

PA-ABR-606
151 80297
KENYA EXPORT DEVELOPMENT SUPPORT

**GERMAN MARKET SURVEY
FOR
SELECTED KENYAN FRESH
AND PROCESSED PRODUCE**

**Development Alternatives, Inc.
USAID Contract No. 623-0249-C-00-2021-00
KEDS Project P.O. Box 40312 Nairobi, Kenya**

German Market Survey
for
Select Kenyan Fresh and Processed Produce

Prepared by
David Jones
Fintrac Inc.

USAID Contract No. 623-0249-C-00-2021-00

This publication was prepared under the auspices of KEDS, which is the USAID-funded Kenya Export Development Support Project. Technical assistance is being provided by Development Alternatives, Inc., in association with The Services Group, Deloitte Haskins Sells, and Fintrac Inc.

TABLE OF CONTENTS

	Overview	i
Section I	Asparagus	1
Section II	Avocados	6
Section III	Green Beans	11
Section IV	Chilies	17
Section V	Mangoes	21
Section VI	Processed Mangoes	26
Section VII	Passion Fruit Juice	31
Section VIII	Mangetout (Snow Peas)	34
Section IX	Fresh/Frozen Strawberries	38
Section X	Cherry Tomatoes	51
Appendix A	German Import Statistics	A-1
Appendix B	Key German Contacts in the Fruit and Vegetable Trade	B-1
Appendix C	Key Strawberry Contacts in Germany	C-1

OVERVIEW

Market Opportunities for Kenyan Exporters

The table below gives a brief overview of German market prospects for selected Kenyan products. Products are rated on the following scale:

- 5 Excellent/Good market prospect, high volume potential
- 4 Excellent/Good market prospect, low volume potential (niche)
- 3 Fair market prospect, high volume potential
- 2 Fair market prospect, low volume potential (niche)
- 1 Poor market prospect
- 0 No market prospects exist

Those marked with an asterisk ("*") signify that additional market research is needed before any further steps can be recommended.

Product	Rating	Notes
Asparagus - Fresh	2*	Major white market; narrow window for green requires further investigation
Asparagus - Frozen	2	Possible market; China emerging as significant and cost-effective supplier
Asparagus - Canned	1	Supplied by China very cost-competitively
Avocados	3	Good existing market for Kenya; intense competition from Israel and South Africa; potential air vs. sea transport problem
Green Beans - Fresh	4	Good existing market and reputation for Kenya in fine beans; growing competition from Mediterranean countries
Green Beans - Frozen	2	Kenya would need to produce 5mm diameter IQF Extra Fine beans to enter market; intense competition from Poland and China
Chilies - Fresh	2	Small existing market for Kenya; expansion unlikely due to limitations of demand and strong Turkish trade
Chilies - Ground	3	Growing industrial market; strict phytosanitary controls.

Product	Rating	Notes
Mangoes - Fresh	3	Steady existing market for Kenya; expansion limited by preference for red blush varieties
Mango - Juice	4	Good market prospects; strict adherence to standards essential
Mango - Canned	2	Some demand in a mixed range of exotics
Mango - Dried	1	Small market already well-supplied
Passion Fruit - Juice	4	Potential of supplying 1-2 container loads monthly; volatile prices; strict adherence to standards essential
Mangetout - Fresh	1	Very small market but worth monitoring
Mangetout - Frozen	1	Cost-effectively supplied by EC and China
Strawberries - Fresh	2	Large but risky market; best quality only
Strawberries - Frozen	2	Trade almost entirely locked into Senga Sengana variety; potential for premium small calibration berries of below 20mm
Cherry Tomatoes	2*	Growing market warrants further research; best pre-packed; intense competition

Country Profile

Germany is easily the largest market in Europe for fresh fruit and vegetables. The demand comes from its very large population with original West German numbers of over 60 million people expanded by 40 million as a result of unification. Further market expansion has occurred since 1990 as a result of the independence of the Eastern Socialist countries and the channelling of their demand for food through Germany.

The majority of German consumers buy their food products through the retail outlets of supermarket chains, although street markets are also relatively active in major cities.

Given the current size of the German market, its consumers' penchant for fresh produce, and its projected growth, there are some definite opportunities for further Kenyan market development. There is lesser opportunity in the processed foods sector, not because consumption isn't very substantial (again, Germany leads the rest of the EC in some categories), but because the Eastern European countries and China are already supplying a full range of canned and frozen fruits and vegetables, with South Africa, Israel, Australia, New Zealand, and Latin America also providing significant volumes.

