

Background paper for the  
**Competitive Commercial Agriculture in Sub-Saharan Africa  
(CCAA) Study**

**All-Africa Review of  
Experiences with Commercial Agriculture  
Critical Success Factors in the African High Value  
Horticulture Export Industry**

*Geoff Tyler*

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## Critical Success Factors in the African High Value Horticulture Export Industry

### Background

For the purpose of this case study we define horticulture as fresh fruit, vegetables and flowers. The sector is highly diverse and embraces the traditional large-scale, plantation production of medium value products, e.g. bananas, pineapples, citrus fruits and the more recent intensive production of high value products such as green beans, mange-tout, baby sweet corn, fresh fruit-salad, roses and carnations.

This is a segment of the agricultural market that is of ever growing importance since there is a high income elasticity of demand – as people get richer they eat more fresh produce, and in particular more prepared, packaged, “added-value” fresh produce.

Globally, this is an important sector for developing countries. In the mid-1990’s it was estimated<sup>1</sup> that the value exports of fresh fruit and vegetables from developing to developed countries was US\$4.3 billion, even after excluding the very large banana trade, while the value of floriculture exports was US\$1.4 billion.

The sector has also become important for sub-Saharan Africa. By the late 1990’s the export of fresh produce was approximately equal to two-thirds of the export value of traditional agricultural commodities.<sup>2</sup>

The transport of fresh produce over long distances became possible with the development of refrigeration and “cold chains” linking production points and consumption points. As transport costs have fallen, and incomes in developed countries have risen, an ever wider variety of fresh products can be profitably freighted, mainly by sea and by air, from the poorer but warmer tropical and sub-tropical regions to the richer but colder north.

The trade originally centred on products such as bananas and pineapples that cannot economically be grown in temperate climates.

It then developed to embrace the production out of season of crops that can only be grown in the northern regions in the summer, e.g. citrus, grapes, melons, green beans, peas, asparagus, cut flowers.

The most recent trend has been the production of some high value, “temperate” items all year round in developing countries because, in spite of high transport costs, they can be produced more cheaply (even during the northern summer) due to lower labour costs, e.g. washed and trimmed mangetout, prepared fruit salads, trays of prepared mixed vegetables, flower bouquets in retail packs.

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<sup>1</sup> estimate prepared for CDC by High Value Horticulture Ltd, consultants

<sup>2</sup> the value of the exports of meat, fruits, vegetables, fish and flowers compared with that of cocoa, coffee, tea, cotton, sugar, tobacco and cashew nuts, as reported in: Opportunities and Challenges for Developing High-Value Agricultural Exports in Ethiopia. World Bank (2004)

Africa is well placed to participate in this market being closest to Europe, which is the world's largest importer of fresh produce. ACP countries also benefit from preferential, duty free access to EU markets. In broad terms, because of transport costs and the time needed to get to market, most (but not all<sup>3</sup>) fresh horticultural products traditionally move from south to north, i.e. central and south America is the primary supplier of horticultural products to North America, Africa supplies Europe and S E Asia supplies Japan. There is also a rapidly growing market in the Middle East which both Africa and S E Asia compete to supply.

Some African countries have a long-tradition of plantation and estate fruit production for export to Europe via sea freight, e.g. bananas and pineapples from West Africa (mainly the Ivory Coast and Cameroun) and citrus, grapes, apples and pears from South Africa.

In this case study we will focus primarily on the more recent development of air freighted, high value horticultural products.

This industry developed first in Kenya. From almost nothing in the late 1960's, export of fresh flowers had reached 29,000 tonnes by 1995, fresh vegetables had reached 28,500 tonnes and the export of fresh fruit had reached 14,000 tonnes, worth over US\$100m p.a.. As with the tea industry, Kenya's combination of broadly sound macro-economic policies and long-history of private sector, commercial farming (both small and large-scale) meant that when a profitable new opportunity arose farmers were quick to respond.

The industry spread, but on a smaller scale, to other countries in the region - Tanzania, Uganda and Zambia - all of which were economically less stable and less well-disposed towards the private sector during the 1970's and 1980's. Thus in 2004 Zambia exported 3,995 tonnes (value US\$29.8m) of fresh flowers and 6,238 tonnes (value US\$18.1m) of fresh vegetables, with more than 16,500 people employed by the sector.

During the 1990's the industry also expanded rapidly in Zimbabwe and South Africa, where good management and marketing skills have been able to compensate for longer transport distances and higher labour costs. From almost nothing in the early 1980's, by 1995 Zimbabwe was exporting 12,000 tonnes of flowers and 12,000 tonnes of fresh vegetables and fruit (plus a further 27,000 tonnes of citrus exported by land and sea).

