	127	101	99	119	109	119	117	128	120
2001	128	132	129	106	101	120	111	126	122	135	117
2002	134	137	132	110	101	118	112	130	126	137	117

Market shares:

Cocoa						
		Cocoa beans (180100)	Cocoa shells / cocoa waste (180200)	Cocoa paste not defatted (180310)	Cocoa paste wholly or partly defatted (180320)	Cocoa butter, fat and oil (180400)
Ghana	1993	14.28	23.50	4.07	4.02	10.08
	1994	16.81	31.21	5.77	7.93	15.58
	1995	13.85	64.25	7.78	6.60	20.78
	1996	20.01	49.71	4.01	5.40	20.68
	1997	18.48	19.45	2.38	6.12	24.24
	1998	19.21	26.11	0.67	11.44	23.64
	1999	19.12	15.50	0.66	5.90	14.03
	2000	19.32	18.28	3.00	9.29	17.41
	2001	17.37	58.50	2.58	17.10	15.06
	2002	19.32	35.20	4.55	8.62	9.11
Cameroun	1993	9.66	1.64	26.44	1.13	1.72
	1994	7.12	0.66	14.55	8.01	2.02
	1995	9.66	1.08	12.41	22.39	3.74
	1996	9.72	3.89	22.07	15.88	4.17
	1997	8.23	3.98	14.91	18.85	2.70
	1998	9.45	1.03	16.93	13.74	4.78
	1999	7.21	2.64	22.38	2.15	2.60
	2000	5.48	2.47	19.45	0.11	4.13
	2001	8.87	0.23	24.05	1.08	0.53
	2002	6.48	0.09	16.46	.	0.41
Ivory Coast	1993	49.41	1.28	59.39	54.70	31.69
	1994	48.73	13.61	65.92	45.09	18.41
	1995	52.55	1.67	68.61	41.42	18.63
	1996	49.45	6.07	63.45	65.64	21.29
	1997	51.16	0.79	77.12	62.29	21.60
	1998	50.58	17.32	79.65	38.74	27.55
	1999	55.24	32.90	74.43	51.10	36.45
	2000	56.98	29.06	74.32	42.10	34.41
	2001	52.88	20.25	71.01	47.65	42.20
	2002	49.65	45.06	77.02	55.57	39.19
Nigeria	1993	10.01	3.12	0.78	1.25	6.42
	1994	9.68	1.28	.	2.75	4.99
	1995	9.14	0.31	1.44	2.92	5.25
	1996	9.21	1.18	3.25	3.75	8.02
	1997	9.03	.	2.41	2.53	12.18
	1998	11.88	.	0.86	7.22	8.87
	1999	10.86	0.77	0.50	4.17	9.94

	2000	8.40	1.36	0.20	7.03	8.39
	2001	12.87	.	0.28	4.50	5.50
	2002	14.38	.	0.28	1.08	5.43

Fish							
		Yellowfin tunas (030342)	Skipjack or stripe-bellied bonito (030343)	Other molluscs (030749)	Other molluscs (030759)	Tunas, skipjack & bonito (160414)	Other prepared or preserved fish (160420)
Ghana	1993	0.33	4.30	0.61	0.12	0.36	-
	1994	0.45	1.67	0.70	0.13	1.38	0.00
	1995	0.22	2.19	0.71	0.14	3.84	0.05
	1996	0.85	4.00	0.87	0.11	5.13	0.13
	1997	4.66	7.09	2.10	0.43	8.52	0.40
	1998	3.88	10.53	0.93	0.72	7.15	0.48
	1999	3.30	17.24	1.11	0.45	7.65	1.75
	2000	3.49	15.84	1.41	0.06	8.86	1.67
	2001	2.35	12.64	1.24	0.56	8.99	2.09
	2002	3.49	13.23	1.45	1.14	6.28	3.30
Ivory Coast	1993	1.56	0.65	0.14	0.12	20.22	3.24
	1994	0.84	9.92	0.24	0.30	18.86	4.03
	1995	-	.	0.34	0.19	31.59	2.95
	1996	0.01	0.02	0.12	0.04	29.80	2.74
	1997	0.55	.	0.09	0.06	21.91	0.43
	1998	0.17	.	0.35	0.13	20.79	0.14
	1999	1.01	.	0.27	0.15	15.39	0.23
	2000	0.13	.	0.19	0.08	15.30	0.46
	2001	1.00	.	0.22	0.15	12.76	1.31
	2002	0.08	.	0.12	0.19	15.18	1.76
Morocco	1993	0.89	2.23	15.01	30.55	0.08	3.24
	1994	4.43	11.89	11.64	48.00	0.03	1.80
	1995	3.08	9.47	12.78	37.28	0.14	2.07
	1996	4.19	6.25	15.73	30.04	0.03	1.47
	1997	2.66	4.16	13.82	24.68	0.06	2.32
	1998	2.27	3.88	14.14	34.11	0.10	5.93
	1999	1.86	4.62	13.21	35.23	0.06	10.83
	2000	2.80	4.81	19.27	53.90	0.18	10.31
	2001	2.18	4.22	15.21	55.73	0.26	11.08
	2002	2.21	3.83	14.71	46.10	0.31	10.96
Senegal	1993	0.01	0.01	3.13	6.28	9.37	1.17
	1994	-	0.02	3.39	12.17	8.80	0.54
	1995	-	0.21	3.49	10.74	6.29	2.02
	1996	0.14	-	3.84	7.39	5.81	0.95

