Ghana Export Horticulture Cluster Strategic Profile Study

Part I - Scoping review

Prepared for

World Bank Sustainable Development Network (WB-SDN)
Africa Region, Agriculture and Rural Development (AFTAR),

The Republic of Ghana Ministry of Food and Agriculture,

and

European Union All ACP Agricultural Commodities Programme (EU-AAACP)

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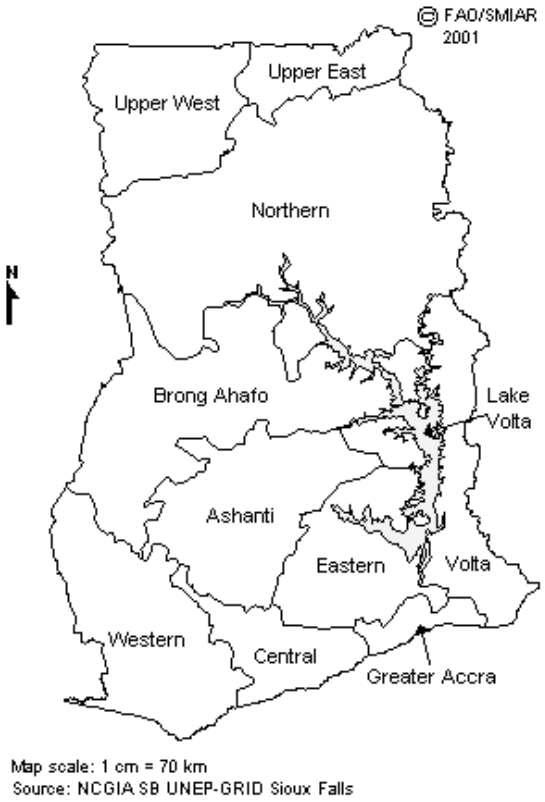
The following report was prepared on the basis of a two week research trip carried out early in 2008. I was supported throughout the mission by the staff of the Export Marketing and Quality Awareness Project namely Mawuli Agboka, Eric Quaye, Harry Bleppony and David Crentsil. I am most grateful to all four for giving up their time to show me around, for their help and insights into the horticultural scene, and for their good company. I could not have achieved the breadth and depth of this review without their assistance.

Many others also gave up their time willingly to the interviews on which this report is based. A bare list of the persons met is provided at the end here, in Annex VII, so I should like to acknowledge the warm welcome I received from all. In spite of busy schedules and businesses to run, time was always available for yet another researcher. Particular thanks to Jean-Michel Voisard and his team at TIPCEE for sharing their experiences, overview and data.

MAPS OF GHANA

Map 1 Ghana - Administrative Divisions



Source: http://www.fao.org/giews/french/basedocs/gha/ghaadm1f.stm

Map2 Ghana – Relief and Major Towns and Cities

Source: http://www.ghanaweb.biz/GHP/img/pics/12307026.gif

ACRONYMS & ABBREVIATIONS & CONVERSIONS

Organisations:

ACP	Africa, Caribbean, and Pacific (signatory countries of the Lomé Convention)
ADB	Agricultural Development Bank
ADRA	Adventist Development & Relief Agency
AfDB	African Development Bank
AGOA	African Growth and Opportunity Act
AgSSIP	Agricultural Services Sub-Sector Investment Programme
CAADP	Comprehensive Africa Agriculture Development Programme
COLEACP	Comité pour Liaison Europe ACP
EBA	Everything But Arms
EC	European Commission
ECOWAS	Economic Community of West African States
EDIF	Export Development & Investment Fund
EMQAP	Export Marketing and Quality Awareness Project
EPA	Economic Partnership Agreements
EU	European Union
FAGE	Federation of Associations of Ghanaian Exporters
FAO	Food and Agriculture Organisation
FASDEP	Food and Agriculture Sector Development Policy
FBO	Farmer Based Organisation
FOM	Farmer Ownership Model
GAVEX	Ghana Association of Vegetable Exporters
GEPC	Ghana Export Promotion Council
GIPC	Ghana Investment Promotion Centre
GSB	Ghana Standards Board
GSP	Generalized System of Preferences
GTZ	Gesellschaft für Technische Zusammenarbeit – German Government agency for international co-operation
GYEA	Ghana Yam Exporters Association

HAG	Horticultural Association of Ghana
HEII	Horticultural Exports Industry Initiative
IFAD	International Fund for Agricultural Development
JITAP	Joint Integrated Technical Assistance Programme to Selected Least Developed and Other African Countries
KIA	Kotoka International Airport
MCA	Millennium Challenge Account
MCF	Millennium Challenge Fund
MIDA	Millennium Development Authority
MOAP	Market Oriented Agriculture Programme (of GTZ)
MOFA	Ministry of Food and Agriculture
MOTI	Ministry of Trade and Industry
NEPAD	New Partnership for Africa's Development
NRGP	Northern Rural Growth Programme
PIP	Pesticides Initiative Programme
SPEG	Sea-Freight Pineapple Exporters of Ghana
UBA	Union Bananière Africain
USAID	United States Agency for International Development
TIPCEE	Trade and Investment Programme for a Competitive Export Economy
VEPEAG	Vegetable Producers and Exporters Association of Ghana
WTO	World Trade Organisation

Other Abbreviations:

CIF	Cost, Insurance & Freight
CY	Container Yard
FOB	Free on Board
Ha	Hectares
Kg	Kilogram
Km	Kilometre
Lb	Pound (unit of mass)
M	Metres

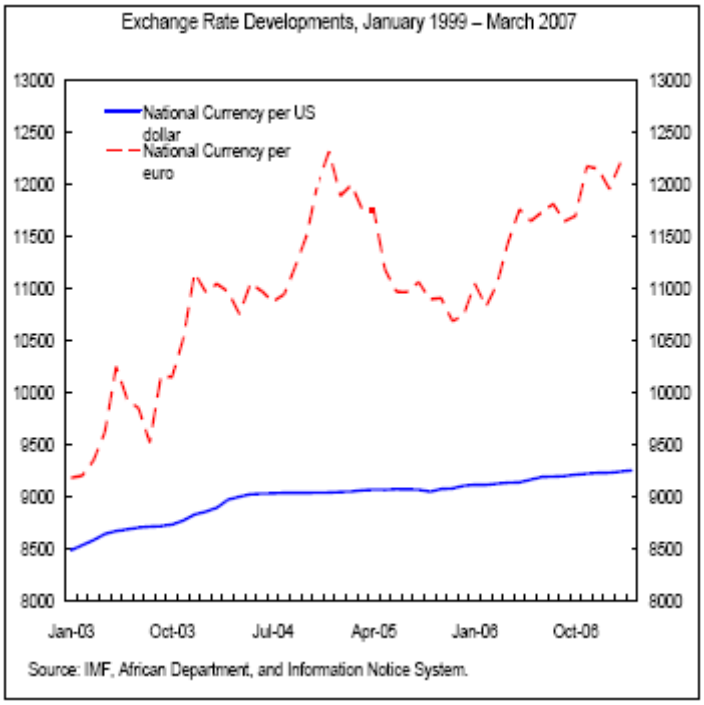
Mn	Million
NGO	Non-Governmental Organisation
NTAE	Non-Traditional Agricultural Exports
SSA	Sub-Saharan Africa
T	Tonnes

Conversions:

Metric units are used where possible in this report.

1kg	=	2.2046 lb
1lb	=	0.4536 Kg
1ha	=	2.471Acres
1acre	=	0.4047Ha

Currency:



The Ghanaian cedi was redenominated in July 2007 with ¢10,000 re-set to GH¢1. Since then the cedi has fallen in value from 0.946/USD to 1.009/USD and from 1.297/€ to 1.587/€.

For this report, exchange rates of GH¢1/USD and GH¢1.58/€ are used.

1. INTRODUCTION

In the last twenty years Ghana has developed a significant export of fresh produce to Europe. Pineapples, mangoes and papaya lead the fruit exports while yams, chillies and asian vegetables head the vegetable trade. The European Union imported almost 90,000 tonnes of fresh produce from Ghana in 2007, which earned the Ghanaian horticulture cluster some €80mn C&F. These "non-traditional" exports contribute employment, fiscal revenue and foreign exchange to the economy. As a result, policy makers and development partners have looked to support export horticulture as a diversification of the export base and an opportunity to improve rural livelihoods. The origins of this industry in Ghana lie in the Structural Adjustment Programme and liberalization strategies of the 1980s. Donors and NGOs provided support through the 1990s and the industry has been integrated into agricultural and development policy in the new millennium.

In 1998 the World Bank, in collaboration with the Ministry of Food and Agriculture (MOFA), commissioned a short study of the sector[1] to review the opportunities, identify the constraints and suggest strategies and infra-structural improvements to take fresh produce exports forward. A similar exercise was conducted in 2003[2] as part of the restructuring of the World Bank-funded Agricultural Services Sub-Sector Investment Programme (AgSSIP) within the Ministry of Food and Agriculture. This second appraisal of the industry led to the development of a strong horticultural component to the AgSSIP under the title Horticultural Exports Industry Initiative (HEII) within MOFA.

Since 2003 the Ghanaian horticultural export sector has been subjected to a severe upheaval: European demand for the traditional West African pineapple variety evaporated and European retailers adopted stricter private standards for retailing fresh produce. HEII and other donor programmes[3] have been able to support these changes and contribute to infrastructural improvements, and the horticultural export industry now looks rather different. Tables 1a and 1b provide some headline numbers of progress since 2001[4]. The data indicate the difficulties in the pineapple trade, the appearance of bananas as important exports and the growth in mango and chilli exports.

Table 1a EU Imports of Selected Fruit (tonnes)

	Total EU Imports			EU Imports from Ghana				
	2001	2007	Growth	2001	2007	Share 2001	Share 2007	C&f value 2007€
Bananas	3,801,895	4,682,893	23%	3,458	33,404	0.09%	0.71%	20,304,496
Pineapples	374,748	829,243	121%	33,209	35,463	8.86%	4.28%	37,553,172
Papaya	18,848	36,481	94%	1,937	1,042	10.28%	2.86%	1,910,112
Mangoes, guavas and Mangosteens	136,830	211,570	55%	62	983	0.05%	0.46%	2,802,090
							TOTAL	62,569,870

[1] *The Future for the Ghanaian Horticultural Export Industry* 1998 Dixie and Sergeant, Accord Associates
[2] *Ghana Horticulture Sector Development Study* 2003 Voisard and Jaeger, Accord Associates
[3] Notably, the TIPCEE programme has been at the forefront of supporting change for the industry participants
[4] Start date chosen for a longer time series, but a similar pattern is seen since 2003

Table 1b EU Imports of Selected Vegetables (tonnes)

	Total EU Imports			EU Imports from Ghana				
	2001	2007	Growth	2001	2007	Share 2001	Share 2007	C&f value 2007€
Capsicums (Chilis)	25,486	35,833	41%	418	2,947	1.64%	8.22%	5,835,875
Other Vegetables	67,347	74,933	11%	6,511	2,565	9.67%	3.42%	4,140,256
Babycorn	4,965	6,509	31%	1	8	0.02%	0.12%	9,283
Ravaya	375	2,438	550%	97	174	25.90%	7.12%	357,125
Yams	16,197	21,268	31%	7,756	11,048	47.88%	51.95%	5,372,009
Cassava	8,525	23,312	173%	117	2,076	1.37%	8.90%	1,388,888
Sweet Potatoes	16,031	51,619	222%	51	26	0.32%	0.05%	26,891
							TOTAL	17,130,327

Source: EUROSTAT

At the same time the institutional environment has also changed: HEII, which raised the profile of the sector, has completed its implementation and evolved into a further programme of support (EMQAP) funded by the African Development Bank; several donors including the World Bank have moved to towards budget support strategies and, most significantly, the US government's Millennium Challenge Fund has initiated a $547mn programme in Ghana with a strong agricultural, indeed horticultural, component.

What then is the current potential for the Ghanaian horticultural export industry? What is planned in policy, infrastructure, investment and support to achieve this potential? What strategies will take the cluster forward? To answer these questions a two stage exercise has been planned[5]. The present report provides an analysis of the recent evolution of Ghana's horticultural export cluster. This has entailed a comprehensive "scoping" study to take stock of the evolution of the horticultural cluster since the HEII was first conceived, both in terms of the supply side in Ghana and the demand side in Europe. Based on these observations, and the definition of the problems, issues and constraints a strategy can then be designed in the second stage to take the cluster to the next development phase over the following five year period.

This study will not review the entire span of the Ghanaian horticultural industry. Much of the agricultural activity that could be defined as horticulture is aimed at supplying the local market with a range of fruits and vegetables. Some of these products will also find their way into a regional supply chain that takes them beyond the Ghanaian border and therefore qualify as exports. But these markets are not substantially different to the local markets: the supply chains are essentially the same; the markets do not differ significantly in their particular requirements and the decision to export or not rests with the traders and market women.

A very small portion of Ghanaian horticultural output is aimed at exploiting more distant markets. For the most part, this means Europe. There are some opportunities in the Middle East[6] or the Maghreb but these are quite minor, and Ghana has no comparative advantages over other sources supplying to the North American or the Far Eastern markets. As subsidiary opportunities, the second phase can look at these markets in more detail if needed.

This report, then, is focussed on the ability for Ghanaian horticultural produce to exploit the European demand. The distinction between distant and local/regional marketing is important. The distant export of fresh produce has substantially **higher costs** (transport, packaging,

[5] See Terms of Reference in Annex V

[6] These markets are more usually supplied from India and Pakistan or East Africa. For example, of the 70,000 tonnes of mangoes imported to the UAE in 2005, India supplied 27,700 tonnes, Pakistan 37,000 tonnes and Kenya 2,000 tonnes. Similarly, of the 48,300 tonnes of imports of mangoes into Saudi Arabia in 2006, Yemen, Pakistan, India and Egypt collectively supplied 92%. Ghana has few advantages in these markets.

marketing, financing), **higher risks** (unpredictable demand, poor market linkage, counterparty integrity, currency, product deterioration) and **higher performance requirements** (competition with worldwide suppliers, marketing demand for quality, programmed supply agreements, logistic efficiency, business agility). Export horticulture may have clear macroeconomic benefits, but the rewards at the microeconomic level are not secure.

We consider here whether the Ghanaian horticultural export cluster is achieving its potential in the European market; and if not, then where are the constraints?

2. SECTOR EVOLUTION FROM 2003

This chapter reviews the main changes that have taken place in the cluster over the past five years. Rather than describe the background and underlying structure again, a list of reports and studies of the Ghanaian horticultural cluster is included in the bibliography in Annex VI.

2.1 Key Aspects of change 2003 – 2008

The range of fruit and vegetables produced in Ghana for export has not altered significantly. However, there have been some important alterations in the output of individual crops and in the cluster participants. To give an overview, the most important changes are listed below; individual topics are then discussed in more detail.

1. Golden Exotics Ltd, a subsidiary of the group Compagnie Fruitière, was incorporated in Ghana in 2003 and began production of pineapple and banana. The company now dominates the sector and is responsible for 88% of banana exports and 40% of fresh pineapple exports.

2. Other foreign investors in the sector include a juice manufacturer, Pinora, and the Swiss fruit distributor, HPW. HPW groups five exporters under a marketing umbrella and jointly account for another 40% of Ghanaian fresh pineapple exports. The approach by Chiquita to develop a $40mn banana investment failed through lack of interest in Ghana, and Chiquita found partners in Angola and Mozambique instead.

3. Substantial local investments include the replacement of existing pineapple planting stock, the development of mango plantings and the installation of cold stores and pack houses.

4. Banana exports have expanded from below 5,000 tonnes to around 35,000 tonnes.

5. The European demand for traditional pineapple varieties evaporated in favour of the MD2. The new variety has been multiplied and disbursed by the HEII programme. The change over seriously affected the ability of many producers to grow for export since the new variety requires a higher level of husbandry and inputs. The TIPCEE programme has carried out farmer training and the technology is available although there is evidence that a proportion of growers have withdrawn from pineapples.

6. The number of pineapple exporters has dropped dramatically. Farmapine, in particular, the export operation owned by smallholders, is no longer active. On the import side Schumacher, the German importer and distributor formerly responsible for handling the greater part of Ghanaian pineapple exports, is now a minor player.

7. Mango output is growing with the development of projects around Tamale in the north.

8. HEII completed the refurbishment of Shed 9, the fruit export shed at the port of Tema, with the installation of cooling and cold storage facilities throughout the shed. Despite completion in April 2007 the shed is still not operating while management issues are discussed.

9. On-farm pack houses and cooling facilities have been installed by some private players.

10. Those pineapple exporters still in business have mostly gone over to Fair Trade certification in order to maintain a presence in the European market.

11. The GlobalGAP[7] standard has been widely adopted in the export cluster. This was imperative for continued access to European retailers.

12. HEII funded the upgrading of the Ghana Standards Board laboratories to a pesticide residue analysis laboratory with new equipment. The Ghana Standards Board has published norms and standards for a number of crops.

13. A number of the trade associations are in a much weaker state than previously. In the case of SPEG, this reflects the difficulties in the pineapple industry, while HAG and FAGE need a stronger definition of mission. A number of new trade associations have been created. A National Horticultural Task Force now provides a forum for private and public oversight of the industry.

14. A number of NGOs and donor programmes have been aimed at the cluster since 2003, most notably TIPCEE. The HEII programme was completed and evolved into EMQAP. See Annex I and Section 2.6

15. As of 2008 the Millennium Challenge Account of $547mn gets underway with its Agricultural Transformation Programme. Horticulture is a significant component.

16. Processing of fruit for export has further developed with the expansion of the Blue Skies, HPW and PeelCo fresh-cut operations and the development of the Pinora juicing plant.

2.2 The Crop Portfolio 2003-2008

2.2.1 Pineapples

- The last five years have been traumatic for the Ghanaian pineapple industry. The European demand for the traditional Smooth Cayenne variety disappeared in a short time and simultaneously the requirement for EUREP GAP certification became widespread.

- The consequence is a landscape depleted of active participants. Smallholder export of pineapples has closed down. There are now only eight significant exporting members of SPEG where five years ago there were over 40 active exporters.

- Among the casualties are the smallholder owners of Farmapine, established by the World Bank on the Farmer Ownership Model.

- The smallholder pineapple sector has been hit particularly hard because they were reliant on exporters supplementing their own production to make up volumes. As these players were unable to maintain a market presence in the switchover there were no buyers for the smallholder output. Further, MD2 requires substantial

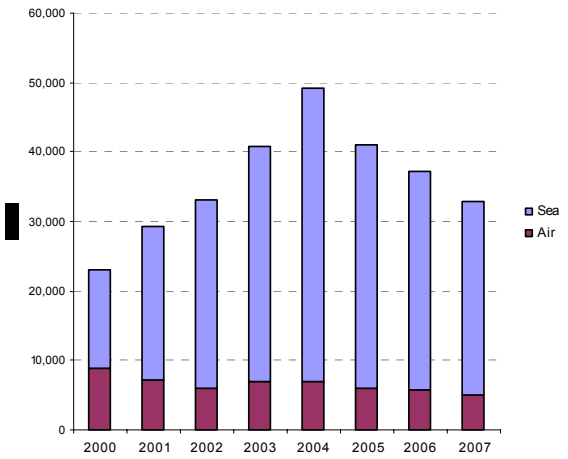
[7] See Annex IV. Global GAP is a re-branding of Eurep GAP, the European retailers protocol for good agricultural practice.

investment: not only are the plantlets expensive, but the cultivation requires the use of more inputs.

- It was the speed of withdrawal of demand for Smooth Cayenne that hit the Ghanaian industry hard. Earlier market surveys had indicated that in a comparison of Ghanaian and Central American (Costa Rica) products, importers were less concerned about the variety than the performance of the Ghanaian exporters and the quality on delivery. Indeed, a consumer survey for GHPPP[8] showed no significant preference between Smooth Cayenne and MD2 in a sample, albeit small, of shoppers. But exporters suddenly found themselves without a market even as the MD2 programme of multiplication was underway.

- European imports of whole pineapples from Ghana have fallen from 44,000 tonnes in 2003 to 35,000 tonnes in 2007 (Fig 1). In this same period Compagnie Fruitière established Golden Exotics in Ghana and has created export production of 15,000 tonnes. In other words, the imports from the established Ghanaian producers fell by 55% to 20,000 tonnes.