The African industry embraces both large, multinational integrated businesses and smallholders growing less than one hectare of vegetables.

The export industry in Kenya was promoted by the Government (the Horticultural Crops Development Authority was established in 1967) and pioneered both by large farmers/entrepreneurs mostly of European origin, who had a keen awareness of the product and quality requirements of European markets, and by entrepreneurs of Asian origin who saw an opportunity to supply "Asian vegetables" to the growing population of

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<sup>3</sup> As transport costs fall, storage technology improves and the "value-added" component of horticultural products increases, so trade is becoming ever more global and less regional in scope.

Asian origin and descent in the UK. There has been a growing involvement of African entrepreneurs in all aspects of the business.

Since vegetable production is highly labour intensive, but not as capital intensive as flower production, there are potential cost savings if production is contracted out to smallholders who can make use of family labour and informal hired labour. In Kenya, and on a smaller scale in Tanzania, there has been a substantial participation by smallholders. At its peak, one outgrower scheme in Kenya had 24,000 participating smallholders.<sup>4</sup> In 2000 the HCDA estimated that 40% of fruit exports and 70% of vegetable exports were produced by smallholders.<sup>5</sup>

In spite of the above broad trends, a central feature of the high value horticulture industry is its dynamism and complexity. This can be illustrated by some UK import statistics. In 1998 Kenya accounted for 60% of the UK's imports of air-freighted green beans, and 45% of the air-freighted imports of peas. However it supplied only 2% of the UK's air-freighted sweet corn imports, (whereas Zambia supplied 18% and Thailand 65%) and non of its air-freighted asparagus (whereas 84% came from central and south America)<sup>6</sup>.

This case study will focus on summarising the critical success factors that drive the high value horticulture industry and will then illustrate the importance of these by reference to several ventures in which CDC was a major investor.

### Critical Success Factors

#### **Agronomic Conditions**

With high value fresh produce, in order to obtain high prices, the product needs to meet high specifications in terms of quality, appearance, size and availability at critical times. Long stemmed roses are more difficult to produce and expensive than short stemmed roses, but a short stemmed, red rose in prime condition offered for sale 2 days before St Valentine's day is worth a great deal more than a long-stemmed yellow rose on the same day or a long-stemmed red rose three days later.

Each horticultural product has its own optimal requirements in terms of climate, soils, altitude, day-length etc. To meet these specifications it is preferable to have the right natural growing conditions. If natural conditions are not ideal, then it is necessary to have the ability to economically control them, e.g. by growing under shade, in greenhouses, with irrigation etc.

Some countries, e.g. Kenya, have a wide range of climates due to differences in altitude, so that a wide-range of crops can be grown and for long growing periods. In comparison

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<sup>4</sup> As reported in a discussion paper "Are Horticultural Exports a Replicable Success Story? Evidence from Kenya and Cote d'Ivoire", N Minot and M Ngigi

<sup>5</sup> quoted in Minot and Ngigi

<sup>6</sup> Source: Food Industry Management Group, Wye College

Zambia and Zimbabwe are relatively uniform geographically, and can only grow a smaller range of crops for shorter periods.

Agronomic conditions by themselves do not however determine success. Since high value fresh produce is a luxury product, the physical quantities (as opposed to the values) involved are not large and so the land areas need for cultivation are relatively modest, e.g. 8 ha of greenhouses would constitute a reasonable commercial rose production unit, and 100 ha would be a large fresh vegetable production unit. Production is therefore not normally limited by land availability, but by access to markets, competitive pressures and overall efficiency of operation, i.e. more like a manufacturing businesses than a farm.

### **Economical and Fast Transport Links**

A good location for growing is important for long term success, but it is certainly not sufficient. As a rule of thumb, half the wholesale cost of African fresh produce in European markets is represented by the cost of transport, storage and handling. Economical and efficient transport and cold-storage chains are essential.

A critical factor which boosted the high value horticulture industry in Kenya was the development of mass tourism in the 1970's. The jumbo jets bringing the tourists had spare cargo capacity for the return journeys and were therefore able to offer relatively low freight rates for horticultural exports.

Recent rising airfreight costs are reported to be threatening the viability of the Zambian industry. In August 2005 British Airways terminated its freight service to Zambia citing the high cost of jet fuel which had made the service unprofitable. Meanwhile ZEGA, the horticulture industry association, was complaining early in 2006 that the average airfreight cost had risen from US\$1.75/kg to US\$2.25/kg, rendering growing for export unprofitable.