	1997	0.00	0.32	4.01	5.92	5.32	0.57
	1998	-	0.40	3.65	9.91	4.95	0.39
	1999	-	0.12	3.27	27.94	3.22	0.18
	2000	0.03	0.06	2.47	13.69	2.11	0.09
	2001	0.46	0.08	2.88	4.70	3.36	0.10
	2002	0.06	0.03	2.87	14.05	2.21	0.14
Seychelles	1993	5.50	0.21	.	.	2.36	0.31
	1994	0.91	0.06	.	.	2.78	0.04
	1995	0.06	-	.	.	2.23	0.03
	1996	-	-	.	.	3.63	-
	1997	2.83	0.09	.	.	7.20	-
	1998	1.70	0.61	.	0.02	6.86	-
	1999	2.73	1.02	.	.	12.08	0.27
	2000	5.57	0.49	.	.	17.49	0.80
	2001	7.78	9.09	0.09	.	18.47	1.35
	2002	7.60	14.95	0.15	.	18.17	1.88

Vegetables						
		Other vegetables, fresh or chilled (070990)	Other manioc or similar roots (071490)	Other oil seeds & oleaginous fruits (120799)	Other vegetable fat & oils (151590)	
Ghana	1993	0.75	17.18	0.68	0.00	
	1994	2.05	25.59	1.88	0.04	
	1995	2.78	29.63	0.18	0.00	
	1996	3.63	33.06	3.27	0.13	
	1997	4.22	32.90	1.75	0.24	
	1998	4.79	30.32	7.97	0.72	
	1999	5.20	26.09	0.00	1.52	
	2000	6.01	24.38	0.00	1.55	
	2001	5.50	26.61	0.06	1.81	
	2002	4.07	24.19	12.75	6.01	
Costa Rica	1993	1.20	7.67	.	.	
	1994	0.77	7.20	.	.	
	1995	0.70	6.69	.	.	
	1996	0.73	7.60	.	.	
	1997	0.67	8.68	.	.	
	1998	0.65	11.40	.	.	
	1999	0.64	10.26	.	.	
	2000	0.55	12.13	.	.	
	2001	0.44	15.62	.	.	
	2002	0.43	12.39	.	.	
Ecuador	1993	.	.	.	.
	1994	.	.	.	.

	1995	0.00	.	.	.
	1996	.	.	.	.
	1997	0.00	0.03	0.04	.
	1998	0.00	.	0.09	.
	1999	0.00	.	0.40	0.03
	2000	0.01	0.02	0.04	0.06
	2001	0.04	0.02	.	.
	2002	0.00	0.13	.	0.02
Ivory Coast	1993	1.34	0.27	.	0.12
	1994	1.12	2.13	1.05	4.39
	1995	1.09	11.69	0.58	6.18
	1996	0.72	4.86	0.21	0.30
	1997	0.54	0.59	0.03	0.23
	1998	0.44	1.29	3.04	2.01
	1999	0.32	4.43	0.73	4.39
	2000	0.52	1.60	1.52	0.59
	2001	0.25	0.84	1.59	0.01
	2002	0.36	0.31	0.64	0.06
Kenya	1993	20.25	.	.	0.06
	1994	19.93	.	0.60	0.23
	1995	18.07	0.06	0.95	0.19
	1996	17.96	0.04	0.61	0.15
	1997	16.82	.	.	0.00
	1998	16.45	0.00	0.34	0.13
	1999	17.36	1.17	0.07	0.02
	2000	21.73	0.05	0.04	0.07
	2001	25.85	0.01	.	0.04
	2002	27.77	0.07	.	0.14

Fruits			
		Bananas, including plantains, fresh or dried (080300)	Pineapples (080430)
Ghana	1993	0.02	5.43
	1994	0.02	6.29
	1995	0.05	5.27
	1996	0.08	8.02
	1997	0.15	8.62
	1998	0.19	8.79
	1999	0.08	8.75
	2000	0.11	10.00
	2001	0.16	10.87
	2002	0.14	12.61