Figure 1 EU Imports of Pineapple from Ghana



- Even exports by air were hit as Smooth Cayenne supplies diminished. There is no advantage to shipping MD2 by air since its value lies in the high sugar levels available well before full ripeness which allows it to be picked earlier and shipped but still be sweet to the consumer. [9]

- Set against this scene are some positive developments: the roll out of MD2 is largely done and material is widely available at a manageable cost, the production protocols are better understood, 100% of exports are GlobalGAP certified, Blue Skies are buying and cutting increasing quantities of pineapple. The Blue Skies exports of 5,000 tonnes of pineapples equate to 15,000 tonnes of whole fruit.

- The industry probably reached a nadir in 2007. From here the surviving exporters can go forward: Golden Exotics will likely expand. The other SPEG members can build on their increasing technical skills with the new variety and on their steadily improving infrastructure (supported by EMQAP and MiDA). The smallholder sector can regroup around the opportunities for the traditional varieties to supply the local market, the processors (the juice yield of Smooth Cayenne is significantly greater than MD2) and the still present demand for farm ripened air-freighted Smooth Cayenne.

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[8] *Ghana Private-Public Partnership Food Industry Development Program Final Report for USAID* 2005 Prof Samuel Sefa-Dedeh

[9] The Smooth Cayenne on the other hand benefits from being allowed to attain full ripeness and is then easiest shipped by air.

2.2.2 Bananas

- The banana export business is dominated by Golden Exotics. Output in 2007 was 35,000 tonnes. The currently planted area of 820 ha could be doubled.

- VREL have been growing and exporting bananas for many years in Volta Region. VREL maintain a niche in the EU organic banana market.

- The attempt by Chiquita to invest in banana production in Ghana is described below (Section 2.3.12)

2.2.3 Mangoes

- Mangoes are finally coming forward after years of insignificant sales to Europe. Sea-shipment is growing, and more mangoes were exported by sea in 2007 than by air.

- Whole fruit exports finally reached 1,000 tonnes in 2007 up from about 80 tonnes in 2003. Blue Skies are buying mangoes for fresh cut exports. The local market is also growing.

- Production is divided by into three disjunctive zones: the older plantings are in the South while new developments are taking place in Brong Ahafo and the North. The NGO, ADRA, have been active in spreading the cultivation of mangoes.

- Production in the South is expanding and there are now over 600 farms. To April 2008 a total of 161 farms (covering 983 ha) have been certified to GlobalGAP under the Option 2 scheme. Further farms are going through the process in 2008. One farm (49ha) is certified to Option 1.

- Control measures against anthracnose and also stone weevil are succeeding. Fruit fly remains a problem.

- Southern production is heavily biased towards the Keitt variety (estimated at 87%) with the consequence that the harvest and export season is short.

- The nucleus farm development of ITFC near Tamale, with 1,300 smallholders, is beginning to yield. All organic. This should extend the supply season of "Ghanaian" mango.

- Production in Brong Ahafo is supported by the MOAP programme.

2.2.4 Papaya

- Papaya exports to Europe declined from 1,650 tonnes in 2003 to 1,050 tonnes in 2007. Sea shipments were tried but have fallen away again to insignificant levels.

- Golden Exotics took over Paradise Farms and switched entirely to pineapple production: there were already difficulties with the Compagnie Fruitière papaya production in Côte d'Ivoire and the Paradise Farm location was felt to be less than ideal. Jei River is no longer producing papaya.

- Tropigha, marketing through Schumacher, and Dansak, remain the major suppliers.

- Papaya production in Ghana requires irrigation and the crop is not easily adopted by smallholders.

- Any strategy for further expansion of papaya in Ghana must review the balance the between the high-class offering of the air-freighted types currently grown, and the lower cost alternative of the "Golden" variety which is amenable to sea-freighting and now leads Brazilian output.

2.2.5 Miscellaneous Fruits

- A number of other tropical fruit crops, such as passion fruit, avocadoes or lychees, are produced in minor quantities for export or experimentally.

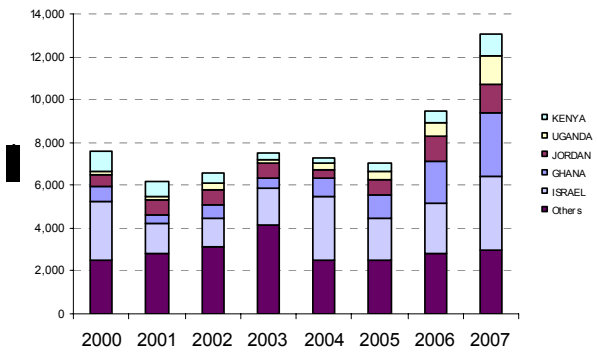
2.2.6 Chillies

- European imports of Ghanaian chillies have risen from 500 tonnes in 2003 to 3,000 tonnes in 2007.

- New varieties have been introduced.

- The produce is not however reaching the higher priced supermarket sector and the increase in sales may reflect the move of the Kenya exporters into the premium end of the market, but it seems also that the demand for air-freighted loose chillies has increased suddenly (Fig 2).

Fuigure 2 EU Imports of Capsicums by Air



2.2.7 Asian Vegetables

- Imports to Europe of Asian vegetables from Ghana have fallen for the last two years. The reason behind this is not clear, but there has been little growth in the trade of these products.

- Mostly, the Asian vegetables are for the UK market, and no significant growth is expected here. The trade tends to be low value and aimed at the communities of immigrant population who may now be in the second or third generation with a diminishing interest in ethnic cuisine.

- There has been no significant cross-over of these vegetables into mainstream shopping or the catering trade.

- One of the few products that are now in the supermarkets is okra and volumes here may grow. A variety with promising virus tolerance levels has been distributed to farmers and is being monitored for its level of virus tolerance.

2.2.8 Roots and Tubers

- Yams, cassava and sweet potatoes are included here. Although all three are lower value root crops, there are important differences in the European markets: sweet potatoes are now incorporated into the mainstream supermarket offering, at least

in northern Europe while cassava and yams remain in the less regulated, less selective ethnic markets.

- Exports of sweet potato are quite minor, rising in 2005 to some 600 tonnes but falling away again the following year to 300 tonnes of which only 120 tonnes were imported to Europe. The variety, Beauregard, which has pest resistant qualities and is popular in Europe, has been introduced, but any progress in the European market will depend on competing directly with suppliers from the USA and Israel who share the EU market quite evenly.

- Ghanaian yams[10] are successful. The unit value is low, and so the product tends to be over looked in commentary on the Ghanaian horticultural scene, but imports to the EU from Ghana have grown significantly from 8,000 tonnes in 2003 to 11,500 tonnes in 2006 with an increase in market share from 46% to 52%. With further exports to the USA the total exports exceed 16,000 tonnes. Imports to the EU from Ghana are valued at some €8mn.

- Cassava exports from Ghana have grown quite strongly and the EU imported 2,800 tonnes in 2006 up from 800 tonnes in 2003.

2.2.9 Miscellaneous Vegetables

- Of the other minor vegetable exports, ravaya (baby aubergines) may offer some opportunity. Ghanaian exports to Europe have increased gradually from 113 tonnes in 2003 to 175 tonnes in 2007. Over the same period, imports to Europe have risen from 530 tonnes to around 2,400 tonnes with Kenya leading the suppliers.

- Baby corn and herbs may offer some potential and some trials are underway.

2.2.10 Plants, flowers and foliage

- Ghana Fresh Produce Ltd, the only exporter of flowers in 2003, appears to have ceased trading.

- A Dutch investment, by Gold Coast Foliage Ltd, of €0.6mn in foliage production in Central Region began exports in 2007

- The tissue culture laboratories at Sogakope, formerly with Tongu Fruits, are now producing plantlets of various tropical plant species for export to Holland.

2.3 Companies and Investments in 2008

Three companies now dominate the pineapple export trade: Compagnie Fruitière of France are the largest producer with their investment in Golden Exotics in Ghana, HPW of Switzerland acts as a marketing umbrella for five Ghanaian producer/exporters, and Blue Skies of the United Kingdom process some 15,000 tonnes of pineapples at Nsawam for export as fresh cut product. In 2007, over 80% of pineapples destined for export, either whole or processed, were handled by these three companies.

[10] Including cocoyams though these volumes are small

There has been a major decline in other players in the market. There remain a handful of SPEG members, such as Koranco and Chartered Impex, still operating independently in the fresh pineapple export trade. The switch in demand to MD2 and the imposition of GlobalGAP as a requirement dealt a further blow to companies already struggling to compete against the Central and South American suppliers. Their demise highlights the difficulty of outgrower-based exporters competing in the fresh produce market: not only are the efficiencies of the grower exporters hard to match but the performance and agility standards are challenging when co-ordinating different suppliers.

Citrus processing has seen investment in Pinora. Existing processors such as Coastal Groves and Athena Foods continue to operate in the sector. Athena Foods has become a supplier of pineapple concentrate to Coca Cola Nigeria.

In the vegetable and tuber export trade, the business is carried out by a number of players with little change from the situation five years ago.

The major changes, positive and negative, among the players over the past five years are discussed below. This does not include all those farms that have invested in new planting material or upgraded facilities for Global GAP certification.

2.3.1 Compagnie Fruitière

Established in 1939, Compagnie Fruitière[11] is one of the major fresh fruit distributors in Europe. From the early 1970s the company has invested in plantations in West Africa, and it is now the leading fruit producer in the ACP region with 350,000 tonnes of bananas, 80,000 tonnes of pineapples and 10,000 of papaya and other minor products. In 1992 Dole took a 40% share in the capital of the company. Compagnie Fruitière has a UK based distribution operation as well as an integrated logistic operation in Africa Express Line[12], which manages the shipping of 900,000 pallets per year.

The deteriorating political situation in Côte d'Ivoire provoked Compagnie Fruitière to invest in Ghana in 2003. The company purchased the holding of Paradise Farms near Nsawam, which had been focussed on papaya production, and began operations as Golden Exotics Ltd. The farm is now planted with 350ha of MD2 pineapples and produced 15,000 tonnes of pineapples in 2007. Another 650ha are available for development.

In 2005 Compagnie Fruitière developed the Kasunya Farm to the north east of Accra with 820ha of banana. Production in 2007 reached 35,000 tonnes. A further 1,200 ha is available for development. As of 2007 Golden Exotics Ltd was responsible for 88% of Ghanaian banana exports to Europe and 40% of Ghanaian fresh pineapple exports. Clearly, the development at Shed 9 in Tema would be most useful for the company.

Compagnie Fruitière has invested €25mn to the end of 2006 in developing their Ghanaian operations. The production is fully compliant with GlobalGAP standards and indeed is unusual in being a Gold accredited supplier to Tesco's Nature's Choice standard. The Ghanaian operation is small compared to the Compagnie Fruitière plantations in either Cameroon or Côte d'Ivoire, but with political uncertainty in both origins the Ghanaian investment is an important insurance.

[11] http://www.fruitiere.fr/
[12] http://www.africaexpressline.com/

At present, the AEL shipping line no longer runs to northern Europe from West Africa., but discharges in Port Vendres in Southern France. As a result, the Compagnie Fruitière production is rarely sold in the UK since trucking from southern France is too expensive. The pineapples and bananas from Ghana are sold across southern Europe through the multiples under the Compagnie Fruitière brand rather than as Ghanaian produce. Sales in the UK are mostly of the Fair Trade certified product sourced from HPW.

The Golden Exotics operation is estimated to provide some 11,000 jobs in Ghana with about 2,200 employed directly in production. The production is likely to expand. The arrival and establishment of Compagnie Fruitière in Ghana has been a key development in the horticultural cluster. The scale of the crisis in the pineapple trade is quite clear when the Golden Exotics figures are removed from the data, and the presence and expansion of the Ghanaian fruit in the European, albeit southern, retailers is a boost for marketing Ghana produce.

2.3.2 HPW and Bomarts

HPW AG[13] is a Swiss based company specialising in the marketing of Fair Trade and organic tropical produce. The company is owned by the founder Hans Peter Werder, who began marketing Ghanaian product in 2000 through a tie-up with the Ghanaian exporter Bomarts.

Bomarts is a Ghanaian company that has been producing pineapples since the mid 1980s and started exports not long after. The company is a member of SPEG and among the first to introduce MD2 pineapples into Ghana. Bomarts became the main supplier to the government of MD2 plantlets from its tissue culture laboratories.

Bomarts achieved Fair Trade certification at a time when demand, notably in Switzerland was growing rapidly. Since Bomarts was unable to supply sufficient volume from Ghana, a second Ghanaian exporter, Milani, was taken on to supplement supplies. As HPW expanded into supplying the UK as well so other Ghanaian exporters were brought in under the HPW umbrella.

In 2006 HPW formed HPW Fair Trade Ghana Ltd and employs 14 agronomists and export specialists. The staff provide technical support to farms, a central quality management service, centralized procurement of inputs from fertilizer to cartons, financial support and a small experimental farm to trial other tropical fruit production.

HPW now groups five Ghanaian operations: Bomarts Farms Ltd, Milani Ltd, Jei River Ltd, Georgefield Ltd and Tacks Farm Ltd. All are Fair Trade and Global GAP certified; Tacks Farm is also an organic producer. Total output of the group was over 15,000 of pineapples in 2007 of which 12,000 tonnes were sent by sea and 3,500 tonnes by air. The latter were Smooth Cayenne for the demand still present in Europe. A pack house and blast-chiller have been installed on the Bomarts and Milani farms. There are minor volumes of mango and papaya too, though Bomarts are expanding their mango production in Volta Region.

[13] http://www.hpwag.ch

HPW has also moved in to fresh-cut fruit and now has cutting and packing operations in Ghana, Egypt and South Africa, incidentally a similar arrangement to the Blue Skies distribution of processing facilities.

Fair Trade fruits are principally retailed in Switzerland, the UK and Belgium. The pineapples are sold through the major multiples such as Coop in Switzerland, Tesco, Asda, Morrison and Marks and Spencer in the UK and Delhaize in Belgium. There is little current expansion in Fair Trade in these markets, but Germany has good potential and the Fair Trade label has significant further opportunity. That said, Costa Rica also produces Fair Trade product and could swamp the market at any time and so HPW is looking to expand into programmed retail sales as the technical capability of its operation in Ghana develop. The individual members have the freedom to sell independently, should HPW be unable to handle the total output.

2.3.3 Wienco

Wienco[14] is a Ghanaian–Dutch joint venture established in 1979 to carry out business in the agricultural sector. The core business of the group is the import and distribution of fertilisers and the company is also involved in cocoa, cotton and warehousing.

Since 1988 the subsidiary, Volta River Estates Ltd (VREL)[15] have been the major banana producer and exporter from Ghana, making use of the Ghanaian quota to supply bananas to the EU and Fair Trade certified. Production was almost wiped out by storms in 2002 and the plantation was subsequently relaunched as organic. While Ghanaian banana exports are now led by Golden Exotics, VREL remains a niche player with some 4,000 – 5,000 tonnes capacity. VREL is also working on developing a capability with organic MD2 pineapple production using some 30ha under the independent management of some of its staff.

Wienco have spent eight years developing organic mango output in Northern Region under the subsidiary Integrated Tamale Fruit Company (ITFC)[16]. Currently, ITFC has a nucleus farm of some 160 ha based on Zill, Amelie, Kent and Keitt varieties of mango, and about 1,400 outgrowers, of which some 25% of the area is drip-irrigated while there are plans for full coverage. Early problems with the stone weevil appear to have been solved and exports are gradually increasing, reaching 300 tonnes in 2007 mostly to the mid East (Lebanon and Egypt). A target of 10,000 -15,000 tonnes by 2015 is planned.

2.3.4 Schumacher

Schumacher are a tropical fruit distributor based in southern Germany. Previously a force in marketing Ghanaian pineapples, Schumacher is now barely involved in Ghanaian pineapples. A change of management at Jei River Ltd, once the major exporter of pineapples, in 2006 broke Schumacher's principal link with the industry. Schumacher continues to market fruit from Ghana, mostly papaya, through a connection with Tropigha, and passion fruit but the switch to MD2 and the alliance of a number of players with HPW has reduced the pineapple

[14] http://www.wienco.com/index.php
[15] http://www.vrelorganic.com/index.html
[16] http://www.itfcorganic.com/htm/getpage.asp

trade. Schumacher also maintain three farms in Ghana and have invested in Peelco Ltd[17] to produce fresh-cut fruits.

2.3.5 Blue Skies

Blue Skies[18] was founded in 1998 with a factory just outside Nsawam in the pineapple zone. The company was established to prepare, pack and export pineapples for the UK market. While Ghana remains the flagship project, Blue Skies have developed further facilities in Egypt, South Africa and Brazil in order to provide a portfolio of product throughout the year. The company has grown to handle some 25% of Ghanaian pineapple exports, cutting some 15,000 tonnes per year to send 5,000 tonnes of prepared product to Europe. The Ghanaian operation also supplies mango, papaya and coconut.

Most of the product is sold through UK retailers and Blue Skies are certified to meet both the general GlobalGAP standards as well as the individual labels of the different retailers, such as Waitrose or Leaf. Fair Trade is not an important segment of the fresh cut market but Blue Skies is a certified producer as well as producing organic product. The company has recently started to offer a Waitrose Caretrace[19] labelling service where by the consumer can trace the individual purchase back to the farmer.

All fresh-cut products must be air-freighted. In the absence of appropriate cold store facilities at the airport, Kotoka, the company uses two refrigerated shipping containers on the apron. The produce is moved from the farm in refrigerated trucks to the airport and once cleared for export is held in the containers, airside of the cargo terminal, until the plane is ready for loading.

2.3.6 Pinora

Pinora[20] is a German-Ghanaian venture processing pineapples and oranges into frozen juice concentrates for export. The company is based in Asamankase, to the west of Nsawam in a newly built installation. The company was established by the German juice processor, blender and dealer, TWG Tradework GmbH[21] in 2005 in order to secure a supply of pineapple juice.

The investment to date is estimated at some €10mn and the company now buys from about 25,000 farmers. South African management operates the plant with technical assistance from Brazilian technicians. In the course of setting up, the company realised the potential of the extensive orange groves in Central and Western Region to provide a feedstock for the factory and have expanded into orange juice. The company buys from a large area from Takoradi and beyond in the West to beyond Kumasi and into Brong Ahafo in the North West. Oranges may be collected or delivered direct but securing transport remains a major bottleneck.

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[17] http://peelcofruits.com/
[18] http://www.bsholdings.com/index.aspx?page=1&lang=1
[19] http://www.caretrace.com/networkprofile.aspx?id=1
[20] http://www.pinora.com/
[21] http://www.tradework.de/index_gb.html

Prices are set weekly or monthly, and the General Manager, Kay Jacobs, reports that their prices are now becoming a reference among orange traders. Pinora processed some 30,000 tonnes of oranges in 2007. There is a capacity to process almost 30,000 tonnes of pineapples but supply has become a problem: the company cannot secure sufficient Smooth Cayenne pineapples and only managed some 5,000 tonnes last year.

2.3.7 Gold Coast Fruits[22]

A Ghanaian–German joint investment in a 600 ha pineapple farm in the Nsawam area. The company also uses outgrowers to supply mango and papaya. The company supplies fresh fruit as well as fresh-cut products. Gold Coast Fruits are registered as a Free Zone.

2.3.8 Bio Exotica[23]

A $2mn Ghanaian-Dutch investment has established a farm for producing organic pineapple on the shores of Lake Volta. The project is in part funded by the Dutch Programme for Co-operation with Emerging Markets (PSOM). The aim is an output of some 1,800 tonnes per year.

2.3.9 Gold Coast Foliage Ltd

Gold Coast Foliage Ltd has established a €600,000 project at Ekumfi Suprodo, near Mankessim in the Central Region. The project, which started production two years ago with a work force of 126 aims to grow green foliage for export for the production of bouquets. The project is based on 102 ha of land of which 10ha has so far been developed.

2.3.10 Tongu Fruits, VIAD and SBW

An operation based in Volta Region, Tongu Fruits were an important component of the fresh produce landscape in 2003. Previously the company was preparing fresh-cut fruits for exports. That activity is believed to have ceased but the company is still involved in pineapple and mango production under its new owner Volta Integrated Agriculture Development Co Ltd (VIAD). The company also operated a tissue culture facility and were one of the suppliers of plantlets of MD2. The tissue culture facility is now believed to be owned by SBW International[24] of Holland. The laboratory has capacity to produce approximately 12 million tissue culture plants per year; large scale production activities are carried out for lily, Zantedeschia, Gerbera, Anthurium and Bromeliads for export to Holland.