Airfreight costs vary substantially between countries and so give some countries a competitive advantage. In addition, for fresh produce, time is of the essence. The longer the shelf life that can be offered to the buyer in Europe, the better will be the price obtainable.

The shortest air transport distances are from West Africa, but East Africa has developed much larger volumes of produce. There are economies of scale with many competing, specialised, private charter airfreight companies, which has led to lower average costs.

Similarly it is important that the locations which are good for growing the required products are also close to the international airports, to minimise the cost, time and risks of local overland transport.

A cold chain needs to be maintained from farm to retail outlet in Europe. This becomes more practical and economical once a critical industry mass justifies the building of

dedicated cold stores at airports, rather than relying on loading produce direct from refrigerated trucks on to waiting aircraft.

Finally the bureaucratic process for exporting fresh produce needs to be efficient and free from excessive corruption since officials have the power to use delaying tactics to cause the financial loss of an entire consignment. The relatively slow growth of air-freighted fresh produce exports from West Africa has in part been blamed on corruption at the airports. Similarly it is important that organised crime does not gain control of any critical aspect of the supply chain.

## **Marketing**

Traditional, bulk, agricultural commodities are not “marketed” in the modern sense of the word, they are simply delivered to a market (which today would probably be an internet auction) where, subject to any minor adjustments for quality, they sell for the prevailing market price on that day. The buyer most likely has no interest in who the supplier is, and only wants to be sure that the product meets industry standard specifications. The key strategy of growers to increase profits by lowering unit costs.

Marketing is however the essence of modern, consumer goods industries. In a world of product differentiation, packaging, branding, advertising, routes to market, and slotting fees (buying shelf space in supermarkets), while it is important to minimise costs it is even more important to develop strategies for increasing margins by adding value.

High value fresh produce combines attributes of both traditional, undifferentiated commodities and the modern, branded, consumer goods sector.

The marketing of fresh produce is itself a specialist area, precisely because it is fresh and cannot be stored beyond a few days so that any daily shortages or gluts of produce are immediately reflected in rising or falling prices to clear the market with almost no scope for moderating prices by adjusting stocks. Any produce that arrives in Europe of sub-standard quality is either un-saleable or has to be sold at a heavy discount, almost certainly at a large financial loss to the grower and/or shipper.

Some horticultural producers still grow on a traditional “speculative” basis, i.e. trying to anticipate market requirements, taking their own planting decisions and relying on finding customers (directly or via auction) once they have product ready for delivery.

This remains typical of the cut flower trade. Most European flower imports are sold at auction, mainly in Holland, and the key is to be producing high quality, modern, fashionable varieties at the right time of year. Since market fashions are regularly changing, so growers need to be regularly adjusting their production. The most sought after varieties usually belong to specialist, international plant breeders and they will only licence production by those growers in which they have confidence, and for quantities which they believe the market can absorb without sacrificing margins.

However with fresh fruit and vegetables there is a trend towards growing to order, under contract to major European supermarkets and/or wholesalers. They have strict food hygiene and quality standards to meet and want to be sure in advance of their supply sources and schedules and do not wish to take the risk of relying on purchases via auction. Cost is important to the European supermarkets and importers, but meeting customer expectations is paramount<sup>7</sup> therefore the major buyers normally want regular supplies from a small number of reliable, larger growers to facilitate monitoring<sup>8</sup>.

Fresh fruit and vegetable marketing therefore involves negotiating and managing supply contracts with very demanding buyers, sustaining a good reputation within the industry, and thereby achieving a price premium. Producers who have to resort to selling their produce at auction having produced on a “speculative” basis, normally obtain lower prices and are subjected to greater business risks<sup>9</sup>.

There is a constant commercial battle between all of the industry participants to capture the lion’s share of the value chain through branding and customer loyalty. A theoretical illustrations would be:

- Some where a plant breeder is trying to develop a new variety of green beans with a distinctive quality (colour, taste, shelf-life, health properties) that will be irresistible to consumers. Only those growers, traders and retail outlets willing to use its brand name “Sutton’s Slimming Superbean” would be licensed, and the breeder will charge royalties that ensure it receives the full benefit of any price premiums that can be achieved from customers.
- A large producer of green beans, say Homegrown in Kenya, would like customers to be aware of its trade name and to put the Homegrown brand name onto every tray of green beans its sells in the UK. Assuming that customers would come to appreciate that “Homegrown is best” and would have a preference for Homegrown, no supermarket would want to take the risk of losing customers through not stocking Homegrown beans.
- The Horticultural Crops Development Authority, however, wants to see all Kenyan exporters thrive, so they would rather that retail pack simply stress “Kenyan Fresh Beans”, or ideally that the industry adopt a common brand name (as “Outspan” and “Cape” used to be used for South African produce).
- The importer does not want to become dependent on any particular supplier, so the notion of retail customer loyalty to Homegrown or to Kenya represents a