Costa Rica	1993	11.97	16.50
	1994	17.11	18.46
	1995	14.85	20.09
	1996	17.09	25.90
	1997	20.30	30.69
	1998	22.24	32.39
	1999	21.02	33.74
	2000	19.50	37.60
	2001	20.31	41.16
	2002	22.76	44.56
Ecuador	1993	14.50	0.02
	1994	16.15	0.03
	1995	16.29	0.03
	1996	17.24	0.04
	1997	21.07	0.00
	1998	16.74	0.18
	1999	19.87	0.38
	2000	19.25	0.13
	2001	21.26	0.94
	2002	25.24	2.54
Ivory Coast	1993	5.55	56.15
	1994	4.92	54.23
	1995	4.24	49.30
	1996	4.37	50.18
	1997	5.64	52.40
	1998	5.68	47.66
	1999	5.45	48.52
	2000	5.44	45.38
	2001	6.75	39.51
	2002	5.90	31.47
Kenya	1993	0.06	0.08
	1994	0.00	0.03
	1995	0.00	0.04
	1996	0.00	0.03
	1997	0.00	0.01
	1998	0.00	0.04
	1999	0.00	0.01
	2000	0.00	0.02
	2001	0.00	0.01
	2002	0.00	0.01

Wood

		Virola, mahogany, imbuia & balsa (440724)	Wood sawn, other (440729)	Wood sawn, other (440799)	Other wood sheets for veneering (440839)	Other wood sheets for veneering (440890)	Non- coniferous wood (440920)	Plywood with at least one outer ply of tropical wood (441213)	Plywood with at least one outer ply of non- coniferous wood (441214)
Ghana	1993	.	.	4.65	.	4.65	1.21	.	.
	1994	.	.	5.02	.	4.70	1.44	.	.
	1995	.	.	4.44	.	5.10	1.62	.	.
	1996	9.09	14.93	2.18	16.06	3.38	0.92	0.66	0.10
	1997	3.92	15.68	1.37	12.99	3.53	0.94	0.92	0.54
	1998	6.40	14.01	1.09	13.66	3.27	1.22	0.35	0.06
	1999	4.56	11.70	1.50	17.29	3.02	1.29	0.65	0.27
	2000	2.98	8.93	1.44	17.36	2.86	0.81	1.43	0.26
	2001	3.86	9.57	0.99	16.44	3.18	1.04	2.03	0.34
	2002	9.61	8.25	0.93	17.34	2.40	1.51	1.77	0.60
Cameroon	1993	.	.	2.94	.	1.61	0.08	.	.
	1994	.	.	2.88	.	2.77	0.02	.	.
	1995	.	.	3.20	.	3.94	0.05	.	.
	1996	14.09	19.55	2.51	8.99	2.94	0.19	1.17	0.01
	1997	15.74	20.30	1.94	15.67	0.25	0.42	1.11	0.01
	1998	24.34	21.39	2.10	16.79	0.24	0.65	0.87	0.01
	1999	24.26	23.24	1.89	12.04	0.76	1.20	0.89	0.02
	2000	27.05	32.27	4.57	12.94	0.89	1.58	1.30	0.00
	2001	30.00	32.03	5.81	9.36	1.73	2.10	1.32	0.34
	2002	26.02	30.36	4.48	7.88	3.05	2.08	1.19	0.33
Ivory Coast	1993	.	.	8.32	.	10.39	5.39	.	.
	1994	.	.	8.70	.	8.88	5.00	.	.
	1995	.	.	9.46	.	8.84	4.70	.	.
	1996	19.94	21.93	6.68	21.66	5.32	4.16	1.30	0.09
	1997	20.71	20.83	4.56	23.03	3.89	4.30	1.60	0.12
	1998	20.05	24.91	3.92	25.47	2.83	4.79	2.00	0.30
	1999	19.87	23.13	3.10	29.06	2.33	4.53	1.99	0.24
	2000	18.12	17.59	3.30	30.48	1.83	3.69	2.24	0.20
	2001	16.00	18.53	3.73	30.74	1.67	4.26	2.58	0.52
	2002	18.67	17.23	5.41	24.19	1.85	3.29	2.42	0.29
Gabon	1993	.	.	0.05	.	0.01	.	.	.
	1994	.	.	0.04	.	.	.	.	.
	1995	.	.	0.04	.	0.01	.	.	.
	1996	0.98	0.58	0.08	0.61	0.04	.	3.25	0.00
	1997	0.91	0.86	0.13	3.80	0.02	0.42	2.29	0.01
	1998	0.13	1.05	0.15	3.47	.	0.65	2.61	0.00
	1999	0.43	1.02	0.17	6.80	0.04	.	3.81	0.01

	2000	1.45	1.31	0.21	12.40	0.04	1.58	3.09	0.00
	2001	3.20	1.52	0.56	18.28	0.21	2.10	3.57	0.05
	2002	3.78	2.91	0.60	26.49	0.52	0.04	4.41	0.24