[22] http://goldcoastfruits.com/
[23] http://www.bio-exotica.nl/
[24] http://www.stbw.nl/

2.3.11 Farmapine

Nine years after its foundation, the World Bank sponsored pineapple producer and exporter, Farmapine, collapsed. The pack house closed in 2006 and the newspapers reported the demise of the company in August 2007 after some negotiations regarding the debt. In 2003 Farmapine was the second largest (after Jei River) exporter of pineapples by some distance. The company, based on the Farmer Ownership Model (FOM), appears to have struggled under management issues for some time, not only running a top heavy administration that ate into the farmer's revenue, but also suffering from farmer members side selling to other exporters. The loss of the market in Europe, as customers demanded MD2 in preference to the Smooth Cayenne that the 300 or so member farmers produced, was evidently the final blow.

Pinora attempted to mitigate the effects on the local population by offering to buy pineapples from the members but were unable to do so either from lack of agreement or because farmers had abandoned pineapples.

Given the World Bank backing for FOMs, and the lessons that might be learned of the difficulties of management in this model, a more thorough history should be researched and written.

2.3.12 Chiquita

Although Chiquita have not invested in Ghana, their interest and efforts to do so are instructive. Chiquita[25], with annual revenues of $4billion, is one of the top three corporate players in the world banana trade. They are the most important supplier to Europe and second most important in the USA. Chiquita have extensive plantations in Central America.

Chiquita have declared an interest in developing some 8,000 ha of banana production in Africa in order to mitigate the risks of only producing in one geographical region. Chiquita have a small plantation in Côte d'Ivoire, but the country is not currently attractive for expansion. Chiquita came to Ghana to investigate the possibility of developing production through an alliance with local entrepreneurs. The company report that they were most impressed by the encouragement provided by the government, which evidently welcomed the prospect of such an investment. They also reported a very favourable opinion of the infrastructure, with good roads in the Volta Region and an "excellent" cold store at the port.

Chiquita staff made a number of visits to the country, not only to assess the agro-ecologic factors but also to seek out partners. The Chiquita model provides potential partners with plans, technical support, logistics, and a 10 to 15 year marketing agreement. The partner should be able to use this to secure financing for the development of the project.

Chiquita were unable to find any potential partners in Ghana interested in developing this opportunity.

[25] http://www.chiquita.com/

Chiquita subsequently have found partners and financing in Angola and Mozambique, neither of which have the sea-freight advantages offered by Ghana.

The scale of this failure should be appreciated. A 2,000 ha development would provide 2,000 direct jobs and 10,000 indirect jobs throughout the supply chain. The foreign exchange earnings would be of the order of $29mn with an annual impact on GNP in excess of $100mn (assuming a 5 fold GNP multiplier). The impact on services in terms of trucking, port services and sea-freight would be very substantial.

Chiquita are still looking for plantation opportunities in Africa and could yet return to Ghana if a suitable partner were to come forward.

2.4 Infrastructure Evolution

2.4.1 Power

The distribution network is clearly improving but on-farm power supplies are still reported to be difficult and expensive.

2.4.2 Irrigation

There have been no large scale developments of irrigation since 2003. Several private initiatives however have been completed and Golden Exotics and ITFC have both installed extensive irrigation. The MiDA plans some wells and boreholes.

2.4.3 Pack-houses and Cooling Facilities

There are now a number of pack houses and cold stores around the southern producing belt. To date, these are all, with the exception of Shed 9, private facilities built by a number of companies such as Bomarts, VREL, Milani and Golden Exotics. These will be supplemented shortly by EMQAP, EDIF and MiDA all of whom are planning public facilities. With demise of some operations there are also facilities not in use: examples include the cold stores of John Lawrence Farms as well as the Equatorial and Farmapine packing facilities.

2.4.4 Roads

The poor state of the roads continues to add to the costs of export, not only in direct vehicle costs but also in time and damage to the produce. The road system is a particular concern for investors relying on outgrowers, such as Pinora who buy throughout Central Region and into the neighbouring regions. They report the need for head loading to position product where their trucks can collect. EMQAP and MiDA have infrastructural components aimed at upgrading roadways.

2.4.5 Sea Port

The major change at the port, and an important achievement of HEII, is the refurbishment of the fruit export shed at Tema, Shed 9. Cold storage for up to 1360 pallets has been installed. The major works were completed in May/June 2007 but the facility has yet to be used. As at April 2008 there were still some minor works in progress (construction of access steps and a toilet block) but the facility was ready to use, and, indeed, had been for nine months.

Since the mid-1990s, when sea-freighting of pineapples from Ghana began, Shed 9 at Tema port has been used as the export shed for offloading, palletising, controlling and holding of

pineapples. The World Bank report of 2003[26] wrote "….*Shed 9 is a closed warehouse of approximately 4.400 m2, destined to handle export goods, of which SPEG is currently leasing half of the floor space (2.200 m2) from GPHA. The shed was initially designed for non-perishable items and is not adequately ventilated. This results in a differential of +5 deg C with the outside temperature. This has an adverse effect on fruit stored in the shed prior to the ship's arrival. ….*"

The refurbishment of Shed 9 became a key component of HEII. Plans incorporated improved ventilation throughout with a cooling facility at one end in addition to reefer container handling, stuffing and plugging capability. As the concurrent programme of developing MD2 production moved on, so it became apparent that there would be a much bigger need for cold storage at the port, particularly with the development of incoming investors such as Compagnie Fruitière and their banana production. The HEII plans were amended to convert the whole of the space at Shed 9 into cold storage (in eight units of about 500m^2 each), and the budget was expanded by cancelling some other projects within HEII. Among those infrastructural components sacrificed were the planned alterations for Kotoka International Airport (air-freight of pineapples was likely to decline) and the up-country post harvest centres.

Shed 9 is now a world class fruit export terminal. It remains shut, however, while the management and financing of this facility is debated by the stakeholders. In outline, the situation appears to be that:

1. GPHA is undergoing privatisation. The container terminal has been taken over by a consortium of A P Moeller and the Bolloré group (as Meridien Port Services) with GPHA maintaining a minority interest. Similarly, nine private operators are now licensed to provide stevedoring and shore-handling services. In the process of privatisation, particularly the container terminal, a number of sheds and warehouses are no longer available. GPHA is looking to the management of Shed 9 to pay a "fair" rent for the land and structure which it has given up in allowing the refurbishment. We do not know the scale of the rent anticipated, but Shed 11 is let to the Cocoa Board for $102,000 per year.

2. MOFA paid for the refurbishment with funds from the AgSSIP loan. The final cost was $5.81mn (Euro3.68mn). Issues regarding payment for the use of the facility will be the subject of a concession agreement.

3. SPEG has always charged handling fees to its members which were part of the service of chartering freight space and handling the port operations. They wish this to continue and insist on being a part of the management. SPEG have a high overhead, with 10 staff including five still based at Tema, and will continue to look for royalty payments.

4. Golden Exotics, as part of Compagnie Fruitière and with logistic experience in Cameroon and Côte d'Ivoire, have offered to manage the Shed 9 **at cost** on a number of conditions:

- there is sufficient throughput
- costs include maintenance

[26] Voisard and Jaeger

- the stevedoring and shore-handling functions are handled by them to keep costs low
- that they operate the facility with their own staff
- vessels loading from Shed 9 have priority to dock at berth 9 immediately outside the shed

A Joint Venture between SPEG and Compagnie Fruitière (actually between SPEG Fruit Terminal Operations LTD and Transit Fruits) was established 12 months ago (MOU April 07) in order to develop the management of the Shed 9 but has so far made no progress. The management situation remains unresolved for any of the above parties.

As of April 2008 the intention is to engage consultants to advice on the long-term management of the Shed. This would be the second consultancy on this topic. In the meanwhile, the industry is worse off than before. The Shed cannot be use at all as it is entirely taken up with cold stores. Exporters have been offered the use of Shed 10 but this is evidently even less well ventilated than the original Shed 9 and temperatures are too high.

In consequence, exporters are either delivering directly to the quayside when a vessel is loading, or, with their own blast chillers, are stuffing containers on the farm. Those with Free Zone status (e.g. Bomarts or Milani) can of course complete customs formalities at the farm and do not need to hold product at the port.

Shed 9 must be brought into use as soon as possible. It is also imperative that per pallet charges are minimised. The current high handling charges, with Tema costs, at $15.5/pallet, substantially higher than Abidjan ($12) or Douala ($8), must be addressed.

2.4.6 Airport

No significant changes to the handling of fresh produce have taken place at the airport. Product is still repacked and palletised on the tarmac of the cargo car park. There is a small shelter at one end but this is of limited use.

Limited cold storage is sometimes available but cannot be relied on so product is generally delivered in a relatively short window before loading can take place. Any mishaps or traffic on the roads will therefore be penalised by missing the flight.

The MiDA programme has a component for upgrading facilities at the airport, but it is not certain that this will go ahead.

It would be interesting to assess the scale of losses at the airport: on some occasions consignments must be written off when heavy rain interrupts re-packing or palletizing, but more frequently there is simply deterioration in quality that impacts on the reputation and the return to the exporter.

2.5 Private Sector Collaborative Organisations

The landscape of trade and industry associations has changed since 2003 with the appearance of new groups and the decline in health of others. Overall, there needs to be rationalization: the capability and potential of the clusters would be greatly enhanced by broadening the

scope and tackling problems that are common to all those interested in horticultural exports. It is clearly inefficient to maintain separate secretariats and their overheads.

2.5.1 Umbrella Groups

The National Horticultural Task Force (NHTF) was established in 2003 as a broad-based private sector led group representing produce and marketing organisations, public sector institutions and the donor community. The NHTF maintains a website (www.ghanafreshprduce.org) to share information on business opportunities, regulations, markets and technology. The NHTF has been instrumental in promoting the National Quality Assurance Scheme leading to the definition of the GhanaGAP standard[27].

The Federation of Associations of Ghanaian Exporters (FAGE[28]) acts as an umbrella group for the various trade associations and continues as the private sector institution for export development. To some extent, the NHTF seems to have taken over the role of FAGE in the horticultural sector.

Membership of the Horticulturalists' Association of Ghana (HAG) is declining and the association now counts about 35 members. The role of HAG is even less clear now than five years ago, although the stated aim is to promote Ghana on the horticultural map of the world. The association seems to be repositioning itself to organise group export.

2.5.4 Pineapple Association

The Seafreight Pineapple Exporters' of Ghana (SPEG) is now in poor shape. In 2004 there were some 40 companies actively exporting pineapples, and membership dues and per pallet charges for sea-freight gave the organisation healthy revenue. By 2008 there are no more than 12 active exporters; the General Manager reported that of 26 members only a third had paid their dues from the start of the year. Reserves, which had been building until 2006, are now used up and the overhead of offices and 10 employees are burdensome.

SPEG had assisted in the switch over to MD2 pineapples with $2mn loan from the Government of Ghana. SPEG members travelled to Costa Rica to research the MD2 variety and its production, and brought back plantlets for growing and multiplication. Using the tissue culture laboratories of Bomarts Farms, Tongu Fruits and the research station at Binari the plantlets became widely available at a subsidized price. The loan has yet to be repaid, with an average of $30,000 per member owed.

SPEG insist that they should participate in the management of the refurbished Shed 9 at Tema. To this end a Memorandum of Understanding was signed in 2007 with Golden Exotics to develop the management of the facility. SPEG has made no progress since in resolving the issues that prevent the opening of the Shed (see Section 2.4.5 here), indeed it is not obvious that efforts have been made in this direction. This raises the question of whether the general membership is interested in the refurbished facility.

The future role of SPEG is unclear. GTZ, through the MOAP programme, are assisting in redefining a strategy for the organisation. The changes in SPEG must mirror the radical changes that have taken place in the Ghanaian pineapple industry.

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[27] See Annex IV

[28] http://www.ghana-exporter.org/

2.5.5 Vegetable Associations

The vegetable cluster has now split into two organisations: VEPEAG - the Vegetable Producers and Exporters Association of Ghana formed in 1997 and GAVEX – the Ghana Association of Vegetable Exporters formed in 2006. GAVEX mostly represents the larger exporters, who had become disillusioned with the performance and control of VEPEAG, while VEPEAG is more production oriented.

VEPEAG claims some 500 members but is now trying to restrict membership to those who are active in the industry. The association has formed a marketing company and now export as a single group. It is operating less as a trade association and more as a co-operative. EDIF are supporting with a pack house in Central Region, which is under construction, as well as power tillers and irrigation equipment, while EMQAP is providing refrigerated trucks.

GAVEX seeks to assist its 22 members to operate as individual export companies. The association looks for support for its members in obtaining Global GAP and other standards.

The vegetable growers and exporters were not minded to co-operate five years ago, and they continue in their independent way now. Both organisations report that the profile of the vegetable cluster was raised by the HEII but that little progress was made through HEII. It is, perhaps, typical of the industry, that VEPEAG report that trials of the newly-introduced variety of sweet potato, Beauregard, was so successful on the local market that no product was available for export, while one grower reported burying the crop as unmarketable.

2.5.6 Mango and Papaya Associations

Mango producers have created three organisations since 2003. Two are regional farmer's associations (Yilo-Krobo Mango Farmers' Association YKMFA and Dangme-West Mango Farmers' Association DAMFA) while one is national (Papaya and Mango Producers' and Exporters Association of Ghana PAMPEAG).

The growers' associations have worked closely with the TIPCEE programme, achieving EUREP GAP for all members, establishing good traceability through GIS mapping, and tackling the stone weevil problem.

PAMPEAG, formed in 2003, has taken an alternative route and has focussed on achieving quality standards. EUREP GAP is seen as a secondary goal. The association functions with no external support apart from trade fair attendance. Members are exporting and in 2007 some 300 tonnes were sent to the Lebanon and Egypt.

2.6 Donor Projects Oriented Towards Export Horticulture 2008

Since 2003 there have been various initiatives aimed at the export horticulture sector. Table 2 overleaf lists the most significant ones and a flavour of each is provided in Annex I. There are a number of other horticultural oriented programmes not included here, for example the new Northern Rural Growth Programme, funded by IFAD, AfDB and the Government of Ghana, which although market oriented and adopting a value chain approach, is not specifically concerned with developing exports of high value products. Note also that a number of donors now provide MoFA with budgetary support, though none is directed specifically at horticulture.

The export horticulture sector has benefited from substantial support over the last five years. The support is about to expand as the huge MiDA programme gets underway. The scale of

the MiDA programme raises the question of whether other programmes, either as continuations or new direction, will be attracted to the horticulture sector. This is unfortunate since the MiDA agriculture project is not well linked either to MoFA or to the larger horticultural producers and exporters, but has a strong orientation towards small farmer organisations, capabilities and credit.

There should therefore be concern over the phasing out of the project such as TIPCEE and MOAP where a substantial and valuable knowledge base has been acquired.

There have been good examples of linkage (HEII with TIPCEE and MOAP, for example) in donor support to the sector, but it is not clear that there is learning from evaluation of earlier projects. This is a pity. We need to know what works and what does not; but there is emphasis on targets rather than outcomes.

Table 2 Projects with an Export Horticulture Orientation since 2003

Project	Donor	Objective	Time	Amount
HEII	World Bank	• Conserve the existing market share of the horticultural export industry • Consolidate the competitiveness • Impel diversification and innovation	2004-2007	$9.85mn
EMQAP	AfDB	• Increase the incomes of horticultural crop farmers and exporters and of cassava producers	2007-2011	$28.6mn
GHPPP	USAID	• To link Ghanaians with global distributors by assisting producers in meeting the safety, quality, environmental and labour standards demanded by consumers in these markets	2002-2005	
TIPCEE	USAID	• To achieve exponential growth in sales of agricultural exports over the 5-year life of the project by increasing the competitiveness of Ghana's private sector in international and regional markets	2004-2009	$30mn
MOAP	German Government	• Improve upon the competitiveness of agricultural producers, processors and traders on regional, national and international markets	2004-2011	$22.6mn
MiDA	MCA	• Increase production and productivity of high value cash and food crops in 3 selected zones of Ghana • Enhance the competitiveness of high value cash and food crops in local and international markets.	2007-2013	$547mn

2.7 The Food and Agriculture Sector Development Policy (FASDEP II)

The first Food and Agriculture Sector Development Strategy (FASDEP) was prepared in 2002 as a framework for the agriculture sector. A revised policy, FASDEP II, was prepared in August 2007 and emphasises the commodity value chain approach and greater engagement with the private sector. The policy is complemented by a strategic framework, which, in April 2008, was almost complete.

FASDEP II is consistent with the national development objectives specified in the Growth and Poverty Reduction Strategy II[29], and has been prepared through an extensive consultation process that incorporates a review of the outcome of FASDEP I. The plan notes that the horticulture sector has become the country's focus for agricultural export diversification, and that the recent shocks to the pineapple industry exposed the country's lack of agility. The need for market intelligence, innovation and skills are highlighted and efforts to innovate and reinforce the linkages between agribusiness and smallholders are considered key.

FASDEP I is criticised for failing to recognise the diversity of agriculture producers and their differing needs. FASDEP II will address this so that risk-prone, largely subsistence farmers will be targeted with interventions to reduce their vulnerability and help them improve their productivity. While, at the other end of the scale, the commercial sector can be assisted, for example, through linkage with smallholders

Policy 4.9 *Increased Competitiveness and Enhanced Integration into Domestic and International Markets* deals most directly with the need to translate Ghana's comparative advantages in international markets into competitive advantages. The policy will tackle the following issues in the development of agricultural exports:

- Majority of agricultural operators do not have the skills and knowledge in the requirements of external markets, contributing to high rate of rejection of exports
- Inadequate access to market information and lack of capacity to access market intelligence
- Limited capacity of exporters to meet export volumes
- Inadequate and poor management of logistics in commodity marketing
- Weak legal environment does not encourage contract relationships in production and marketing

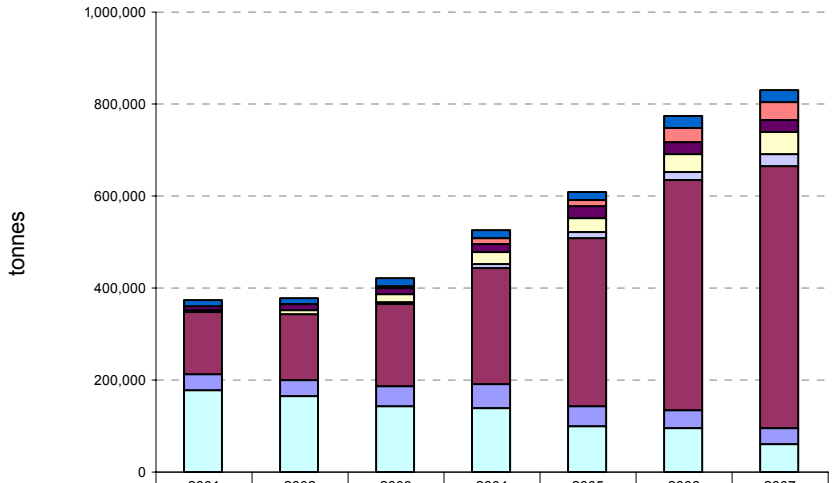
[29] as well as the Comprehensive African Agriculture Development Programme CAADP of NEPAD

3. THE EUROPEAN MARKET RESEARCH

3.1 Pineapples

Traditionally, the bulk of Ghana's exports of horticultural produce to Europe have been based on pineapples. Exports started with air-freighted pineapples in the late-1980s and early-1990s and Ghana became the dominant player in this niche market. By 1993, it was estimated that the market for air-freighted pineapples was about 15,000t[30] of which Ghana supplied about 9,000t. Then Sea-freight Pineapple Exporters of Ghana (SPEG) was established and Ghana's fresh pineapple exports to the EU increased and reached a peak of 52,000t in 2005 – but it has since fallen back to 35,000t in 2007 (Fig 3).

Fig 3 EU imports of pineapples from different sources, 2001/07



	2001	2002	2003	2004	2005	2006	2007
Others	13,418	13,723	16,565	19,672	19,470	25,402	24,665
Panama	35	0	3,713	9,658	12,143	31,476	37,627
Honduras	9,306	13,505	13,474	17,670	25,276	26,644	26,336
Ecuador	3,591	7,865	19,681	27,552	32,614	36,702	49,243
Brazil	240	277	835	10,253	12,679	16,400	26,367
Costa Rica	136,809	140,870	181,273	252,231	363,506	501,043	570,291
Ghana	33,209	36,467	44,317	51,726	45,066	40,237	35,463
Côte d'Ivoire	178,140	165,305	141,347	137,528	99,889	94,760	59,251

***Source** – Accord Associates LLP based on Eurostat data*

In the mid to late 1990s, Ghana was clearly the third place supplier of pineapples to the EU. The main supplier was Côte d'Ivoire, followed by Costa Rica and then Ghana[31]. At this time Costa Rica was recognised as a supplier of low quality, cheap "green" pineapples. However, with the advent of the "supersweet" varieties and aggressive marketing, Costa Rica now dominates a much larger market. In 2007, the total EU market was 830,000t; which was more than double the size in 2002[32]! Between 2002 and 2007, Costa Rica's exports have

[30] At this time, the total size of the EU pineapple market was about 300,000t.
[31] For example in 1997, Côte d'Ivoire exported 154,000t to the EU, Costa Rica, 83,000t and Ghana 24,000t. The next biggest supplier was Honduras at 10,000t followed by the Cameroons at 4,000t
[32] This is even more impressive as between 1991 and 1995, the EU import of pineapples only increased from 215,000t to 231,000t.

increased more than fourfold and have resulted almost doubling market share from 37% to 69% in six years (Table 3).