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<sup>7</sup> The supermarket giants know that once a customer is through their door, she/he is likely to do a week’s shopping in one spot. A reputation for having a well stocked, high quality fruit and vegetable counter is a vital ingredient in a supermarket chain’s reputation, so when negotiating supply contracts far more is at stake for the supermarket than simply their profit margin on the fresh produce.

<sup>8</sup> This trend is becoming a threat to the production of fruit and vegetables by sub-contracted smallholders.

<sup>9</sup> Nevertheless, it is important to note that the major supermarket chains closely monitor the costs of their contracted suppliers, and aim not to pay more than the minimum necessary to keep their preferred suppliers in business.

threat to his business. Ideally major fruit and vegetable traders such as Gerber or Mack Multiples want to see their name on the retail pack, preferably indicating some special feature (“Gerber Gold Standard Green Beans”).

- Finally the supermarket chains such as ASDA (Walmart) or TESCO want customers to be loyal to, and have trust in, themselves, rather than to have a preference for any particular source or brand. They will normally sell the green beans under their own label, i.e. “ASDA Finest Superfresh Beans”, and will often demand exclusivity of supply from any wholesaler or grower wishing to do business with them, (while themselves taking supplies from several sources) so that it is the retailer who is in the strongest bargaining position.

Each player uses volume, market share, advertising, product development, patents, brand names, premiums and discounts to try and establish defensible, profitable positions in the value chain. It is not necessary for all players to have the same strategy, rather that each participant needs to devise and implement a marketing strategy adapted to their particular, objective strengths and weaknesses.

In addition to commercial aspects of marketing, the EU, USA and Japan have established complex and demanding phyto-sanitary regulations for horticultural products (sometimes as a form of protection for their own producers) and exporters therefore need to have the knowledge and expertise to assess and meet these requirements, as well as any extra standards demanded by the major retailers.

### **Labour, Health and Safety**

Growing, processing and packaging fresh produce is normally both technically demanding and highly labour intensive. Depending on the specific situation and product, the labour requirement may be seasonal<sup>10</sup> and it may also need to be highly skilled, but it needs to be relatively low cost to maintain a competitive advantage over European production and processing. European growers and packaging/processing companies have their own strategies for keeping their labour costs as low as possible, normally through the use of migrant workers, legally or illegally.

While cost-effective labour supply is vital, there are growing concerns in Europe over employment conditions. High value fresh produce tends to require intensive pest and disease control with hazardous agro-chemicals, which if used irresponsibly are very harmful to local workers (as well as potentially to consumers). Increasingly buyers in Europe will only deal with registered suppliers who have satisfied strict ethical criteria.

### **Co-operation**

All of the leading exporting countries in Africa have established mechanisms for co-operatively developing the industry, normally in partnership with Government and aid

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<sup>10</sup> e.g. in Zambia it has been estimated that 70% of the horticultural workforce is seasonal or casual and 65% is female.

agencies, e.g. Horticultural Crops Development Authority and Fresh Produce Exporters Association in Kenya; Zambia Export Growers Association; Horticultural Promotion Council in Zimbabwe. This allows shared facilities to be developed, e.g. cold stores and testing laboratories, and also provides a forum for setting industry standards which in turn help a country as a whole to get a good reputation for quality, e.g. conforming to permissible pesticide residues.

In the past the industry in some countries was dominated by state or co-operatively controlled marketing monopolies, e.g. Unifruco and Capespan in South Africa, but these have now lost their monopoly privileges.

### **Entrepreneurial Management**

Provided the location is right, entrepreneurial management is key. Many entrepreneurs and farmers have tried to participate in the high value fresh produce sector but there has been a high failure rate. All aspects need to be planned in advance, carefully negotiated and then implemented to exceptionally high standards - and then modified as the season progresses and from year to year as markets, products, infrastructure and competitors evolve.

The industry leaders (e.g. Homegrown in Kenya) are owned by entrepreneurs who have had the foresight to set trends as opposed to simply following them (e.g. establishing air-charter companies, owning private airport cold-store facilities, investing in European packaging, processing and distribution facilities, developing “organic” supply chains, branding) and have developed integrated, world-class businesses.

Within the industry the main buyers know the main producers personally and reputations for reliability and integrity, on both sides, are extremely important<sup>11</sup>. There are therefore reputational “barriers to entry” which make it difficult for completely new producers (or importers) to break into the market place at satisfactory prices.

### CDC Investment and Management Experience

CDC has invested in a wide range of high value horticulture enterprises in Africa sometimes taking on a management role as well. CDC’s direct investments are summarised in Appendix 1. In addition, CDC invested in several horticultural enterprises indirectly through its funding and management of several national and regional development finance companies and venture capital funds.

CDC’s involvement can be categorised into three periods.

#### *Pioneering in the early 1970’s*

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<sup>11</sup> Zambia’s largest flower exporter, Agriflora Ltd, collapsed due to misuse of loans from international development agencies. In 2004 the then Chairman of ZEGA was sentenced to 10 years in prison for using one of his rose greenhouses to grower marijuana.

In the early 1970's CDC participated in the establishment of the industry in Kenya, however the cost and risks of pioneering proved too high for CDC and its two investments, in Oserian and in Kurai Estate were not profitable. CDC sold its investments, coming to the conclusion that the sector was too entrepreneurial and high risk for an institutional investor.

*Spreading the benefits in the late 1980's and early 1990's*

By the late 1980's and early 1990's the high value horticulture industry was well established in Kenya, and CDC, as a development institution, believed it should support projects aimed at spreading the benefits to other African countries. Thus CDC invested in Zambia, Tanzania, the Gambia, Ghana, Nigeria and Namibia. Some of the projects were complete failures while others proved to be poor investments, as detailed below:

**Mpongwe Development Company, Zambia**

The history of Mpongwe is presented in detail in the food staples case study, but the experience with cut flowers is summarised here.

Between 1984 and 1991 Mpongwe produced gladioli for export to Europe. It was not a large-scale venture, turnover was around US\$250,000 p.a., but it was the only source of foreign exchange earnings with which to pay expatriate salaries and management fees at a time of a severe foreign exchange shortage in the country.

Agriculturally it was successful. Appropriate varieties were identified and trialled and good yields of high quality stems were produced. Premiums were achieved by supplying mixed bunches (more than one colour). It was also an important source of employment in the area.

Commercially it was a failure. Costs were substantially higher than revenue because:

- The floriculture industry was only just developing in Zambia, and there were no industry-wide facilities, e.g. no cold storage facilities at the airport, so that Mpongwe's refrigerated truck had to wait at the airport, until the plane was ready to load
- The industry was not yet large-enough to attract charter flights and so was dependent on freight space being available on infrequent passenger flights to Europe (Lusaka was not a hub for the airlines), and freight rates were high relative to the value of the flowers
- Mpongwe had to undertake its own road transport in the absence of a reliable contractor. It had just one refrigerated truck. The main flower harvest was during the rainy season, and the truck had to negotiate 70 km of dirt roads before

reaching a 300 km tarmac road to the airport. It frequently got stuck or broke down and missed the international flight. The distance alone made the road haulage expensive, relative to a competitor who had a gladioli production unit close to the airport

- The most sought after varieties of gladioli belonged to specialist plant breeders, who naturally charged as high a price as possible for the corms as well as royalties for each stem sold

Once Zambia adopted a more flexible foreign exchange regime, the absolute need to earn foreign exchange fell away and Mpongwe stopped growing gladioli and concentrated on its core business.

Horticulture subsequently evolved and developed in Zambia as growers found more suitable crops (e.g. roses) and locations (usually within 50 km of the airport) and formed the Zambia Export Growers Association, which established cold-storage facilities at the airport and facilitated the chartering of dedicated airfreight, and by 2004 had 28 members.

The rather obvious lesson from the Mpongwe experience is that good growing conditions are not enough. Transport cost and logistics are also a critical success factor. Even for a relatively high value commodity, production will steadily gravitate towards those locations which can deliver a quality product to end market at the lowest cost, including transport cost.

### **Makumbaya Farms, Gambia**

CDC went into joint venture with a UK specialist, Framptons, and a local investor to produce chrysanthemums for export. Gambia had a number of attractions – relative proximity to Europe, temperate climate, a growing season which was complementary to European production, relatively low cost labour. However this was an untried product in Gambia and a pilot scheme should have been undertaken to establish a viable production and distribution model. However Framptons was in financial difficulties and tried to proceed straight to commercial scale production. There were unresolved pest problems and problems with the logistics and capacity of air-freighting to Europe. Framptons went into liquidation and withdrew from the project. CDC took a majority stake and attempted to turn the venture around but was unable to create a financially viable farming system and supply chain. Eventually the project was closed down.