The main loser in the Costa Rican expansion was Côte d'Ivoire, whose market share declined from 48% to 7%. Ghana also experienced a sharp decline in market share, whilst Brazil, Panama, Ecuador and Honduras all increased their exports and market share. These recent changes in the market supply dynamics has resulted in Ghana now being reduced to the fifth biggest supplier to Europe and, if current trends continue, it will soon be overtaken by Brazil.

Table 3 The share of the EU market for pineapples from different sources, 2001/07

***Source** – Accord Associates LLP based on Eurostat data*

The data clearly shows the very disappointing performance of Ghanaian pineapples in the European market. However, the one piece of positive data is that its unit value of the fruit is the highest of all its major competitors (Table 4). This is probably due to two reasons. First, it is estimated that about 20% of the fruit is exported by air which will have a much higher C&F value. Secondly, a considerable portion of the sea-freight pineapples are either certified as organic or fair trade; which again will mean that they have higher values. Ghana usually provides 30-40% of the EU air-freighted pineapples. Other significant suppliers include South Africa, Cameroon and Benin.

Table 4 Average C&F value of pineapples imported into the EU (€/t), 2007

***Source** – Accord Associates LLP based on Eurostat data*

In fact, the gaining of fair trade certification has made a considerable difference to the profitability of Ghanaian pineapples and is probably the reason why the decline in exports since 2005 has not been greater. However, the fair trade market is small (see box overleaf) and Ghana is, at best, a second supplier to this higher value market behind Costa Rica. Therefore, if Ghana wants to become a major player in the EU pineapple market again, it will have to make more in-roads into the undifferentiated retail market and supply the multiple supermarkets with consistent quality i.e. it will have to compete on price, quality and service.

The perception of the Ghanaian pineapples on the EU market is that fruit quality is reasonable for air-freighting but it is very inconsistent when sea-freighted. Up to the mid 1990s, the EU market preference was for the golden smooth cayenne but this changed rapidly and the super-sweet varieties totally dominate the demand. The production of super-sweet varieties started in Costa Rica and was then introduced into other Central and South American countries. They were not introduced into Ghana until perhaps 2002, but it now dominates production for Europe.

When Ghana started sea-freighting pineapples, it was still growing the smooth cayenne variety. The in-field techniques and post-harvest care management were not good enough to produce fruit that could be transported by sea without suffering from internal blackening and other fruit quality problems. Even though the fruit appeared to be good when packed, when it arrived in Europe, it was very variable. Interviews with importers who have recently purchased Ghanaian fruit would suggest that this problem has not yet been eliminated.

The Fair Trade Opportunity

The most recent data from the Fairtrade Labelling Organisation show that about 8,000 tonnes of fair trade certified fruit was sold in Europe in 2005. This did not include bananas but would include pineapples, mangoes and avocadoes, citrus and deciduous fruits. The UK led sales with 4,700 tonnes of fruit while per capita spend was highest in Switzerland. Sales of fair-trade products have grown strongly since 2005, and sales of bananas, for example, have more than doubled. If similar growth rates applied to other fresh fruit the total market remains very small.

As a brand, however, fair-trade is crossing into the mainstream now and being taken up by the supermarkets. Further expansion is likely in this sector, but with the same performance requirements as conventional products: year round supply and guarantees of quality and price levels are to be expected.

The Ghanaian exporters in the fair-trade sector have been able to obtain a premium for fruit sales outside of the supermarket sector, with some sales in the supermarket sector too. Further expansion will require the opening up of new markets or development into supermarket sales.

Ghana has made good inroads into the Fair Trade market in the UK, supplying to some of the major retailers such as Tesco and Marks and Spencers. The fruit imported by Compagnie Fruitière is sold in the main supermarkets in Southern France and are sold alongside fruit from Côte d'Ivoire; it is claimed that customers prefer the taste of Ghanaian pineapples over those from Côte d'Ivoire.

Even though Ghana has lost market share and has now fallen to the fifth most important supplier to the EU market, there is significant interest from the trade to identify a good alternative supplier to Costa Rica. There is often concern in an industry when one supplier has too high a market share because the buyers feel that they are susceptible to the exporter's negotiating position as well as any interruptions in trade caused by, for example, adverse weather. Importers want an alternative supplier in another geographical area. Traditionally this has been the position that Côte d'Ivoire has fulfilled, but its exports are declining rapidly. It should be recognised that Brazil could become the main alternate supplier; but Ghana should be in an excellent position to fulfil this role; future strategies for the expansion of the pineapple industry should take cognisance of this. However, this will only happen if it makes considerable efforts to expand production, offer a wider range of shipping destinations and improve the consistency and quality of the fruit.

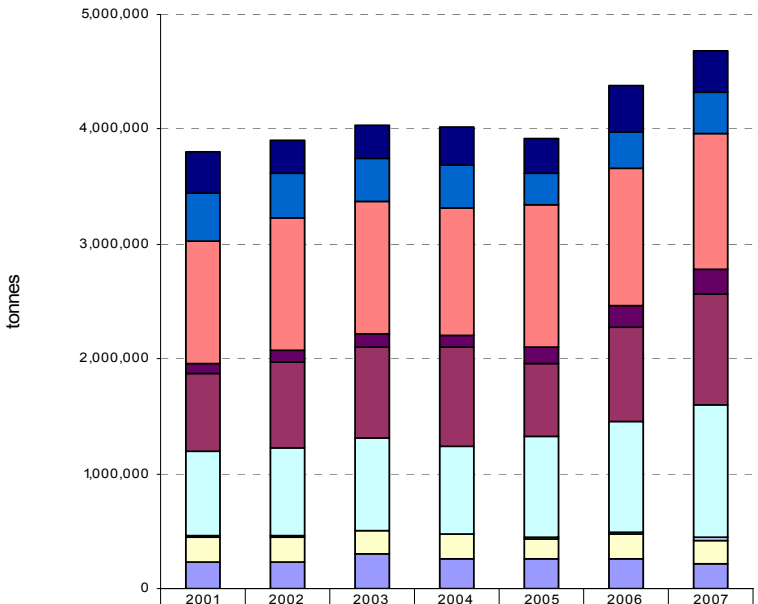
3.2 Bananas

Bananas dominate the EU fruit and vegetable imports; imports are almost 4.7 Mn tonnes worth $2.7bn. Supplies are dominated by Central and South American countries, but Ghana has a small but growing share of the market. In 2007, it exported 33,000t, up from less than 4,000t in 2001. Whilst it still lags well behind its West African neighbours, Côte d'Ivoire and Cameroon, Ghana is expanding its exports more rapidly than both these two countries (Fig 4).

Virtually all of Ghana's banana exports are by one company, Compagnie Fruitière. They report that exports are very successful and that the market demand in France for Ghanaian fruit is good. They claim the taste is better than the Central American fruit and there is a good market demand for the slightly smaller fruit produced in Ghana, which also it a distinct advantage. Compagnie Fruitière's exports are to Southern Europe and they market most of the fruit through supermarkets in Southern France.

The market data and trade interviews regarding Ghana's banana exports are very positive. Its trade is very reliant on one company and the logistics for exports are targeted at Southern Europe (via Port Vendres). If further expansion of the banana exports can be encouraged, it will help reduce logistic costs and, hopefully, will eventually lead to more destinations being serviced by the shipping companies.

Fig 4 EU imports of bananas from different sources, 2001/07



	2001	2002	2003	2004	2005	2006	2007
Others	358,627	277,831	285,511	326,558	302,620	404,630	365,660
Panama	417,420	396,153	381,454	370,835	281,639	312,978	354,056
Ecuador	1,068,550	1,156,983	1,148,753	1,120,761	1,239,220	1,199,320	1,185,551
Dominican Rep	85,910	97,332	111,948	101,337	144,683	176,757	206,216
Costa Rica	680,939	746,290	802,040	856,406	634,511	834,045	971,428
Colombia	735,040	768,037	799,237	766,501	882,395	951,376	1,154,821
Ghana	3,458	3,250	946	1,788	4,207	22,404	33,404
Côte d'Ivoire	226,533	216,718	207,420	210,760	183,752	221,791	189,840
Cameroon	225,419	236,477	298,493	261,231	252,912	252,702	221,918

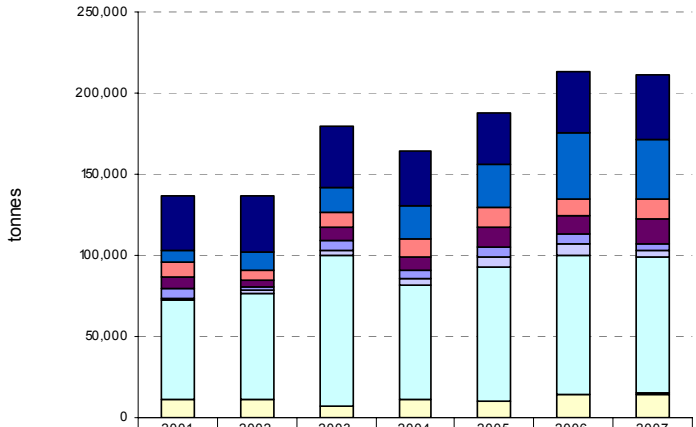
***Source** – Accord Associates LLP based on Eurostat data*

The EU market for bananas is very large and Ghana's exports are increasing quickly; it therefore represents a good opportunity to achieve a significant volume of exports. If Ghana's banana exports do keep increasing, the extra volume should help reduce transport costs and increase frequency of shipments; both of which will help stimulate other sea-freighted commodities. Ghana along with other ACP countries is able to export bananas free of duty into the EU which gives it a significant advantage over Central and South America,

3.3 Mangoes

Trade statistics combine mangoes with guavas and mangosteens; but imports of guavas and mangosteens are very small compared with mangoes. In recent years, the EU imports of mangoes have increased from 136,000t to over 210,000t with Brazil, followed by Peru, dominating the supply. After a few years of very low exports, Ghana has started to expand and exports have now almost reached 1,000t (Fig 5).

Fig 5 EU imports of mangoes, guava and mangosteens from different sources, 2001/07



	2001	2002	2003	2004	2005	2006	2007
Others	33,574	34,838	37,908	33,654	31,717	37,429	39,714
Peru	7,774	10,848	15,398	20,059	26,402	41,040	36,689
Pakistan	8,751	6,263	8,682	10,940	12,307	10,120	13,225
Israel	6,638	4,152	8,759	8,286	12,919	11,353	15,006
Ecuador	6,255	2,661	5,821	5,590	5,937	5,686	3,718
Costa Rica	1,752	1,859	2,652	4,009	6,274	7,549	4,664
Brazil	61,127	65,049	92,959	69,931	82,477	85,117	82,866
Ghana	62	64	83	179	268	295	983
Côte d'Ivoire	10,897	11,220	7,194	11,430	9,857	14,433	14,706

Source *– Accord Associates LLP based on Eurostat data*

The C&F value of Ghana's mango exports are the highest of all the countries considered (Table 5). This is because some are air-freighted whilst the other countries export mainly by sea. Air-freighted fruit seemed to be being squeezed out, but market share has been increasing since 2004 and is now about 28%.

If Ghana's mango exports are going to expand and reach the level of say Côte d'Ivoire, then it will have to develop exports by sea. This will probably mean that the in-field management and post-harvest handling will have to improve to ensure that there are no quality problems.

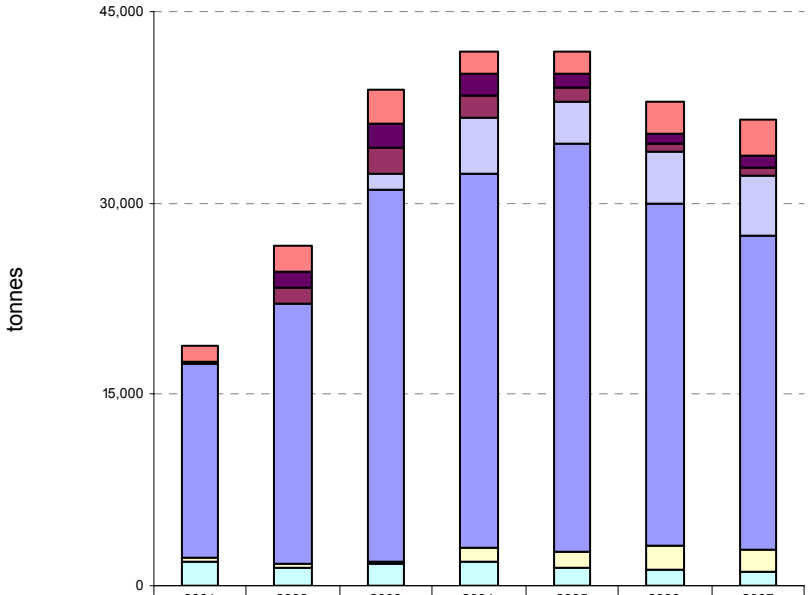
Table 5 Average C&F value of mangoes imported into the EU (€/t), 2007

Source *– Accord Associates LLP based on Eurostat data*

3.4 Papaya

European imports of papaya have virtually doubled from 19,000t in 2001 to 36,000t in 2007; although imports have actually decreased from a high 42,000t in 2004. Brazil is the dominant supplier with currently a 67% market share. Other significant suppliers include Ecuador and Côte d'Ivoire. Ghana is the fourth major supplier, but its exports have almost halved during the time the market size doubled (Fig 6).

Fig 6 EU imports of papaya from different sources, 2001/07

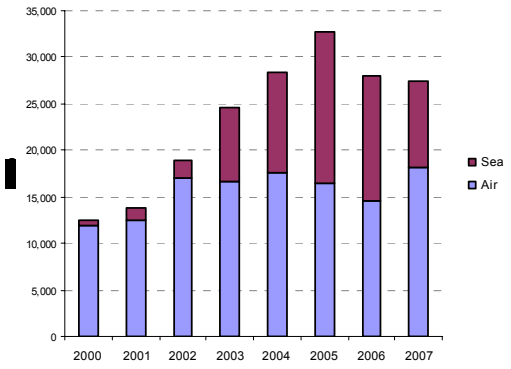


	2001	2002	2003	2004	2005	2006	2007
Others	1,323	2,036	2,636	1,807	1,663	2,512	2,763
Pakistan	1	1,301	2,007	1,676	1,152	785	885
India	23	1,288	2,004	1,722	1,067	519	622
Ecuador	25	14	1,272	4,367	3,387	4,078	4,740
Brazil	15,304	20,332	29,111	29,344	31,855	26,942	24,623
Côte d'Ivoire	236	340	232	1,164	1,398	1,857	1,806
Ghana	1,937	1,414	1,649	1,860	1,334	1,223	1,042

Source *– Accord Associates LLP based on Eurostat data*

The decline in papaya imports over the last three years is interesting. On the surface it is difficult to be certain whether this is due to a decrease in demand, whether there have been production difficulties in the main supplying countries or whether there are other issues. The general view in the market is that the strategy of Brazil in the early 2000s which involved trying to ship more of the fruit by sea and less by the more expensive air freight failed (Fig 7). Whilst sea freight reduced the costs of getting the fruit to the EU, it negatively impacted on quality and the policy was reversed. Therefore the reduction seen in the export statistics is due to a decline in the Brazilian sea freight deliveries.

Figure 7 EU Imports of Papaya

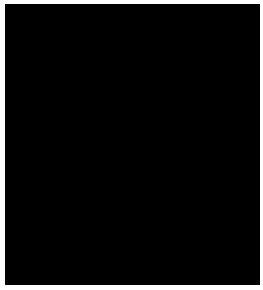


Because the papaya market is responsive to quality, it does present an interesting advantage for West Africa. The papaya produced in Ghana and Côte d'Ivoire is regarded as being inherently better quality than the Brazilian fruit. It is for this reason that Utopia, a major UK fruit-importing company, has helped establish a 250ha papaya orchard in Côte d'Ivoire which it would like to replicate in Ghana. Also, because of the inherently good fruit quality, the biggest processor of prepared fruit in the UK is also interested in investing in a fruit preparation business in Ghana.

3.5 Capsicum

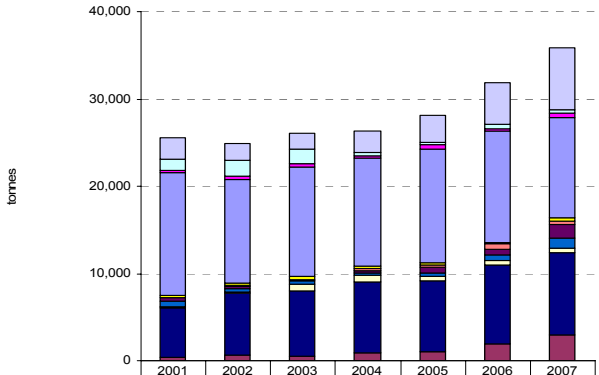
The category "Capsicum" covers a wide range of items including birds eye chillies, sweet chillies, Scotch bonnet etc. Overall, EU imports in this category have shown a good increase from 25,000t in 2001 to 36,000t in 2007. It is also pleasing to report that Ghana's exports have increased almost five-fold during this period. Its growth has been much more rapid than Kenya, one of its traditional competitors in this market (Fig 8). It is also pleasing to note that the unit C&F value of Ghana's capsicum exports is one of the highest; only Kenya, Thailand and Zambia are higher (Table 6). These countries will have higher unit values partly because a significant part of their exports will be pre-packed. The growth in Ghana's exports and the fact that it is growing faster than countries such as the Dominican Republic, which has cheaper air-freight costs to Europe is particularly encouraging. Ghana has a great opportunity to increase its exports as Kenya's competitive position is being eroded as its air-freight rates increase; however, it is important to recognise that to compete most effectively, Ghana must offer quality of product and service comparable to Kenyan exports.

Table 6 Average C&F value of Capsicum imported into the EU (€/t), 2007



Source *– Accord Associates LLP based on Eurostat data*

Fig 8 EU imports of capsicums from different sources, 2001/07



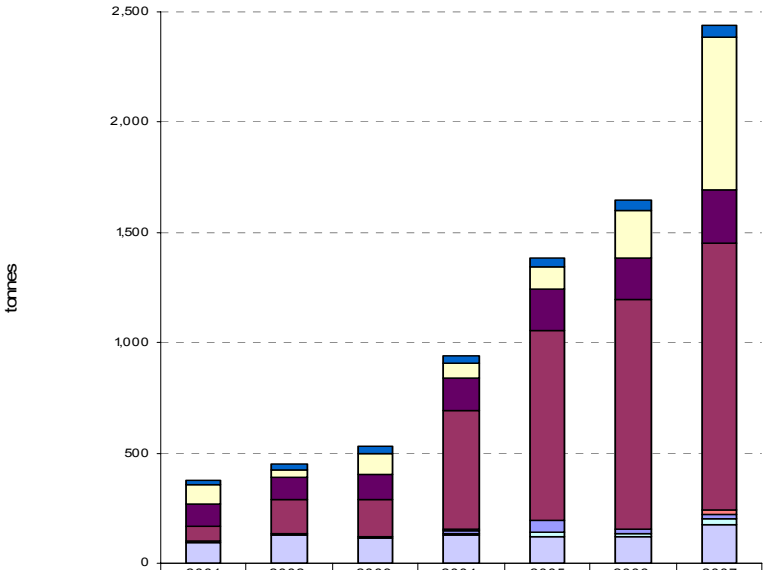
	2001	2002	2003	2004	2005	2006	2007
Others	2,392	1,849	1,737	2,444	3,085	4,845	7,003
Dominican Rep	1,271	1,929	1,776	357	233	429	482
Thailand	323	341	363	375	571	375	478
Turkey	14,058	11,855	12,488	12,279	13,031	12,677	11,520
Zimbabw e	227	312	424	346	201	144	349
Zambia	52	75	53	201	322	652	384
Uganda	288	208	110	280	536	732	1,582
Kenya	689	452	334	195	473	581	1,128
Egypt	134	156	777	860	442	568	578
Morocco	5,635	7,049	7,480	8,168	8,185	8,962	9,382
Ghana	418	650	517	841	1,017	1,955	2,947

Source *– Accord Associates LLP based on Eurostat data*

3.6 Ravaya

Ravaya, or small aubergine, is not a very significant item in the EU market, total imports are less than 2,500t (Fig 9), but it is increasing quickly and should represent an interesting opportunity for Ghana. Kenya supplies almost half the EU's demand; but Ghana has a significant air-freight cost advantage, and therefore has an excellent opportunity to expand its market share. The other significant supplier is the Dominican Republic, which has an effective air-freight rate similar to out of Ghana.