A key lesson was the high risk of trying to pioneer a new product, in a country with no tradition of export horticulture, even with an experienced partner.

### **Forest Resource Industries, Ghana**

The objective was to expand an existing small-scale pineapple estate and diversify into mangoes for export to Europe, with CDC providing a loan. Unfortunately the management was weak and employed mainly on the basis of family connections rather than professional competence. The mangoes were a complete failure due to disease. The costs of developing the additional pineapple area were reported to be 15 times higher than the local industry average. Quality was poor, there was no marketing plan as such and the average selling price of FRI pineapples was 50% of the national average. The venture went into receivership even though the pineapple industry as a whole in Ghana has done well and by the late 1990's was the country's most successful horticultural export.

A key lesson was the vital importance of top quality management to make or break a horticultural venture, even when the product itself is well established in the country. Horticultural crops are not tolerant of poor management.

### **Aussenkher Farms, Namibia**

This was a technically sound venture to produce out of season, irrigated table grapes for the European market, an activity which was well established in South Africa but which was pioneering for Namibia. The potential competitive advantage was that Namibian production should ripen a few weeks earlier than the South African crop, and so establish its own niche in the market.

The sponsor had the drive and commitment to get the venture off the ground and to produce a quality product. However CDC found his management style incompatible with its expectations. CDC believed that financial planning and financial controls were weak and that costs were saved by not providing adequate social infrastructure and by not fully complying with some aspects of local labour laws. The project went into arrears in debt service payments and faced receivership. The sponsor was able to resolve the situation by arranging for a local bank to refinance the CDC loans<sup>12</sup>.

The key lesson for CDC was that while it is essential that promoters and managers of horticultural ventures are "entrepreneurial", these large, labour-intensive businesses also need a strong element of sound administrative and financial organisation in order to be "bankable", i.e. capable of working with institutional investors. Managers who can combine entrepreneurial flair, integrity and attention to organisational and financial detail are rare.

### **Heleena Farms, Nigeria**

In 1993 CDC provided a loan for the first, export-oriented, rose farm in Nigeria, promoted by a local businessman. Expertise was to come from expatriate management and from European technical and marketing consultants. It was believed that the area around Jos, chosen for the project, had an excellent climate for rose production and that Nigeria would benefit from its relative proximity to European markets.

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<sup>12</sup> The venture survived as is now viewed as a major agricultural success story in Namibia.

In practice, the management appointed did not have practical experience of rose production and mistakes were made in the selection of varieties, choice of planting dates and disease control. Greenhouses were not well maintained. The logistics of transport to the airport and on to Europe proved more difficult than expected. Financial control was weak. Large losses were made and after three years the sponsor sacked the expatriate managing director and abandoned rose production in favour of producing vegetables for the local market.

This project again demonstrated the high risk of pioneering in the fresh produce sector. As a minimum, the management appointed should have had substantial rose growing experience in order to have had a chance of succeeding in a country with no previous experience of rose exports.

#### *Consolidation from the mid-1990's onwards*

As a result of these negative experiences in the early 1990's CDC became more cautious, recognising that while high value horticulture was an important and growing sector in Africa, pioneering was simply too risky for an institutional investor. Rather than quit the sector, CDC decided to focus on finance for the expansion and development of existing enterprises.

Two ventures financed by CDC-managed venture capital funds performed well and provided investors with good returns on their capital:

- In 1998 CDC's Acacia Fund in Kenya provided expansion finance for cut flower production by Mount Elgin Orchards Ltd,
- In 1999 the Fedha Fund provided expansion finance for Tanzania Flowers Ltd for the production of cut roses and the contract growing of chrysanthemum cuttings.

CDC also took a controlling stake in, and managed, two large-scale, established horticultural ventures where it believed there was scope to expand:

#### **York Farms, Zambia**

In 1996 CDC bought a controlling stake in York Farms, Zambia's leading exporter of cut roses and vegetables at the time. The business had originally been developed by a European farmer/entrepreneur, who had diversified into export horticulture in order to earn foreign exchange, at a time when there were severe foreign exchange shortages in the country. When the time came to retire and realise the capital value of his investment, in the early 1990's there were still foreign exchange restrictions which would have prevented him from remitting overseas any sales proceeds. He therefore negotiated with the Central Bank a deal whereby he would sell York Farms to the University of Zambia, in return for a share of its foreign exchange earnings until the purchase price had been remitted. He continued to manage the business until this objective was achieved and then was ready to leave the country. The University of Zambia knew it did not have the

expertise to run a large-scale commercial farm and invited CDC to acquire a 51% stake and take management responsibility.

CDC hired an experienced chief executive from Kenya to replace the former owner, while retaining the other senior managers, and the venture was run successfully for six years. The CDC management team expanded the area of irrigated vegetable production and was innovative in seeking new crops and new forms of products (e.g. pre-packed trays of mixed, prepared vegetables, labelled and bar-coded ready to put on supermarket shelves<sup>13</sup>). Roses were sold via the Dutch auction while most of the vegetables were supplied to the UK's largest supermarket chain, via a leading importer/distributor.

By the year 2000 York Farms had approximately 1,000 permanent employees and up to 1,500 casual employees.

Managing York Farms was not easy. Market requirements changed regularly, profit margins on established products were steadily eroded as new competitors joined the industry. Inspections by representatives of the UK supermarket chains were rigorous and demanding. In addition, as a UK Government owned institution, CDC was prone to attract closer inspection and investigation of its employment and environmental practices than would a fully private sector venture. York was criticised for employing workers on rolling, short-term casual contracts, especially women in the processing and packaging section, to avoid the entitlements due to permanent workers. It was also criticised for conforming to Zambian health and safety standards rather than UK standards.

In 2001 CDC decided to reduce its involvement in the agribusiness sector world-wide and York Farms was put up for sale. It was bought by a consortium of the management team and York's main UK importer/distributor. CDC sold its 51% stake in the business for less than it had originally paid for it, in spite of the expansion of the business, because profit margins had fallen.

The main lesson for CDC arising from York Farms was simply how challenging it is to remain profitable in the fresh produce sector. When good profit margins are achieved they attract increasing competition. Eventually products which start out as high priced, "differentiated" specialities become low margin "commodities". As with most modern consumer-oriented businesses (whether agricultural, manufacturing or services), there is a need for constant innovation if overall profit margins are to be maintained.

### **Sulmac, Kenya**

Encouraged by the relative success of York Farms, CDC adopted an objective to develop an international high value horticulture business, with diversified product range and production locations which would allow it to offer year-round supply of the main flower and vegetable products to key European supermarket chains. As part of this strategy, it believed it was essential to have a base in Kenya.

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<sup>13</sup> The premium for pre-packed trays of washed, trimmed, mixed vegetables was so high, that it was profitable for York to import baby carrots from South Africa to add to its mangetout and baby corn.

Sulmac was Kenya's leading producer of carnations (the largest carnation farm in the world at one time) and a major producer of roses. Almost by accident, it belonged to Unilever.<sup>14</sup> Cut flower production was not a core business and Unilever was looking to sell. However Sulmac was such a high profile, major employer in Kenya that Unilever was keen to sell to an organisation of established reputation and integrity.

CDC initially declined an offer from Unilever to acquire Sulmac, primarily because there was a back-log of over-manning and unsatisfactory housing conditions. There was also some concern about the role of Sulmac and other flower farms in contributing to pollution in the Lake Naivasha area. Unilever accepted the need to "get its house in order" prior to sale. CDC eventually acquired Sulmac in 1998.

Since cut flowers were not Unilever's core business, Sulmac had not invested adequately in new varieties of carnations and roses. It was producing standard products at low margins.

CDC's strategy was to invest in modernising the flower varieties in 86 ha of greenhouses and in diversifying into 150 ha of vegetable production. A new senior management team was recruited.

The strategy was not a success. In particular, CDC had underestimated the barriers to entry for a new, major producer of fresh vegetables. The importer/distributor who handled York Farms' fresh vegetable exports already had an established supplier in Kenya and saw Sulmac's diversification into vegetables as a threat. Other buyers in the UK wanted to see Sulmac establish a track record of reliable vegetable production before being willing to enter into buying contracts. Thus Sulmac found itself reluctantly producing vegetables on a "speculative" basis and its produce had to be sold at auction in Europe at relatively low prices. This, combined with the teething problems inherent in setting up the vegetable production unit from scratch, quickly led to financial operating losses.

In 2001 CDC put Sulmac up for sale as part of its strategic decision to reduce its involvement in agribusiness<sup>15</sup>. It was sold in 2002 to a major horticultural enterprise nearby, Homegrown, in return for a minority shareholding in the parent company, Flamingo Holdings.