Fig 9 EU imports of ravaya from different sources, 2001/07



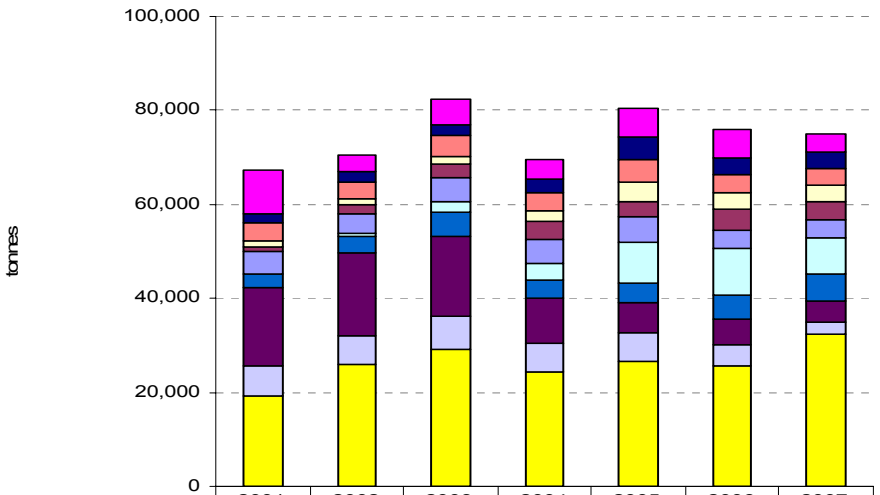
	2001	2002	2003	2004	2005	2006	2007
Others EST	20	25	30	35	40	45	50
Dominican Rep	87	34	96	65	99	214	698
Thailand	102	103	118	149	194	191	239
Kenya	67	155	163	542	857	1,039	1,209
Uganda			2	3	2	4	24
Gambia		1		11	53	20	19
Cameroon	3	2	9	7	17	10	27
Ghana	97	130	113	130	122	124	174

Source *– Accord Associates LLP based on Eurostat data*

3.7 Other vegetables

Within the Eurostat data, there is a category for "other vegetables" which contains Asian and other ethnic vegetables. Ghana has traditionally been a significant supplier of Asian vegetables air-freighted to the EU; however exports have declined from 7,000t in 2003 to 2,500t in 2007. Kenya's exports have also decline dramatically since 2001 (fig 10). The market perception is that the traditional supplier of Asian vegetables, Kenya, is becoming more and more uncompetitive because of high air freight costs (in excess of USD2.10/kg). As Ghana has been reasonably active in this market for a number of years, some of the buyers expected it to profit from Kenya's demise. However, this has not been the case and now the bigger UK importers are increasingly looking elsewhere, for competitive pricing, volume and performance.

Fig 10 EU imports of other vegetables from different sources, 2001/07



	2001	2002	2003	2004	2005	2006	2007
Turkey	9,188	3,505	5,388	4,137	5,884	5,891	3,840
Thailand	2,204	2,395	2,400	2,851	4,920	3,456	3,562
Morocco	3,583	3,598	4,409	3,985	4,781	3,843	3,383
Israel	1,262	1,275	1,627	2,178	4,134	3,775	3,486
Dominican Rep	1,233	1,707	2,833	3,778	3,304	4,298	3,831
Bangladesh	4,668	4,089	5,136	5,075	5,211	3,825	3,898
Argentina	110	831	2,249	3,589	8,894	9,911	7,730
R South Africa	2,682	3,462	5,182	3,833	4,233	5,366	5,637
Kenya	16,789	17,655	16,953	9,804	6,328	5,249	4,674
Ghana	6,511	5,949	6,983	5,812	6,005	4,554	2,565
Others	19,118	26,106	29,297	24,479	26,613	25,659	32,328

Source *– Accord Associates LLP based on Eurostat data*

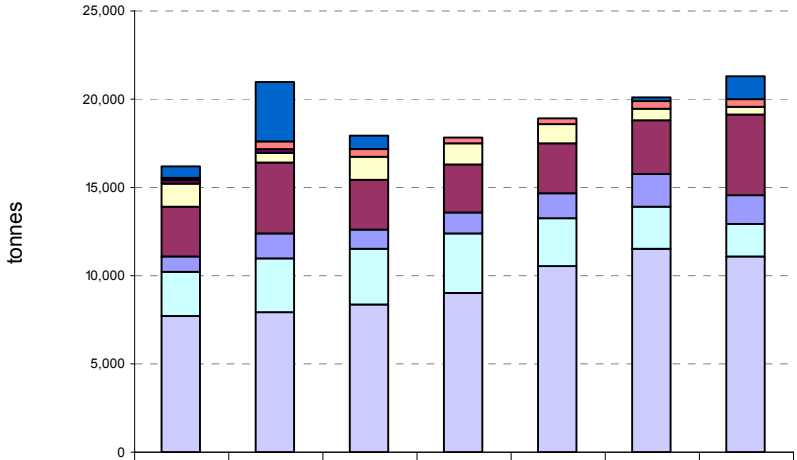
There have been some minor efforts at exporting babycorn from Ghana (8t were exported from Ghana in 2007 compared with total EU imports of 6,500t). The yields of this crop are very low and it is normally only viable if it is grown on farms with cattle which can profitably use the by-products of the maize plants, or if the babycorn are marketed in mixed packs of temperate vegetables.

3.8 Root & Tubers

Figure 11 shows the progress of yam imports to the EU over the past seven years. Ghana leads the supplies to this growing market. For the most part the demand comes from ethnic West Africans living in Europe. The imports either pass through the wholesale markets or are distributed directly to retailers specialising in West African product.

In fact, despite the increase in volumes from Ghana, the value of imports from Ghana remains at about €5mn.

Figure 11 EU Imports of Yams

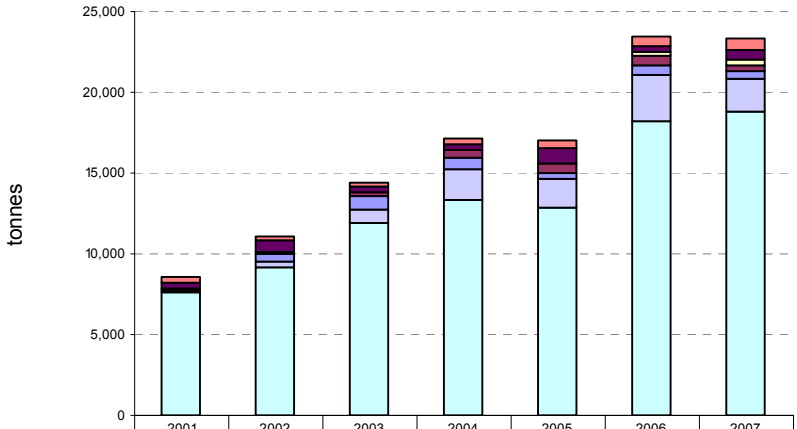


	2001	2002	2003	2004	2005	2006	2007
Others	627	3,331	850	-115	64	246	1,229
St Vincent	183.6	476.9	398	349.6	270.9	382.5	472.8
Nigeria	222.8	232.3	0.4	0	11.5	5.4	0.1
Jamaica	1216.7	468.4	1312.2	1149	1065.6	641.5	422
Costa Rica	2879.3	4080.8	2804.2	2784.5	2815.7	3068.2	4568.3
China	842.7	1440.4	1142	1205.2	1458.1	1799.4	1682.6
Brazil	2469.2	3050.2	3141.1	3325.1	2660.3	2385.5	1844.3
Ghana	7755.9	7889.8	8340	9042.5	10578.4	11569.9	11048

Source *– Accord Associates LLP based on Eurostat data*

Imports of cassava for human consumption (as opposed to the large-scale bulk imports of animal feed) have been growing (Fig 12) Costa Rica leads the suppliers with 80% of the market. Ghana has become the second supplier.

Figure 12 EU Imports of Whole Cassava for Human Consumption



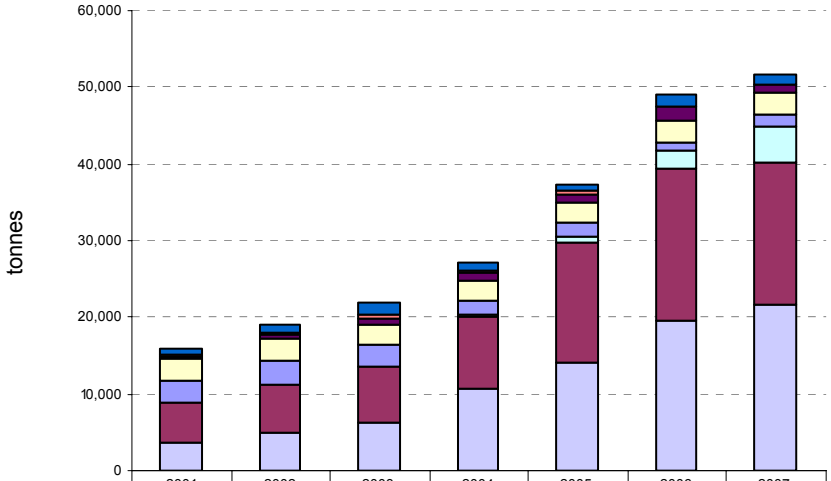
	2001	2002	2003	2004	2005	2006	2007
Others	288	212	309	365	493	611	654
Ecuador	427.6	719.7	345.3	369.5	904	323.4	575
China	5.2	3	0	0	90.9	238.7	363.5
Cameroon	1.3	100.8	245	414.2	521.6	590.4	437.3
Brazil	56.4	535.2	764.5	723.2	370.8	585.7	442.3
Ghana	116.8	310	834.9	1979.1	1770.7	2864.8	2075.6
Costa Rica	7629.8	9212.8	11959.1	13281.3	12890.3	18225	18764.3

Source *– Accord Associates LLP based on Eurostat data*

The trade in cassava is not strictly within the fresh produce category as the cassava is highly perishable and therefore peeled, diced into large chunks and frozen to withstand the sea voyage. Costa Rica also supplies "fresh roots" dipped in wax containing thiabendazole which increases shelf-life at ambient temperature to 6 weeks. Cassava is not valuable enough to cover the cost of air freight.

EU imports of sweet potatoes have grown rapidly from 16,000 tonnes in 2001 to 51,000 tonnes in 2007 (fig13). The sweet potato trade has moved on from being positioned as an ethnic or exotic product and is now firmly in the mainstream supermarket trade. Israel and USA dominate the supplies and despite efforts to introduce new varieties to Africa, there has been little progress from other suppliers.

Figure 13 EU Imports of Sweet Potatoes



	2001	2002	2003	2004	2005	2006	2007
Others	1,019	1,034	1,562	1,007	1,000	1,343	1,324
Ghana	51.2	353.6	359.5	86.1	359.8	121.8	26
Brazil	227.8	512.2	973.1	1057.1	1126.3	1780.8	976.7
Egypt	2978.4	2830.8	2608.6	2654.1	2650.7	2834.4	2869.8
RSA	2913.2	2996	2710.2	1744.6	1696.8	1230.9	1519.8
Honduras	0	0	40.8	360.8	771.9	2132.2	4750.1
USA	5179.6	6371.1	7285.1	9396.5	15682.9	19910	18592.1
Israel	3662.1	4905.4	6330	10718.3	14125.5	19591.9	21559.8

Source *– Accord Associates LLP based on Eurostat data*

3.9 Summary of market statistics

When the EU imports from Ghana for 2001 and 2007 are compared, it shows that the value and volume of fruit exports have increased significantly and vegetables have stayed the same (Table 7). However, the increase in fruit imports is almost entirely due to the expansion in banana trade. As noted above, the pineapple exports declined by 31% between 2004 and 2007. Despite this decline, pineapples are still the major export crop in terms of value earning more revenue than the rest of the fruit together. The volume of vegetable exports has declined, but the total revenues are static. The 2,500t increased in capsicum exports compensated for the 4,000t reduction in the lower value "other vegetables".

Table 7 Comparison of Ghana's horticultural exports to Europe, 2001 and 2007

EU Vegetable Imports from Ghana	tonnes		C&f Value €	
	2001	**2007**	**2001**	**2007**
Capsicums (Chilis)	418	2,947	732,980	5,835,875
Other Vegetables	6,511	2,565	9,740,472	4,140,256
Babycorn	1	8	6,955	9,283
Ravaya	97	174	119,080	357,125
Yams	7,756	11,048	5,242,715	5,372,009
Cassava	117	2,076	83,294	1,388,888
Sweet Potatoes	51	26	33,962	26,891
			15,959,458	17,130,327

EU Fruit Imports from Ghana	tonnes		C&f Value €	
	2001	**2007**	**2001**	**2007**
Bananas	3,458	33,404	2,897,132	20,304,496
Pineapples	33,209	35,463	30,651,756	37,553,172
Papaya	1,937	1,042	2,272,874	1,910,112
Mangoes, guavas and Mangosteens	62	983	107,291	2,802,090
			35,929,053	62,569,870

***Source** – Accord Associates LLP based on Eurostat data*

Overall, the performance of Ghana's horticultural exports has been disappointing; it has failed to expand its exports more rapidly than the market has grown. For example, between 2003 and 2007, the total value of EU imports of the products that Ghana exports has increased by 20% in fruits and by 8% in vegetables. Over this period, the C&F value of Ghanaian fruit exports increased 12%, while the C&F value of the vegetable trade has remained static. However, when the data is disaggregated, there are some very positive trends. For example, Compagnie Fruitière has made exceptional progress with banana and, along with HPW Ltd, pineapple exports. The progress in mango exports has also been very encouraging. In the vegetable sector, the move away from "other vegetables" to the higher value capsicums has also been very encouraging.

3.10 The EU market for processed fruit

Ghana has been successful in attracting investors to establish fruit processing operations. The first significant investment was Blue Skies who started producing fresh-cut (sometimes called prepared) pineapples and have since added fresh-cut mangoes, coconuts and fruit salad mixes. It is estimated that Blue Skies exported about 5,000t of prepared pineapples in 2007, which is the equivalent of 15,000t of fresh pineapples. More recently there have been investments by Pinora and PeelCo. Pinora produce juice from oranges and pineapples.

The market for prepared fruit is one of the most rapidly growing sectors in the EU grocery sector. As with prepared vegetables, the biggest market in Europe is the UK where prepared fruit has doubled in value since 2004. It is now estimated to be worth €155 million/year in the UK with other countries tailing well behind (Table 8). However, it is expected that demand in other European countries will increase in a similar fashion to prepared

vegetables[33]. The drivers for consumption of prepared fruit and vegetables in the EU are the increase of disposable income, the promotion of healthy eating, enjoyment and convenience – with convenience and enjoyment being the most important.

Table 8 Prepared fruit sales value and annual increase, 2006/07

Country	Market size (€m)	Annual growth
United Kingdom	155	33.6%
Netherlands	16	28.5%
Germany	12	39.1%

Source *– Accord Associates LLP based on TNS Worldpanel data*

Pineapple chunks are the second most popular prepared fruit in the UK after the "classic fruit salad" and ahead of the "luxury fruit salad". Pineapple pieces and pineapple slices are ranked sixth and tenth and mango pieces are twelfth. Pineapple is also a significant ingredient in many of the luxury fruit salads.

What is particularly encouraging for investors in Ghana is the rate of increase in the sales of fresh cut fruits; the increase in sales was about 30% per year. In the UK, the average price unit price of prepared fruits decreased by 8.4% during the last year which meant that the actual volume of exports of prepared fruit sales increased by 45.9%. The decline in average prices could have some significant repercussions; processors will be looking to trim some of their costs, including the cost of raw materials and they will also be looking to include cheaper ingredients in some of the fruit salads. Given the very significant air-freight costs associated with prepared fruit in Ghana and the increases over the last 12 months as the price of jet fuel has increased, Ghanaian processors could face more price pressure from the supermarkets and some of this might be passed on to the producers.

Virtually all of the prepared fruit consumed in the UK is sold though supermarkets: 25.4% by Marks and Spencers, 24.6% by Tesco, 19.2% by ASDA and 11.1% by Sainsburys. In fact only 3.9% of sales are through non-multiple outlets[34]. Therefore, virtually all of the processed fruit has to be grown by producers who have GlobalGAP accreditation.

Set against this positive outlook is the argument that air-freighting food is unduly damaging to the environment. The strength of this point of view has faded somewhat over the last year as the true environmental cost of produce has become better understood. While there is no doubt that there is a significant environmental cost in air-freighting produce that is not internalised in the retail price, the international transport is only one of many negative impacts in the chain, not least of which is the impact of the European shopper driving to the supermarket. The hypocrisy of penalising the African entrepreneur while ignoring the environmental footprint of the European consumer seems to have pushed the "air-miles"

[33] The UK lead the way in the marketing of prepared vegetables and now other European countries are starting to show good growth. However, the UK is still the biggest market for prepared vegetables. One of the issues that has restricted the uptake of fresh prepared fruit is that is requires a different cold chain to prepared vegetables.

[34] Data from TNS Worldpanel taken from http://www1.messe-berlin.de/vip8_1/website/MesseBerlin/htdocs/www.freshconex/de/Event-DB/Edward_Garner_Part_2.pdf

argument with a “fair-miles” case. In the case of prepared pineapple it would be interesting to know the comparative environmental impact of sea-freighting three tonnes of fresh pineapple as opposed to air-freighting one tonne of fresh cut product.

In summary, the market for prepared fruit is growing very rapidly and it is very pleasing to note that investors have established successful operations in Ghana. There are other companies that are interested in making new investments. However, there are a number of other countries that have also recognised the growth in this market segment and are starting to target the EU market. In particular, investments have been made in Brazil, which also grows a significant area of pineapple; this may become a significant competitor to Ghana. It is therefore important that consideration is given to supporting this sector to ensure that that the competitive position is maintained and even strengthened.

4. FREIGHT

The major direct cost associated with horticultural exports is freight. The frequency and destination of the air flights or sea vessels also has a major impact on market access. The structure of the sea and air freight services throughout the world have changed over the last few years and these might impact on Ghanaian horticultural exports.

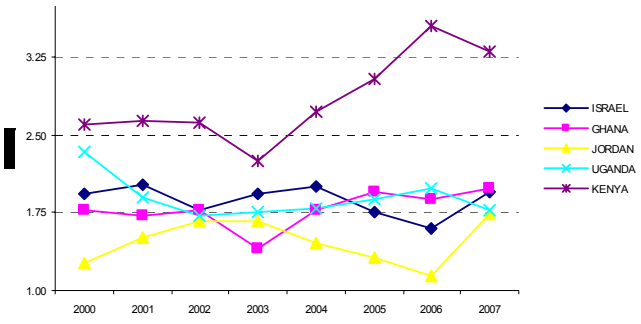
Air freight - the basis of Ghana's horticultural exports to Europe was the air freighting of pineapples and then Asian vegetables. Ghanaian exporters were able to compete effectively from the early 1990s because of the cheap freight that they negotiated. Cargo aircraft that delivered goods from Europe into Nigeria started calling at Accra to collect northbound freight. The space available increased as northbound freighters from South America began to call at Accra too and competitive rates, in the region of USD0.70/kg, were available.

Since the mid1990s, cargo aircraft have become much larger[35], and countries with smaller volumes of perishable goods have found it difficult to maintain good freight connections. The volumes of exports that Ghana built up in the 1990s ensured that it was still a good destination for northbound freight.

More recently, the substantial increases in the price of oil have led to significant fuel surcharges on freight. However, the importers interviewed did not have problem with either the price or quality of the air freight service out of Ghana. It is reported that the effective freight rates, i.e. including fuel and insurance surcharges, are about USD1.20 to 1.40/kg. This is significantly cheaper than charges out of East Africa (USD2.20/kg) but slightly more expensive than the Caribbean (Dominican Republic was often quoted at between USD0.90 and USD1.10/kg).

The future development of the worldwide air freighted produce business faces two threats: firstly, fuel prices and secondly environmental arguments. While Ghana has relatively low air-freight costs compared to some competitors, the unit value of the exports is generally quite low and transport costs make up a greater proportion of the landed value. Figure 14 shows, for example, the unit value of chillies exported from several origins. Fluctuations in transport prices will have less impact on the pre-packed Kenyan product destined for the supermarket.

Figure 14 Unit Value of Air-freighted Capsicums Imported to EU



Air freight space from Accra to Europe has recently expanded further with the start of a KLM/Air France service providing up to 40 tonnes capacity per week to Paris.

[35] In the early to mid-1990s, most of the cargo freight planes used to move perishable cargo out of Africa were either Boeing 707s or DC8s; these have now been replaced by much more fuel-efficient and quieter Boeing 747 freight aircraft. The Boeing 747 fleet are able to carry cargo much more cheaply than the older smaller aircraft.

Sea freight – ten years ago the best option for Ghanaian fruit exporters was to develop sufficient volume of exports to attract refrigerated vessels to call at Tema, rather than depending on the more expensive reefer containers. Calculations in 1998 projected a 25% saving using reefer ships as opposed to containers[36].

However, the structure of the sea freight industry has changed in recent years; there has been considerable investment in container ships but not reefers[37]. This has led to an over-capacity in containerised transport which has resulted in a reduction in rates not seen in reefer vessels. While this may give exporters more flexibility, it is still important to build up the volume of horticultural exports to create competition in the shipping modes and to develop the selection of destinations. The volume of banana exports from Ghana's Central and South American competitors has led to the development of services to a wide range of European ports.

Sea freight rates for refrigerated cargo from Ghana are comparatively high. A 40 foot reefer container is quoted at $5580[38] from Tema to Northern Europe, giving a cost of around $279/ pallet. This compares with a rate on the AEL refrigerated boat to Southern Europe of about $220/pallet.

Apart from cost, the container services from Tema are disadvantageous because of the use of hubs in Europe. Maersk for example offload all containers at Algeciras in Spain for trans-shipment onto feeder vessels. If the schedule of the incoming vessel from Africa and the outgoing feeder vessel to other European ports do not coincide, the container remains at Algeciras until the next available sailing. This can add significantly to the journey time. On the other hand, AEL have dropped their reefer vessel sailings to Northern Europe from Tema and produce must travel by road from Port Vendres in Southern France.

An increase in outgoing volumes of fresh produce would have a significant impact on the price, availability and choice of destinations.

[36] The Future for the Ghanaian Horticultural Export Industry" by Accord Associates, July 1998.
[37] The average lifespan of a reefer vessel is generally regarded to be between 26 to 28 years and the average age of the fleet is currently 21 years.
[38] This is a ball park figure and would be subject to negotiation on volume etc

5. SUMMARY OF GHANA'S POTENTIAL FOR HORTICULTURAL EXPORTS TO THE EU.

Ghana has underachieved in supplying the EU market. It has comparative advantages, for example good climate, reasonable soils, proximity to the EU market, cheap air freight costs, adequate infra-structure and good incentives provided by Government. However, it has lost market share in the pineapple, papaya and other vegetable markets. In contrast it is making good progress with yams, bananas, mangoes and capsicum (Table 7). This section discusses what should be realistic targets for the medium to longer term value and volume of horticultural exports. It is assumed that there will be significant interventions to help the industry reach its potential; it is also assumed that these interventions will be focussed at creating the biggest impact within the industry as opposed to just helping smaller-producers.

Pineapples – The biggest disappointment over the last five years has been the decline in the pineapple exports. Whilst it is accepted that part of this was due to the rapid change in the market's preference for super-sweet varieties rather the smooth cayenne and Ghana was possibly slow to react to this change. It was also disappointing to note that Ghana had fallen from being the third biggest supplier to fifth place. However, as the second place supplier, Côte d'Ivoire, has lost market share even more rapidly than Ghana and is now a similar sized supplier as Ghana.

In fact there is no obvious main alternative to Costa Rica, a fact that worries importers because Ecuador, Honduras, Panama and Brazil are all similar sized suppliers as Ghana and Côte d'Ivoire. No buyer likes to be over dependant on one source, not only because of the supply risks but also because the negotiating position is weak. Vigorous alternatives are needed. Markets get nervous when more than two-thirds of supply are sourced from one country – which given that total EU imports could soon be 1 Mn tonnes/year, buyers will be looking to source over 300,000t/year from countries other than the Costa Rica, and ideally most of it should come from one country.

In order to spread their risk, buyers would like the alternative supply to be on another continent, which means that their preferred second buyer could be either be in West Africa, i.e. Ghana or Côte d'Ivoire or possibly, South America, i.e. Brazil or Ecuador. Brazil and Ecuador have an advantage because of their more frequent and varied shipping destinations. There is considerable good will amongst the buyers for trading with Ghana, but it must improve its quality, reliability and frequency of delivery. Therefore, if Ghana is to reverse its decline in pineapple exports, it must encourage larger and more technically competent businesses to invest in pineapple production. If support is only focused on small-farmers to export fair trade and organic produce, Ghana will remain a secondary supplier to a niche market[39].

Given that the opportunity for non-Costa Rican suppliers will be more than 300,000t/year in the medium term, Ghana should be targeting at least a third of this, i.e. over 100,000t/year. This could be done by attracting three of four more large investors to stimulate large scale production. With this volume of exports, sea freight would be more frequent and, it is hoped, that there would be more varied destinations which would improve marketing. When the

[39] One importer noted that their preferred fair trade and organic supplier was Costa Rica. This is not surprising because the competitive advantage for fair trade and organic production is normally in the same countries as for conventional production.

industry has reached this level and has a small number of major exporters, they could then purchase produce from smaller-farmers who would be contracted suppliers[40].

Bananas – There is even bigger potential for Ghana to supply bananas to Europe than pineapples. The total market is much larger, Ghana has a duty advantage compared to Central and South America and in the last five years, Golden Exotic has made considerable progress in developing exports to the EU. One of the world's major banana companies, Chiquita, have recently tried to invest in Ghana, but they failed because they failed to identify an appropriate local partner. However, if they or other major banana companies could be persuaded to invest, it should be possible to develop an industry exporting more than 200,000t/year in the medium-term. To put this into perspective, it is slightly less than Cameroon is currently exporting. In addition to the very significant revenues and employment opportunities this would generate, it would also vastly improve the logistics for marketing other tropical fruit.

Mangoes – Ghana has made good progress in developing mango exports to the EU since the focus for production was moved away from the coastal plains to drier areas in the north of the country. Already exports have almost reached 1,000t/year and, given that consumption is increasing rapidly in the EU, it is hoped Ghana's exports will reach 10,000t in the medium term. To put this target into perspective, it is less than Côte d'Ivoire is currently exporting.

Papaya – Ghana's papaya exports have been disappointing, but there is an indication that importers in the EU are interested in developing professional growers in West Africa because of the inherently good quality. If new investors can be attracted to invest in this crop, then Ghana could be the country to take advantage of expected upturn in consumption of papaya. It is expected that Ghana has the potential to achieve exports of 5,000t/year.

Capsicum – Capsicum exports have shown good growth from Ghana and the EU market is expanding quickly. This creates a good opportunity for Ghanaian exports. It is anticipated that Ghana has the potential to export 5,000t/year in the medium term.

Ravaya – As with capsicums, the EU market is expanding rapidly and Ghana should be able to take advantage of this growth. Therefore, it is expected that the potential is for exports to reach 500t/year in the medium term.

Other vegetables – The EU market for "other vegetables" is reasonably constant, but the traditional main supplier, Kenya is declining because of the high cost of air-freight which creates an interesting opportunity for Ghana to exploit. Air-freight rates out of Ghana to Europe are significantly below those from Kenya (USD1.20/kg compared with USD2.20/kg), so this represents a good opportunity for professional growers and exporters to exploit. Therefore, it is estimated that Ghana has the potential to increase its exports to 8,000t/year.

Summary – If Ghana reaches its medium term potential for horticultural exports to the EU, then it will market over 325,000t/year of fruit and almost 15,000t/year of air-freighted vegetables (Table 9). In total, this will generate over $250mn/year. Almost half the revenue is generated by the banana industry and when the pineapples are included, the two crops contribute almost 75% of the income. This highlights the importance of these two products.

[40] It is important that small-farmers are committed to supply one particular exporter to ensure that the GlobalGAP certification can be achieved.

These two crops are not only important in terms of revenue, but they will help create the logistical infra-structure required to transport other higher value fruits such as mangoes and papaya. The potential earnings from the vegetables are much less – possibly about 10% of the fruit exports.

Table 9 Ghana's potential tonnage, value and employment opportunities from export horticulture - 2015

Source *– Consultant's estimates*

In addition to contributing significantly to Ghana's trade, horticultural exports can create a very significant number of good quality jobs. It is estimated that if it reaches its medium term potential, this could be as many as 20,000 jobs[41]. Most of the jobs will be in the banana and pineapple industry. The assumptions for reaching the potential for these crops include that they are orchestrated by large professional companies who are targeting the multiple retail outlets who will demand GlobalGAP. This will ensure that the employment created will also include access to medical and education, i.e. they will be good jobs. In addition to the direct employment opportunities, there will be many indirect jobs created servicing the export industry.

[41] In calculating the employment creation, some employment assumptions were made. These were that professionally managed banana estates created one job per 25t of fruit exported, pineapples exports created one job per 18t, and mangoes and other fruit created one job per 12t. Vegetables create more jobs per tonne exported – in the case of Ghana it was assumed that one job was created per 2 tonnes exported.

Table 10

Product	Transport	Main market		Market statistics - 2001		Market statistics - 2007		Current trend	Potential 2015[1]	Comments
		Country	Segment	Size (t)	Share (%)	Size (t)	Share (%)			
Pineapple - air	air	Switzerland/ Italy	Wholesale	6,000t*	65%*	6,000t*	65%*	↔/↓	6,000t	Traditional Ghanaian export
Pineapple - sea	sea	Mainland EU	Supermarket Fair Trade	27,000t	8.9%*	29,000t	4.3%*	↓↓↓	100,000t	Potential will only be achieved if supply chain becomes more commercial and fruit quality improved
Bananas	sea	South EU	Supermarket	3,500t	0.1%	33,000t	1.2%	↑↑	200,000t	One company dominating exports, a vital crop to improving logistics
Mangoes	air	South EU	Wholesale	62t		983t	0.5%	↑↑↑	10,000t	Need to enhance export by sea
Papaya	air	South EU	Wholesale	1,937t	10%	1,042t	3.0	↓↓	5,000t	Needs at least one more serious and professional investor
Chillies	Air	UK	Wholesale	418t	1.6%	2,947t	8%	↑↑	5,000t	Need to become more professional
Ravaya	air	UK	Wholesale	97t	25%	174t	7%	↓↓	500t	Need to become more professional and out-compete Kenya
Asian veg	air	UK	Wholesale	6,511t		2,565t		↓↓↓	8,000t	Need to attract serious investors and competent management
Yams	Sea	UK	Wholesale	7,750	48%	11,048	52%	↑↑	15,000t	An informal trade, not influenced by certification.
Cassava	Sea	Netherlands	Wholesale	117	1.5%	2,076	9%	↑↑	5,000t	Surprising growth

Source *– Accord Associates LLP based on Eurostat data and trade interviews*

Key - ** Estimate*

[1] Assumes that there are positive interventions

6. CONCLUSIONS

1. The present study is a scoping exercise to review the options for a horticultural export strategy. It aims to identify the issues and problems that need to be addressed.
2. By export horticulture we are referring in this phase to horticulture directed at profiting from the European market. This definition is important because the European market has quite different requirements from the local or regional markets.
3. We could also include North America and the Middle East here. North America is omitted from the reasoning because the comparative advantages of Ghanaian supply are insufficient, except perhaps in yams. The Middle East is providing some demand currently, for example in fresh pineapples and mangoes, and Ghana's position here could be explored in more detail as an adjunct to the European market.

Recent Performance of the Ghanaian horticultural products in Europe

4. Ghanaian horticultural products are present in a number of the European countries and are marketed through the multiple retailers and the wholesalers.
5. The major Ghanaian products sold in Europe are bananas, pineapples, mangoes, papayas, yams, chillies and various Asian vegetables
6. There are some notable investment success stories in, for example, fresh cut pineapple, orange juice, and bananas. Mangoes may be emerging now too.
7. Yam and chilli exports have grown without significant investment, or indeed support as these are aimed at ethnic markets where Ghana has some advantages either in air-freight cost (chillies) or in trading connections (yams).
8. In the key product of pineapples, which currently account for 42% of the value of Ghanaian whole produce into Europe, Ghanaian exporters have lost market share in the period 2003 to 2007. The European market for pineapples has almost doubled in size, but Ghanaian industry has been unable to capitalise on this expansion.
9. Current exports of whole pineapple fruit are 40% focussed in the Fair Trade niche. This does not leave room for rapid growth and is vulnerable to attack from Costa Rican competitors. Another 40% is successfully marketed through several channels in Europe by the investor, Compagnie Fruitière.
10. We conclude that Ghanaian horticultural products are not achieving their full potential in the European market. Can we learn from the achievements of the various donor programmes?

Why are Ghanaian products not achieving their potential?

11. We know that Ghanaian pineapple producers have been hard hit by the switch to MD2. However, at this traumatic time Ghana has dropped down from 3rd to 5th place in the supplier rankings and market share has dropped from 10.5% to 4% between 2003 and 2007.

12. Other products have also under-performed (mangoes and papaya, vegetables) and it is proving increasingly difficult to compete in the European arena.

13. Ghanaian enterprises have been unable to convert the comparative advantages in any of these products into real competitive advantage. The existing comparative advantages (e.g. location, freight, climate, labour) are insufficient to be able to profit easily from the European market any longer. Meanwhile, the major competitors in Central and Southern America are exporting from large scale, efficiently managed projects that are committed to servicing the market with planned programmes of supply.

14. To maintain low costs, while achieving the European market standards of quality and performance, requires skills and capital. Modern equipment, efficient logistics and strong management are now essential if an enterprise is to compete in Europe. This is even truer where there are few comparative advantages.

15. We can therefore say that a business-like and technologically-innovative approach is needed, appropriately financed and well managed with technical expertise.

16. Ghana needs investors and technical management to drive exports forward and to spearhead an opening for the Ghanaian smaller scale producers to utilise. Therefore we need to understand a) how to support current investments and b) how to attract further investment.

17. Failure to move in this direction will see Ghanaian output confined to the diminishing low price market in Europe and minor niches. Larger scale exports will impact on the sea-freighting capability, with more frequent sailings, more varied destinations and opportunities to lower costs.

So where do small scale producers fit?

18. Currently, the Ghanaian small scale producer is struggles to compete in the mainstream European market with fresh produce passing along a route of an aggregator consolidating product for export. This may once have been possible, and it still is where ethnic demand is concerned, but for the supermarket a new order of supply is needed. The supermarkets have performance requirements that stretch the capabilities of the best of their suppliers while the competition between suppliers is acute.

19. There is a significant contrast between the success in yams, exported to the European ethnic markets and the failure in sweet potatoes, sold through the supermarkets.

20. Small scale producers tend to supply the local and regional markets. These can be very substantial and have a number of significant advantages over the more remote opportunities.

21. Within the local market, there are opportunities to supply to processors and that way the small scale producers can access the Europe-directed supply chain. The opportunity for Smooth Cayenne pineapples does not appear to have been realised. There would seem to be a potential demand for 45,000

tonnes based on the current needs of Blue Skies (15,000 tonnes), and the reported capacity at Pinora (30,000 tonnes).

22. This demand requires a greater production than was achieved by small scale farmers at the peak of Ghana's export history. However, we need to understand the needs of the processor (Blue Skies requires both Smooth Cayenne and Sugar Loaf) and returns to the farmer from sales to processors.

23. Ghana cannot base an industry on a market where the demand is focussed through two companies. We must broaden the processing base.

24. This requires investment in processing plants and the development of an outgrower base. Then, small scale farmers will have an important role to play in supplying processors. Sales to local processors are more attractive than exporting in terms of linkage, contracting and payment.

25. Similarly, outgrowers have a role to play in supplying into nucleus farms and supplementing grower/exporters. Indeed, some UK supermarkets, keen to support the small scale farmers, are promoting this route. The model here can take various forms but mot likely will be based around a nucleus of production and will certainly require significant investment.

26. On the Smooth Cayenne production we should note that there remains a demand for 5,000 tonnes of high-end premium air-freighted product. Perhaps this can be expanded with an appropriate marketing initiative.

What are the implications for a national strategy?

27. This study is directed at preparing a strategy for building exports to Europe. We believe that it is important to recognise the separation of the local and regional supply chain from the export oriented chain, and then address the need to attract investment into export horticulture.

28. We need to look at the opportunities for investment; what induces investment; why do other countries attract more investment; what are the experiences of current investors in Ghana, and where can we find investors? We need recommendations based on evidence. We need to assess the capacity and willingness for investment from within Ghana as well as from foreign sources.

29. With an investment oriented approach, the development of Europe-directed horticultural exports will cut across several Ministerial responsibilities. We note, for example, that preliminary discussions with existing investors suggest that the major issues are not agronomic but concern transport, currency, management skills and VAT on imports. The initiative will require and active co-ordination and promotion.

30. As regards horticultural production, the medium-term focus of the Ministry of Agriculture should be clearly on support to the smaller scale producers and the value chain approach taken by FASDEP II is important here. The work developing the small scale farmer sector will be critical to the health of the overall industry, supporting the processors and the diversity of producers will bring sturdiness to the sector.

31. Europe-directed horticulture will impact on the rural economy with employment and with opportunities for outgrowers once the investment in a competitive, managed industry is in place.

32. The activities of the Ministries need co-ordination, and, for this, the National Horticultural Task Force may be the appropriate vehicle. In effect, it could become a horticultural export development council merging the current roles of the trade associations.

33. There is a risk in the current donor environment that momentum and knowledge will be lost as the current projects come to the end of their terms. An arrangement needs to be found, and perhaps it is the NHTF, that can learn from the project based approach and apply it to a more general strategy.

7. NEXT STEPS

The next stage is to develop a strategy to assist Ghana in maximising its potential in the European market for produce, fresh and processed.

GHANA BASED

1. Validation

Before we embark in this direction we need to validate our approach with the sector leaders in Ghana. There needs to be an agreement that although there have been developments and achievements in the market, Ghana is not maximizing its potential and positioning itself competitively.

A shift in emphasis is needed to take export horticulture upwards: export oriented horticulture needs a solid business core because it can no longer be expected to grow out of aggregations of small scale operations. To progress in the European market and achieve the potential benefits, Ghana must have a foundation of lead firms capable of exploiting the European demand for tropical fruit and vegetables.

Without developing a strong business culture, the Ghanaian exports of fresh produce will be confined to low value markets (for example the yams and ethnic market chillies) with limited growth potential, or to niches in the higher value offerings (such as Fair Trade pineapples) growing slowly and vulnerable to the aspirations of the South American competition. If Ghana is to achieve a realistic target of sales to Europe in excess of 300,000 tonnes per year by 2015, then building blocks of larger investments, well-equipped, with efficient logistics, and above all soundly managed, will be needed. Pioneers such as Blue Skies, HPW, ITFC, Compagnie Fruitière and Pinora are showing the way forward.

This then points to a different approach from the current development orientation that views the smallholder as a competitor in the European market. Firstly, a stronger foundation of agri-businesses is needed. Through these Ghana can gain the macroeconomic benefits of employment, fiscal revenue and foreign exchange that export horticulture offers. Second, the small scale independent producer can be encouraged to join the export supply chain through this structure of processors or estates supplemented by outgrowers.

The strategy for export horticulture, therefore, focuses on the agri-businesses or lead firms. Encouraging investment, developing technical expertise, supporting good management, and upgrading the infrastructure and improving the operating environment will secure the foundation.

Support to the small scale farmers growing export crops is then directed at their position as suppliers to this value chain. So, the support must be planned in partnership with the businesses with the aim of an increasing return to all in the chain from expanding export sales.

Export horticulture is, by definition, a part of the wider Ghanaian horticultural picture but it forms a distinct subset where the issues are firmly commercial and not problems of food security, nutritional status or indeed subsistence. Failing to separate them

does not best serve the diversity of producers. Assistance and support must be allocated appropriately.

2. What capabilities are required to successfully supply in to the European/British supermarket trade?

The performance requirements in terms of programmes, volumes, promotion and customer service need to be fully appreciated. Selling into this sector is not only a question of conforming to the regulations of the GLOBAL GAP but also to matching the customer service requirements in competition with other suppliers. An example mentioned earlier in the report noted the difficulty of competing in the sweet potato market, where significant sales pass through the supermarkets, as compared to the yam market, where most sales are outside of the supermarket sector.