A key lesson for CDC at Sulmac was the difference between marketing ambitions and implementable plan. Sulmac began large-scale vegetable production without having put into place specific marketing arrangements which offered a secure outlet and adequate profit margins. It was an over ambitious response to a grand strategy which had not been piloted on a more reasonable scale.

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<sup>14</sup> Unilever had bought Brooke-Bond, the international tea business, for its tea brands. Brooke Bond in Kenya had diversified into floriculture.

<sup>15</sup> A strategy due in part to the heavy losses being experienced by a number of recently acquired, major agribusiness ventures, including Sulmac itself.

### *Current CDC Strategy*

After selling its investments in York Farms and Sulmac (and most of its other agribusiness investments world-wide), CDC continued to look for horticultural investment opportunities in Africa, but only in the context of venture capital style investments made through regional investment funds, where paramount importance is given to backing established, successful management teams either with expansion finance or via management buy-outs or less commonly via management buy-ins.

In 2006 CDC committed US\$100m a new fund with an agribusiness sector focus – the African Agribusiness Fund, managed by a team based in Nairobi. Horticulture is one of its identified target areas for future investment.

### Conclusion

A key general lesson is to reiterate that even when operating in an established country such as Kenya, with an established business and with well known products it is still possible to fail commercially. High value horticulture is challenging.

A seductive feature of high value horticulture is that it is relatively easy to demonstrate high potential returns on investment by basing financial forecasts on the assumption of the early achievement of large crop areas, of good yields, of export quality production, sold for good prices. All of the parameters will be theoretically possible. However the practical risks involved at every stage are so high that the chances of actually achieving such forecasts are quite low, and highly dependent on management performance.

More than any other agricultural sector, it is not sufficient to have the right physical and economic conditions for success, i.e. climate, soils, location, transport infrastructure, critical industry mass, supportive Government regulations etc. These are necessary, but are not sufficient. Given favourable circumstances, success or failure of the individual enterprise is down to the entrepreneurial and managerial skills of the senior management team, and these have proved to be the most critical and most scarce success factors of all.

## Appendix 1

CDC INVESTMENTS IN HORTICULTURE <sup>16</sup> IN AFRICA 1948-2001					
	Country	Description	Invest (£m)	public /private	Outcome
1971	Kenya	<i>Oserian Estate Ltd Export horticulture</i>	0.12	pvte/JV	poor results. Sold to private buyer and loan repaid.
1972	Kenya	<i>Kurai Estate export horticulture project with private management</i>	0.10	/pvte/ govt/ CDC JV	poor results CDC sold stake in 1977
1984	Zambia	<i>Mpongwe Development Company. Mainly cereals and coffee, but produced gladioli for export 1984-91</i>	26.0	CDC/go vt JV	gladioli were technical success, but commercial failure, and abandoned
1989	Tanzania	<i>Chrismill Farms Pineapples for export</i>	1.10	pvte	CDC Equity and loan; failure
1990	Ivory Coast	<i>Plantations Dam Pineapples for export</i>	1.00	pvte	CDC equity and loan; failure
1990	Gambia	<i>Makumbaya Farms Flowers for export. CDC took over management after bankruptcy of sponsor</i>	1.78	CDC	CDC equity and loan; failure; abandoned
1991	Ivory Coast	<i>Eglin Pineapples for export</i>	1.25	pvte	technical success; sustainable business; investment failure
1992	Namibia	<i>Aussenkehr Farms grape production for export</i>	1.76	pvte	equity and loan; technical success; financial failure; loan refinanced by sponsor
1992	Ghana	<i>Forest Resource Industries Ltd Pineapple and mango for export</i>	0.50	pvte	CDC loan; failure; liquidated
1993	Nigeria	<i>Heleena Farms Roses for export</i>	0.50	pvte	CDC loan; failure.
1996	Zambia	<i>York Farm Roses and vegetables for export</i>	3.22	CDC	technical success; sustainable business; investment failure. Sold to MBO team, 2002.
1998	Kenya	<i>Sulmac Acquisition from Unilever. Modernise floriculture and develop vegetable enterprise for export</i>	3.98	CDC	poor technical results and weak marketing; investment failure. Sold to Homegrown, 2002
1998	Zimbabwe	<i>Ariston Diversified agribusiness holding co, including horticulture</i>	no new inv.	pvte	shares acquired in swap for Southdown Tea Co shares. Sustainable business; Investment

<sup>16</sup> excludes investments made via CDC-controlled development finance companies and venture capital funds

					failure
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