3. Are there other markets and products that might be of interest?

Are there opportunities for the small scale producers in other products or other arenas, such as the niche markets of organic, or fair-trade, or other geographic destinations?

4. Who are the lead firms and what are their needs?

Key areas noted already include

- Infrastructure – roads, airport facilities, power
- Transport costs
- Shed 9
- Middle management

5. What are the current requirements for outgrowers? How can we stimulate it?

Pinora, for example, are under-supplied with pineapples. How do we expand the opportunities and develop the supply? There is a great base of small scale production in the Ghanaian horticulture sector. With the appropriate linkages these producers can supply into the European market, through the processors and the larger grower/exporters. The diversity of producers provides a broader foundation on which to base the industry.

6. Are there potential partners in Ghana?

Having failed to find a partner, Chiquita was unable to proceed with its plans to establish production in Ghana. However, the door is not closed and they may yet be interested. The possibility of other potential partners should be investigated urgently.

Other investors will use other models but most will require some kind of partnering to establish. Identify and interview potential players.

7. What can we learn from the widespread failures amongst SPEG members and in particular from the demise of Farmapine?

A more detailed analysis of the collapse of some of the companies and the survival strategies of the remaining ones may provide useful pointers for the industry as a whole. Who has succeeded in the MD" supply chain and what can we learn from them?

8. What can be done to develop capabilities of management and innovation?

MiDA is allocating $66mn to training of Farmer Based Organisations and yet there seems to be a shortage of management capability available in agribusiness. We need an appraisal of the currently available training in agri-business management. Then, a component to augment the present capability can be incorporated, if needed, into the strategy for export horticulture.

It is critical that the industry has a good capacity to introduce and adopt innovation in order to remain competitive. The position of export horticulture in relation to the other national agricultural products will determine to some extent the resources that can be allocated. The customer needs to be included in the determination of the support to technology and this process, perhaps involving matching grants as a mechanism, needs to be reviewed.

9. What are the current policy attractants for investment? How can they be best adapted for export horticulture?

We believe that Ghana has the potential to supply in excess of 300,000 tonnes of fresh produce annually to Europe within the next 8 years. This would create over 20,000 direct jobs, a far greater number of indirect jobs, and have a knock-on effect in terms of developing an infrastructure and logistical capability for produce exports. The potential rewards justify an assertive policy to encourage investment.

10. How is the export horticulture sector best directed?

What might a development council look like? What would be the Terms of Reference? Might it be responsible for driving through the opening and management of Shed 9? Would the National Horticultural Task Force be the appropriate foundation for this role? How can it be made accountable?

The appropriate balance of direction from the various ministries and boards need to be appraised: There are issues beyond agriculture here that concern investment, export, and treasury. The appropriate institutional support needs to be defined.

11. Overview of the comparative and competitive position to producers attracting investment

There are many examples we could review, but suggest the following:

Ethiopia - a new comer on the air-freighted horticulture scene and growing quite rapidly through a process that has been driven by incentives and support from central Government and is based on the country's comparative advantages.

Senegal - expanding supplier to Europe, based on low sea-freight costs and short shipping times to Southern Europe

Egypt - development of processing of produce

Costa Rica – what has attracted the investment to create the competitive position of this origin?

The ability to involve small scale producers in the chain is a key issue to be researched here.

12. Identify potential investors and interview

Who are they?

What do they want?

What would make Ghana attractive?

13. Sources of Finance

What sources are available for agricultural production or processing projects in Ghana? The range of sources has expanded significantly over the past ten years, and is no longer confined to national or multilateral donor facilities. Can the IFC be incorporated into this strategy?

14. Collate the information into a Strategy for Horticultural Export Sector

The final strategy report taking the view forward to 2015 will be presented in Ghana.

ANNEXES

ANNEX I Donors in the Export Horticulture Cluster

A summary of each of the donor projects that have recently been or are directed at export horticulture follows. It has not been possible in the time available, nor would it be appropriate in this forum, to provide an evaluation of the plans or achievements of these programmes.

A. Horticultural Exports Industry Initiative (HEII)

HEII grew out of the recommendations of the 2003 World Bank report on the horticulture sector[42] and formed a component of the much larger AgSSIP programme. The broad objective was to consolidate the gains in export horticulture by securing the competitive position of Ghanaian producers. Seven key activities were envisaged:

1. Post-harvest infrastructure
    - Refurbishment of Shed 9 at Tema
    - Upgrading of perishable handling at Kotoka International Airport
    - Development of field post-harvest centres
2. MD2 sourcing and development
3. Planting Material Sourcing and Dissemination
    - Trials
4. Innovative Research and Development
    - GIS
    - Technical innovation
    - Dissemination & extension
5. Food Safety & Quality Management
    - Pesticide Regulations
    - GAP
    - Certification
6. Industry ownership and farmer equity
    - Shed 9
    - Kotoka Perishable handling

[42] *Ghana Horticulture Sector Development Study* 2003 Voisard and Jaeger, Accord Associates

- Seed sourcing operations

7. Strategic support systems
    - Strategic studies
    - Horticulture agribusiness information hub
    - Market intelligence tools
    - Project monitoring

In the event, substantial changes to the plan were needed. The decision to extend the refurbishment of shed 9 at Tema used a greater portion of the budget than had been forecast. This development was considered to be a priority and other activities were sacrificed, among them developments to Kotoka International Airport and the field post-harvest centres. With a running time of barely three years there was little opportunity to carry out research and development, but there were success in a number of areas such as the introduction of sweet potato varieties and trials on okra and melon varieties. Apart from Shed 9 other success stories include the role out of almost 5mn MD2 plantlets for multiplication, food safety work leading to harmonized lists of registered pesticides, the development of the Ghana Standards Board laboratories and work on GAP certification with TIPCEE and MOAP. HEII also applied matching grants to support the ITFC mango outgrower project at Tamale and the strategic support systems for the industry were developed with for example GIS. .

While there has been an overall evaluation of the AgSSIP programme there does not appear to have been a detailed evaluation of HEII. A more complete assessment of the contributions would be useful. That said, HEII has succeeded in raising the profile of the sector dramatically, both within MoFA and to the donor community (TIPCEE, MiDA, EMQAP), bringing substantial support to the sector.

B. Export Marketing and Quality Awareness Programme (EMQAP)

EMQAP is financed by the African Development Bank and began in 2007. The objective is to increase the incomes of horticultural crop farmers and exporters and of cassava producers. It is being implemented in Central, Eastern and Volta Regions and Greater Accra and focuses on export fruits (e.g. pineapple and papaya) and vegetables (e.g. chillies and eggplants) as well as cassava. The project has four components, namely (i) Production and Productivity Enhancement; (ii) Export Marketing Promotion and Infrastructure Improvement; (iii) Capacity Building; and (iv) Project Coordination and Management. There are plans to construct four temperature controlled pack houses, to upgrade over 400km of feeder roads, to develop demonstration farms in each region and to continue the work of HEII on GAP.

C. Ghana Private-Public Partnership Food Industry Development Program (GHPPP)

GHPPP was initiated in 2002 and ran for 30 months. The programme linked together Michigan State University's (MSU) Partnership for Food Industry Development, Fruits and vegetables (PFID-F&V) programme, Royal Ahold, a Dutch supermarket and foodservice company, and the NGOS involved in the USAID Trade and

Investment Reform Program (TIRP), namely AMEX International, TechnoServe and CARE International.

The partnership worked under five objectives:

1. Develop logistical chain to achieve products of specified consistency, quality and safety.

2. Develop skills and capabilities of all participants in the horticulture supply chain.

3. Establish a Ghanaian NGO with the capability to lead the horticultural industry in sustainable and profitable development.

4. Provide technical assistance where needed to entities in all segments of the horticultural supply chain.

5. Develop and market commercially viable nutritional products for children and pregnant women and other natural products.

D. Trade & Investment Program for a Competitive Export Economy (TIPCEE)

TIPCEE is a five year program funded by USAID and implemented by Chemonics in a consortium with CARE and TechnoServe among others. The program began in 2004 and the goal of TIPCEE is to increase Ghana's private sector competitiveness in world markets through an improved enabling environment and a strengthened capacity of the private sector to respond to market demands. The objectives for TIPCEE can be grouped into four broad categories: expanded market access, more integrated industry/cluster activities, improved performance of enterprises and smallholders, and key policy and regulatory constraints addressed and solutions proposed.

Since project inception TIPCEE's Export Business Development (EBD) and Enabling Environment (EE) components have made significant progress in implementing practical improvements in the supply chains of various horticultural industry commodities and in reforming the Ghanaian policy and regulatory landscape. To complement its basket of high-value export commodities – pineapple, mango, papaya, cashew, vegetables and medicinal plants - and provide greater outreach to smallholder farmers, TIPCEE expanded its approach to include more traditional food crops — identifying maize, citrus, onions, and tomatoes as new target commodities.

The Export Business Development Component comprises three initiatives:

1. Development of innovations and knowledge tools

    - The development of crops-specific training materials for good agricultural practice (GAP) and integrated pest management (IPM) in conjunction with MOFA/EMQAP and GTZ/MOAP

    - Improve product quality norms and standards in conjunction with GSB

- Develop GLOBALGAP (EurepGAP), Fair Trade, and Other Quality Assurance Systems in collaboration with GTZ/MOAP and MOFA /HEII
- Geographic Information Systems[43]
- Strengthening supply chain management systems including supply chain management systems, financial management systems templates, post-harvest infrastructure designs, and the Last Mile Initiative (LMI), which uses ICT to improve the linkage and data exchange between farmers and nucleus exporters
- Enhance Financial Management and Facilitate Investment Support
- Strengthen associations

2. Activities to deepen outreach and dissemination, building on the achievements and pilot studies of the past three years to extend the coverage of GAPS, certification and norms and standards
3. Market access and strategic partnerships
    - Support to the www.ghanafreshproduce.org website with a market monitor and a logistics bulletin board
    - Disseminate market intelligence
    - Build on e-readiness of horticulture sector
    - Establish and strengthen market linkages
    - Investor/buyer missions and investor programmes

The Enabling Environment component has three categories of activity:

1. Policy and regulatory reform begun under earlier USAID policy programme
2. Policy and regulatory issues relating to the specific crops of the TIPCEE programme
3. Other policy and regulatory changes

These operate in several sectors:

- Trade Sector policy
- Financial Sector policy
- Agricultural policy

[43] For example a pilot effort using GIS technology to map 3,000 farms in the citrus supply base has helped link the farmers with the major juice processors in Ghana.

- "Other " sector activities including macroeconomic, exchange rate, labour market policies among others

E. German Technical Cooperation (GTZ) & German Development Service (DED)

GTZ and DED jointly implement the Market Oriented Agriculture Programme (MOAP) funded by the German Government. The programme improves upon the competitiveness of agricultural producers, processors and traders on regional, national and international markets. The programme uses a value chain approach based on pineapple, citrus, mango, chilli, guinea fowl, grasscutter and aquaculture.

The programme began in 2004 and runs until 2013.

The components of the programme include

- value chain development through market analysis, chain linkage, technology and capacity building
- public sector development through support to planning and policy and donor coordination
- private sector development through institutional development of associations (e.g. HAG and SPEG), support to market access, export promotion and trade fairs (e.g. Fruit Logistica), quality and certification standards and product innovation.

F. The Millennium Development Authority (MiDA)[44]

The Millennium Challenge Account compact for a grant of $540mn was signed in August 2006. The initial disbursement was made in March 2007 and the compact will run for five years (i.e. late 2012/ early 2013).

The goal is the "reduction of poverty through economic growth led by agricultural transformation."

Within this are two objectives:

1. Increase production and productivity of high value cash and food crops in 3 selected zones of Ghana

2. Enhance the competitiveness of high value cash and food crops in local and international markets.

Three projects will work towards these objectives:

1. Agriculture Project ($241mn)
   - Increased farmer and enterprise training in commercial agriculture
   - Increased irrigation development

[44] http://www.mida.gov.gh/index.htm

- Land tenure facilitation
- Improved post-harvest handling and value chain services
- Improved access to credit on farm and value chain services
- Improved linkages to farmlands and markets = rehabilitation of feeder roads (950km)

2. Transportation Project ($143mn)

- Enhanced access to air and sea ports – upgrade to N1 sections
- Improved trunk road network in Afram Basin
- Improved Volta Lake Ferry services

3. Rural Development Project ($101mn)

- Support for Community Services
    - Energy for Domestic and Commercial uses
    - Water and Sanitation Facilities
    - Educational and Vocational facilities
- Strengthen rural financial institutions
- Strengthen public sector procurement capacity

The targets of the compact are

1,200 Farmer Based Organisations (FBOs) participating in commercial agriculture activity

60,000 farmers trained in commercial agriculture activity

120 enterprises trained in commercial agriculture activity

51,000 farmers adopting new technologies and farming methods

10-14% post-harvest lost at farm gate (down from baseline 20%)

120 ponds and weirs constructed

5060 ha irrigated

34 post-harvest structures constructed

385,120 tonnes of products passing through post-harvest treatment (total for five years)

The program will operate in 23 districts in three zones: the Southern horticultural belt, the Afram Basin and a Northern zone.

Immediate deliverables of the agriculture project will include training of FBOs, credit to nucleus farmers, a pack house at Kotoka International Airport, construction of pre-coolers on nucleus farms.

The overall responsibility for the implementation of the compact programme rests with the Millennium Development Authority (MiDA). MiDA engages Ministries, consultant and contractors for the execution of the activities. MiDA is subject to Government of Ghana audit requirements as well as the audit provisions of the compact. MiDA has a 14 member board including at least five Ministers, representatives of the District Assemblies in each zone, and representatives of the private sector and NGOs.

Implementation of the activities is assigned in the first place to the Central Management Consultant (CMC) who has a co-ordinating role for the three Regional Implementation Consultants (RICs). Oversight of the contracts is maintained by the Agriculture Project Manager at MiDA. There are a number of other implementing agencies for various components such as the infrastructure development project and the rural services.

The four roles of CMC and RICS are now filled. However, the third and final RIC was not appointed until the start of May 2008.

As regards budgets, the agricultural Project Activity is forecast in Table 11

Table 11 Budget for MiDA Agriculture Project Activity

Farmer & Enterprise Training	o CMC to develop framework for FBO training o RIC to implement FBO training o MOFA to prime FBOs for training	**$66.0mn**
Post Harvest Activity	o Provide 3 public pack-houses in Southern Zone o Pre-coolers for nucleus farmers o Construct perishable cargo centre at KIA o Upgrade the institutional capacity of 3 institutions. Small sale grain storage facility	**$20.3mn**
Irrigation Development Activity	Provide o 10 weirs o 110 dams o At least 5,000 ha under irrigation	**$27.7mn**
Agric credit and other credit	Provide short and medium term credit to the agriculture value chain Post harvest infrastructure (storage services)	**$40mn** **$8mn**

Land Activity	Create 9 Title Registration Districts Facilitate land transactions via on-demand services Clear backlog of land cases in 10 Circuit Courts Train & build capacity in public/private sectors involved in Land Administration	**$10.7mn**
Total		**$172.7mn**

To this we can also add a part of MiDA's Rural Development Project. There is an electrification component that will bring power supply to cooling systems in pack-houses and agro-processing plants.

ANNEX II Overall EU Market Trends

Over the last few years in Europe there has been strong promotion of the health benefits of consuming more fruit and vegetables. However, despite the advertising promoting the health benefits of fruit and vegetables, consumption has been remarkably static or even declining. Recently published data shows that the fruit consumption with the EU member states was 107kg/per capita in 2006 (down from an average of the previous five years of 108kg). The decline was more marked for vegetables; in 2006 the consumption was 98kg/per capita compared to 103kg averaged over the last five years. This represents a 0.7% decline in fruit consumption and 4.5% in vegetables[45].

It is recognised that this is an over simplification of a very complex market, but it does indicate that overall, the EU fruit and vegetable market is, at best, mature. In mature markets there are always opportunities, especially in specific niches where growth is often driven by innovation and product development. In the case of fruit and vegetables, convenience foods, pre-packs/prepared and ready-to-eat line items have also driven the expansion of different market categories.

In the UK, the retail value of fruit and vegetable sales was £8.47 billion in 2003[46], which was a small increase in of just over 2%/year between 1998 and 2003. These data do not include the food service supply chain; where the value of fruit and vegetables consumed has been calculated at £1.5 billion[47]. In the UK, retail fruit sales have shown increases across all the broad categories (Table 12), which are attributed to increased snacking, the consumption of "smoothies" and the realisation of their dietary importance for healthy eating. Retail fruit sales are dominated by bananas, apples and citrus – which all exhibit small increases in sales between 2000 and 2002. Interestingly, in percentage terms, the category that exhibited the biggest increase in sales was "other fruit" – a group that includes mangoes, pineapples and papaya. In other words, even though the spend on fruit may only be growing slowly in the UK, the increase is most rapid in the sector where much of Ghana's exports are positioned.

Table 12 Retail value of fruit sales in the UK, 2000-02 (£ millions)

	2000	**2002**	**% change**
Bananas	643	665	+ 3.4%
Apples	613	617	+ 0.7%
Citrus	490	499	+ 1.8%
Grapes	276	280	+ 1.4%
Stone fruit	276	278	+ 0.7%
Soft fruit	245	246	+ 0.4%
Pears	153	155	+ 1.3%
Other	367	410	+ 11.7%
Total	3,630	3,762	+ 4%

Source *– Mintel data, taken from Fresh Fruit and Vegetables (May 2003)*

[45] Data from "Production, Trade and Consumption Monitor 2007 in the EU-27"
[46] Fresh Fruit and Vegetables (May 2003), published by Mintel.
[47] Opportunities for Sub-Saharan African Small-Farmers to supply the UK Fresh Fruit and Vegetable markets, Accord Associates LLP, May 2007

Within the UK vegetable sector, sales of salads and greens showed the biggest growth while the main losers were onions and root crops (Table 13). The growth in salads is related to the promotion of pre-packs and speciality tomatoes and the innovation of the multi-coloured pre-packs. The increase in sales of greens (a group that covers cabbage, broccoli, green beans and peas) was also due to increased sales of pre-packs and baby vegetables. Sales of root crops, which are dominated by carrots, showed a downturn. The value of mushroom sales increased despite downward pressure on prices associated with imports. The biggest loser was onions, despite an increase in the sales of speciality lines such as red onions. The possible impact of these changes in vegetable consumption on market opportunities for Ghanaian farmers is difficult to interpret because vegetables for all these categories are dominated by EU production. However, the biggest growth sector was "other vegetables", a category that would include many of the vegetables imported from Ghana.

Table 13 Retail value of vegetable sales in the UK, 2000-02 (£ millions)

	2000	**2002**	**% change**
Salads	1,162	1,236	+ 6.4%
Greens	726	752	+ 3.6%
Mushrooms	399	407	+ 2.0%
Roots	399	391	- 2.0%
Onions	218	195	- 10.6%
Other	726	781	+ 7.6%
Total	3,630	3,762	+ 4%

Source *– Mintel data, taken from Fresh Fruit and Vegetables (May 2003)*

The main supply chain for retailing fruit and vegetables was multiple-retail chains, accounting for 84% of the retail sales in 2002, an increase of 2.2% compared with 2000 (Table 14). The category showing the biggest decrease was greengrocers and independent retailers, which declined by a very significant 7.6%. Market stalls and other outlets showed small increases. From the perspective of the Ghanaian producer, it is important to recognise that the multiple-retailers represent the biggest market and the largest growth. Suppliers to the multiple-retailer supply chain should be GlobalGAP certified; which highlights the importance of this private sector agri-standard to Ghana's ability to access the EU horticultural markets.

Table 14 Value of UK fruit and vegetable sales through different retail outlets, 2000-02 (£ millions)

	2000	**2002**	**% change**
Multiple-retailers	6,867	7,021	+ 2.2%
Greengrocers and	910	841	- 7.6%
Market stalls	248	250	+ 0.8%
Other	248	250	+ 0.8%
Total	8,273	8,362	+ 1%

Source – Mintel data, taken from Fresh Fruit and Vegetables (May 2003)

There are a number of factors that are affecting the buying patterns of fruit and vegetables – even if they are not contributing to significant overall growth.

- Advertising and promotion of the "5 a day" campaign is expected to stimulate the consumption of fruit and vegetables.

- The increase in "snacking" has increased fruit consumption – this is probably the reason for the growth in fruit noted above. This was especially noticeable amongst younger people.

- Health concerns and the increase in numbers of people in socio-economic groups A and B. As socio-economic groups A and B eat more fruit and vegetables than groups C2, D and E, continued improvement in the national economy will stimulate the demand for fresh fruit and vegetables.

- Supermarkets increasingly recognise that fresh produce is a "destination item" and therefore they are putting greater efforts into improving the quality and range of fresh fruit and vegetables and more resources to promote the sector and thereby attract more customers.

Despite all these positive drivers that should be impacting on fruit and vegetable sales, the indication from the above data are that **total** sales of fruit and vegetables in the EU are remarkably static; often trying to increase market share in a mature market can be both difficult and expensive. However, where Ghana is fortunate is that the product lines that it produces for export are actually showing good growth. For example, the four main fruit lines that Ghana exports to the EU showed a 33% increase between 2001 and 2007; the growth in pineapples and papaya is particularly impressive (Table 15). The expansion in the four categories of vegetables that Ghana exports are slightly less than the fruit, but still the growth is much better than the growth in the overall EU vegetable consumption.

Table 15 EU imports of certain horticultural products[48], 2001 to 2007

Source *– Accord Associates LLP based on Eurostat data*

[48] The climate in Europe prevents the cultivation of the horticultural products considered in this table; therefore total imports will approximately be the equivalent to total consumption.

ANNEX III Impact of EU Policy on Imports from Ghana

The background to the EU's policy in supporting trade with ACP countries goes back to 1963 when the European Economic Community initiated preferential trade agreements with its former colonies (Treaty of Yaounde). Then, starting in 1975, the EU agreed to give ACP countries unilateral preferences to its markets under the four Lomé agreements with the hope of boosting trade.

When the last Lomé agreement ended, new incentives to stimulate trade were negotiated and approved (the Cotonou Agreement). This called for the creation of reciprocal trade agreements, or Economic Partnership Agreements (EPAs) between the EU and regional blocks of ACP countries. It was expected that regulations covering Ghana's trade with the EU would be incorporated within ECOWAS (Economic Community of West African States) and that the EPAs would be agreed before the end of 2007. The EPAs were expected to continue the trade preferences already enjoyed by ACP exporters and also be a comprehensive agreement to help reduce transaction costs for companies, improve transparency and help create bigger markets for both ACP and EU countries.

Progress in establishing an EPA with ECOWAS did not progress as rapidly as expected and towards the end of 2007, there was a fear that Ghana's horticultural exports to Europe might be subjected to import tariffs. Most sub-Saharan African countries were not overly concerned about the lack of progress with EPAs as they could export goods into the EU under the EBA (Everything but Arms) initiative. However, as Ghana is not an LDC (Least Developed Country) the EBA initiative does not apply and its horticultural exports would be levied charges under the General System of Preferences (GSP). For instance, the GSP tariff for pineapples would be 5.8% of the C&F value and bananas would have attracted a €176/t levy.

It was recognised that Ghanaian exporters would have been severely constrained if an EPA was not agreed. Therefore on 13 December 2007, Ghana and the EU initialled an interim EPA which would allow 100% free access to the EU market except for rice and sugar which would have transition periods. The Côte d'Ivoire signed a similar agreement six days earlier. Therefore, the initialling of the EPA in December 2007 has ensured that there would be no trade barriers inhibiting horticultural exports to the EU.

It is expected that the bilateral EPA will eventually be replaced by an agreement between ECOWAS and the EU. This will require some negotiations within ECOWAS to harmonise the agreements on imports from the EU, but this is not expected to be a serious issue for horticultural exports as any amendments will most likely revolve around imports from the EU. There is a very slight chance that the initialled agreements might not be accepted by the WTO (World Trade Organisation), but again this is unlikely.

In summary, there were concerns during late 2007 that the slow pace of negotiating the EPA by ECOWAS might negatively impact Ghanaian horticultural exports. However, the initialling of the bilateral EPA between Ghana and the EU has removed this concern.

ANNEX IV Retailers' and Other Standards on Imports from Ghana

All horticultural produce imported into the EU must meet certain legal standards. These standards are principally to protect consumer health and to ensure fair trade practices in the food trade. The basic regulations normally applied are the CODEX standards[49]. Codex is recognised in the relevant World Trade Organisation (WTO) agreements as the international body able to provide the minimum standards required to protect the consumer. The EU has been negotiating community membership of Codex for some years, and this has now been achieved.

In addition to meeting the basic CODEX the standards, imported horticultural produce must be accompanied by a phytosanitary certificates issued by the relevant Government department in the exporting country, confirmation of its country of origin (EUR 1 forms); it must be labelled correctly, each actor in the supply chain must be able to document where the produce was procured from and who it was bought from and finally the produce must not have pesticide residues above certain maximum levels. On the whole, most professional exporting organisations are able to fulfil these requirements relatively easily.

In addition to the minimum legal standards, the major EU supermarket chains have established their own standards which are more stringent than the CODEX based ones. As most of the horticultural produce in Northern Europe is retailed through the major multiple supermarkets[50], it is important that Ghanaian exporters do attain the certification required to access supermarkets. The mostly widely used private sector standard was established in 1997 by the Euro-Retailer Produce (Eurep) working group and this was referred to as EurepGAP. However, it has grown in importance and the Eurep Board decided to re-brand it in 2007 as GlobalGAP – but it is still often referred to as EurepGAP[51].

The basic aim of GlobalGAP is exactly the same as the minimum Codex standards, i.e. to ensure that the fresh fruit and vegetables sold by retailers are safe for human consumption. Attaining GlobalGAP is not a legal requirement, but it is regarded as the minimum standard that exporters must have before they can supply the main European retailers.

In addition to GlobalGAP, some supermarkets demand their own standards. For example, in the UK, these include Tesco's "Nature Choice" and Marks and Spencer's "Field to Fork", but if an exporter can achieve GlobalGAP, then it is not normally too difficult to achieve the standards demanded by specific supermarkets. The final variants on private food standards are organic and fair trade, both of which some exporters in Ghana have benefited from.

One of the key facets of private sector standards is the ability to be able to trace the history of a product throughout the supply chain from field to the consumer. This

[49] The Codex Alimentarius Commission was created in 1963 to develop food standard guidelines.
[50] It is estimated that over 80% of horticultural produce is sold through the big seven supermarket chains in the UK and, in Section 3.10 it was noted that 96% of the fresh prepared fruit were sold through supermarkets. All this produce must therefore meet GlobalGAP standards.
[51] This decision was announced on September 2007 at the 8th global conference in Bangkok.

essentially requires a comprehensive system of record keeping. It is a much higher standard than the minimum EU legal requirement, which is just a record of who it was bought from and who it was sold to.

There are a number of misunderstandings about GlobalGAP. It is sometimes thought that it is extremely difficult to achieve certification and that it is costly. In fact achieving these private sector standards are not that difficult and many farmers in Ghana, often with capacity building from donor projects, have already achieved GlobalGAP. It can be costly for a small-farmer because they are not able to spread expenses over a large quantity of produce; especially if significant investments are required in building toilets and chemical stores.

The Eurep working group is aware that it is more difficult for small farmers and in order to reduce costs, a collective certification scheme (GlobalGAP Option 2) was established to allow groups of farmers to comply as a unit. The cost of achieving GlobalGAP Option 2 in Kenya has been calculated at $1,270 for establishment and $350/year for maintenance. Even though an effort has been made to reduce the cost to small farmers, many Kenyan farmers regard $350/year as too high and many have allowed their certification to lapse. Because of the high cost of establishing and maintaining GlobalGAP, some donors have concentrated on assisting small farmers achieve certification.

One of the criticisms of GlobalGAP has been that it is focussed on the European market and does not take full cognisance of the specific problems of small farmers in Africa. Whilst this might be true, it should be noted that Ghanaian producers are supplying European supermarkets with produce; for example Golden Exotics have been awarded Tesco's Nature's Choice gold accreditation.

GhanaGAP is being developed as more sympathetic to production systems in Africa. It has been pointed out that some other countries have established their own standards, e.g. Chile, Kenya, and Thailand. However, it should be recognised that ChileGAP was established to harmonise private sector standards demanded by the North American and European retail markets; it basically took the most stringent demands from both markets and established one standard that was acceptable to both. ThaiGAP has been primarily established to meet the demands of the EU supermarket chains who are investing in Thailand. As yet, there have been no positive outcomes from the establishment of the KenyaGAP.

The concept of establishing standards for a local and regional market are commendable, but Ghanaian exporters who want to target the EU should concentrate on attaining the GlobalGAP standard as this will help with market access.

ANNEX V Terms of Reference

Ghana Horticulture Cluster Strategic Profile Study

PART 1

Terms of reference for a scoping review of the horticultural sub-sector in Ghana

Rationale:

In 2003, the Environmentally and Socially Sustainable Development Network (ESSD) Department of the World Bank commissioned a Ghana Horticultural Sector Development Study[52]. Later that year, the Horticulture Export and Investment Initiative (HEII) was created as the result of restructuring of the agribusiness support component of the Agriculture Services Sub-sector Investment Programme (AgSSIP). Since 2004, HEII considered as an emergency support program, has been playing an important role in reshaping the Ghana horticulture cluster through a series of crucial technical support initiatives and building of a key logistics infrastructure at the Tema seaport.

As a result of its activities, HEII also helped to raise the visibility of the cluster, which resulted in a renewed interest in the sector both from private investors and donor partners. The African Development Bank (ADB), the United States Agency for International Development (USAID), the German Technical Cooperation (GTZ) and the Millennium Challenge Corporation (MCC) among others are all actively involved in support to the cluster.

Five years on from the original study, the horticulture cluster in Ghana has moved ahead. Developments in the institutional environment have combined with an evolution both of the businesses and of the product portfolio; international trade is expanding and an increasing population participates in export horticulture supported by infrastructural enhancements. At the same time, the external operating environment has changed: not only are markets dynamic, but there are also new influences from policy and trade agreements.

As Ghana's horticultural cluster moves into a new phase, with new players, new products and new initiatives, the relevance of the 2003 study and strategy is fading fast. A reappraisal is needed now to give a bold vision for 2013. This should not be a prescriptive 5-year plan, but a vision that can engage the collaboration of the cluster participants.

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[52] Voisard and Jaeger. 'Ghana Horticulture Sector Development Study'. 2003, 108 p.

Objectives:

The present study will take cluster participants towards defining the vision of where Ghanaian horticulture might be in five years time and what will be needed not only to achieve this potential but also to continue the development beyond.

The intended exercise is planned to take place in two phases:

1 – An in depth analysis of Ghana's horticultural export cluster recent evolutions. This entails a comprehensive "scoping" study to take stock of the evolution of the horticultural cluster since the first HEII was conceived, and,

2 -based on the observations gathered in the first phase, the consultant will design a strategy to take the cluster to the next development phase over the next five year period.

The present Terms of Reference detail the work needed for the first phase of the study:

Ghana horticultural export cluster recent evolution in-depth analysis

The consultant will draw on the 2003 horticulture sector study as his/her working baseline, with the purpose of evaluating recent evolutions and progress in the Ghanaian horticultural exports, in terms of structure, performance, positioning, diversification efforts, institutional linkages and competitiveness benchmarks, Additionally, this part 1 of the study should assess and analyse any significant changes in terms of constraints and growth barriers, as well as the cluster response to these challenges (including contributions from the various technical support initiatives and HEII). The broad areas of the consultant's brief can be described as follows:

- **Sector profile update and current performance assessment**. Current versus past product mix, geographical coverage, latest production and export figures, production structures and main players involved, market share trends, new market segments penetration, established forward and backward supply chain linkages, recent market and access conditions evolutions, competing origins' strategy development, competitive positioning shifts. An extensive use of the Market Intelligence Report (MIR), an initiative of the National Horticultural Task Force containing market data and analyses for key horticultural products, should be made to complement the analysis.

- **Progress made on previously identified growth opportunities for existing and new horticultural products (commodity focus).** Progress evaluation for the series of commodities identified in the 2003 study as short-term, medium-term and long-term opportunities. The evaluation should assess the current level of opportunity for each commodity (continued presence of windows of opportunity) and identify all relevant diversification initiatives undertaken in Ghana in the recent past. Special emphasis should be placed on assessing technical results and lessons learned which may shed light on the actual feasibility of new product development in Ghana (specific varieties tested, production conditions in specific regions, yields obtained, production / post harvest constraints, new tested technologies, etc.).

- **Institutional environment evolution assessment (structure and linkage focus).** Identification of the main cluster building / cluster strengthening linkage developments within Ghana as well as at the international level (partnerships, integration and coordination initiatives, etc.). In the analysis, an overview of all ongoing cluster support initiatives and their main outputs and contributions should be included This section should be completed with an actual cluster map, listing stakeholders at various levels of the horticulture value chain and identifying the nature and strength of the existing linkages (work on cluster mapping has been initiated by the USAID's Trade and Investment Project for a Competitive Export Economy (TIPCEE).

- **Assessment of any significant changes in the previously identified industry competitiveness benchmarks**. Whenever applicable and available, new data should be presented to corroborate and complement previous analyses in terms of both direct and indirect cost benchmarks (factors of production, inputs, logistics and marketing), as well key productivity factors (access to advanced factors of production, management capacity, market requirement response capacity, logistics capacity, cluster dynamics, etc.). The analysis should be conducted at the sub-sector level with specific references to the main export commodities (pineapple, papaya, mango, chillies, and ethnic vegetables).

- **Strategic challenges (constraints) and priorities (objectives) validation and update**. In view of the recent developments and investments, the previously identified set of strategic challenges facing the horticultural export cluster should be revisited and assessed. The short-term strategic objectives defined at the outset of HEII should be evaluated in terms of advancement, the main ones being: market positioning and consolidation, ensuring a competitive supply base for the processing industry, impelling of diversification process and supporting horticulture cluster emergence by strengthening strategic information dissemination and private–public collaboration. Special attention should be paid to the progress made on quality and food safety issues, including: product norms, pesticide testing and management, GAPs and post-harvest practices, EurepGAP certification, HACCP application and traceability.

Tasks of the consultant:

The intended work will include (but will not be limited to) the following tasks:

1. Quick review of the fresh produce import trends in the EU: interview of the EU-based importers and of retailers of Ghanaian horticultural produce; review the current status of fresh-cut fruit market in the UK (an interview with the UK office of Blue Skies Products would be useful)

2. Identify the main competitors of Ghana on international horticulture markets and review their respective positioning vis à vis the Ghana origin, and the competitive advantage they may have over Ghana.

3. Review the capabilities of the Ghanaian horticulture cluster and comment on evolution of the horticultural scene from 2003 and how the players have adapted to a changing market.

4. In so doing the consultant will conduct a wide range of interviews with cluster participants to review their issues, aspirations and constraints. Ministries, Government Agencies, private sector operators, and donors involved in the horticultural sub-sectors will be visited. The specific areas to be addressed during these interviews include (inter alia) infrastructure, technology, market access, institutions, the emergence of organized trade and professional organizations, horticulture policy formulation etc...

5. There is the need to obtain a clear picture of the advancement of the on-going donors' programs covering agriculture with a horticulture component, and to document their likely achievements (AfDB, MCA, GTZ etc.).

6. Identify constraints and areas of weakness, and make recommendations to reduce their impact. Attention should be given to gaps and bottlenecks, and their possible resolution, in the execution of ongoing programmes

7. Review the donor environment and intentions for the horticulture cluster. Pay particular attention to the plans for infrastructural developments and issues of management.

8. Examine the external influences of trade policy (here the impact of EPAs in Ghana springs to mind) and market dynamics on the Ghanaian horticulture cluster, how it has progressed in the light certification and other regulatory issues and where the comparative advantages now lie.

9. The consultant will also plan to inform the report with an update on the issues pertaining to GhanaGAP: progress made towards the definition of a GhanaGAP standard, implications for both the commercial agriculture and subsistence agriculture sub-sectors, etc.

Deliverable:

The mission will prepare a report reviewing the horticulture cluster in Ghana, reporting on the findings as detailed in the objective and activities above. Before leaving Ghana, the consultants will make an interim presentation of their findings, to validate the information and the conclusion, to test the appraisal of the issues and to discuss the possible developments over the next five years. This presentation will allow the consultant to interact with the authorities and exchange views and ideas over the strategic outlook that will be the focus of the subsequent mission.

Timing:

It is envisaged that the duration of the mission in Ghana should cover two weeks, with possible in land travel if required. The period of weeks 14 & 15 has been provisionally earmarked.

ANNEX VI Bibliography

A selection of relevant, reports, publications and presentations are listed below. The collection of reports is collected on a CD-ROM with a hyperlinked index. The CD-ROM is available at EMQAP.

Abt Associates Inc.	2006	*Fresh Produce Market Competitiveness Study*
Accord Associates	2001	*The European Pineapple Market Reactions to Different Varieties & Ghana's Market Position*
Afari-Sefa, Victor and Siegfried Bauer	2005	*The Interlinks Between Agricultural Export Diversification, Food Security and Livelihood of Farm Households in Southern Ghana*. Conference on International Agricultural Research for Development
Ahold	2002	*Ghana. Sustainable horticultural export chain*
Amex International		*An Appraisal of the Ghana Pineapple and Mango Industries: Opportunities and Challenges*
Chamberlin, Jordan	2005	*Spatial Perspectives on Development Opportunities in Ghana* IFPRI
Conley and Udry	2004	*Learning About a New Technology: Pineapple in Ghana*
Danielou, Morgane and Christophe Ravry	2005	*The Rise of Ghana's Pineapple Industry. From Successful Takeoff to Sustainable Expansion*
Dixie and Sergeant, Accord Associates	1998	*The Future for the Ghanaian Horticultural Export Industry*
FAGE	2007	*Ready for Take Off Ghana horticulture*
Geomar International	2007	*Ghana horticulture cluster stakeholders' workshop. Preparation of a follow-up programme to HEII: methodological framework*
Henry, Richard and David Summers	2004	*BTO – Promotion Mission to Ghana*
Humboldt University	2006	*Poverty Orientation of Value Chains for Domestic and Export Markets in Ghana.*
JITAP	2003	*Diagnostic report and export development strategy for the horticultural industry in Ghana*
Joosten, Frank and George Ayernor	2005	*Agribusiness Value Chain Analysis. Ghana MSMS Project* IFC
Millennium Challenge Corporation	2006	*Millennium Challenge Compact between USA and Ghana*
Michigan University	2003	*Ghana PPP Food Industry Program: Mission Report Analysis of the Ghanaian Fresh Fruits and Vegetables Industry*
MOAP	2006	*Promotion of Value Chain Development Training*

Owusu, Emmanuel and Eric Quaye	2006	*Setting up a smallholder quality management system for EurepGAP option 2 certification – Ghana's Story – Presentation* 7th EurepGAP Conference
Partnerships 4 competitiveness	2006	*Report from kick-off seminar 22 March 2006*
Sefa- Dedeh, Prof Samuel	2005	*Ghana Private-Public Partnership Food Industry Development Program Final Report for USAID*
Sefa-Dedeh, Prof Samuel	2003	*Marketing plan for fresh pineapple exports in Ghana*
Sefa-Dedeh, Prof Samuel and Doe Adovor	2005	*Mid-Term Impact Assessment of the Ghana PPP for Food Industry Development Program*
Sesay, Mohamed Ahmed	2006	*The Expansion of a Pineapple Plantation in Ghana*
Takane, Tsutomu	2004	*Smallholders and Non-traditional Exports under Economic Liberalization: the Case of Pineapples in Ghana* African Study Monographs, 25(1): 29-43,
TechnoServe	2004	*Study of the Mango Industry in Northern Ghana*
TechnoServe	2003	*Pineapple Industry Strategic Plan*
Trienekens, Jacques and James Hagen	2004	*Innovation through international supply chain development: A case study (Ghana and South Africa)*
Tweneboa-Boateng, Abena	2003	*Marketing Plan for Fresh Vegetable Exports in Ghana. Ghana Private-Public Partnership Food Industry Development Program* Ghana PP PFID Programme
USAID / TIPCEE	2006	*Cluster Presentation*
USAID / TIPCEE	2005	*Last-Mile Initiative/Ghana. Proposal*
USAID / TIPCEE	2005	*Ghana's High Value Horticulture*
USAID / TIPCEE	2006	*Ghana Fresh Produce Sector - Investor s Briefing Book*
Voisard and Jaeger, Accord Associates	2003	*Ghana Horticulture Sector Development Study*
World Bank	2001	*Ghana International Competitiveness. Opportunities and Challenges Facing Non-Traditional Exports*
World Bank BNPP	2005	*Review of Ghana and Senegal's Response to Public and Private Food Safety & Quality Regulations and Standards & impact on smallholders*

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