Retailers and Importers

The German food retail business is dominated by a number of supermarket chains. The largest companies are Rewe, Edeka, the Metro Group (Markant Gruppe), Aldi, Spar/HKG and the Tengelmann Group, though market segments are changing continuously due to merger activities. Each of the supermarket groups operate under a large number of retail names additionally, e.g. Rewe has Kontra, HL, Pennyarkt, R-Kauf, Jumbo, Globus, etc.; and Edeka includes Activmarkt, Neufaf, Super 2000, Center, Elkos, and Union SB. Although the major supermarket chains are involved in the direct purchase of bulk fruit and vegetables, they generally use importers and agents for smaller supplies of imported produce.

There are long-established and reputable fresh produce importers which are used by the major retail outlets, including Fruco, Fruchtring, T. Port, Wiechert, Trofi, Plaumann and Lutaco in Hamburg; Atlanta/Scipio in Bremen and Munich; Fruchthansa in Cologne and Durbeck, Grassnick and American Fruit Importers in Frankfurt. Wholesale markets do exist in all the major cities in Germany, but the above companies have representatives in most of these markets and tend to operate on a national scale.

The normal pattern of trade is by free consignment, although some will also trade on a fixed price basis where a steady relationship has been established with the supplier. "Free consignment" entails the importer providing guideline prices but not actual price guarantees prior to the dispatch of a container. On receipt of the product, the importer channels it to wholesale and retail outlets, paying the supplier according to price achieved minus agreed-upon deductions. Normal mark-ups include a charge for transport and handling; the duty payable; an average of 8% commission by the importer; up to 15% commission for the wholesaler to the retail outlet; and anything from 50% - 100% mark-up by the retail outlet itself. Payment is normally made 30 days after receipt of the produce and relevant documents.

In terms of frozen fruits and vegetables, the German market is complex, made up of a network of importers/agents, re-packers, manufacturers, and a range of different retail outlets (again, however, primarily supermarkets). Suppliers at source sometimes pack "own label" products for premium and supermarket brands, though more often manufacturers and retailers buy spot from inventory held by importers and wholesalers. In this case, the supplying countries provide product to the importer, who then channels it onto coldstores and then targeted clients (be they re-packers, manufacturers, or retailers). Major importers include Henry Lamotte, Gustav Wolff, Pickertsen, Lindt & Co., Wunsche, Dole, DelMonte, and Libby's. Blending companies and jam manufacturers also buy direct, but only for large volume items such as strawberries, apricots, peaches and citrus fruit.

Product Promotion

The type of promotion normally carried out for fresh produce in German supermarkets is essentially based on price. A two-way system operates in that the supermarket chain can inform the importer if they wish to do a price promotion; or the importer contacts the

supermarket/retailers informing them of product arrival from a certain source and offering a discount.

Many of the major supplying countries have marketing boards based in Germany and have a team of panelists made up of importers and retailers that organize the distribution, pricing and marketing of the product in Germany. The marketing board itself, e.g. Agrexco for Israel, provides back-up promotional literature such as brochures, shelf-talkers, etc.

Market Share in Grocery Retail - 1991		
	DM Billion	%
Markant-Gruppe	31.2	17.8%
EDEKA	31.1	17.7%
Rewe/Leibbrand*	29.2	16.6%
Aldi	23.5	13.4%
Spar/HKG	19.7	11.2%
Tengelmann-Gruppe	13.7	7.8%
Interbuy	10.7	6.1%
Remaining Branches	12.6	7.2%
All Others	4.0	2.3%
TOTAL	175.7	100.0%

* Not including Rewe/Leibbrand consumer goods specialty markets

Environmental Control

One point to note is the need for the application of a "green spot" or a "green point" to all forms of packaging. This is as a result of the new environmental legislation introduced recently by the Minister of Environment. An issuing license is necessary from the "Duales Company", based in Bonn. Either the source supplier or the importer can apply for the license to place the green spot on the packaging.

NOTES: This report covers the majority of the pre-identified products for which the KEDS team requested review with the notable exception of okra. This product is relatively unknown in Germany (and the Netherlands), with very little interest existing for it, and no separate statistics available. In addition, there are sections to the Germany Overview which do not appear in other KEDS' Country Reports (Retailers and Importers, Product Promotion and Environmental Control). This is due to the fact that this information was excerpted from a previous report completed by the author for a private client.

SECTION I: ASPARAGUS

Ranking Overview

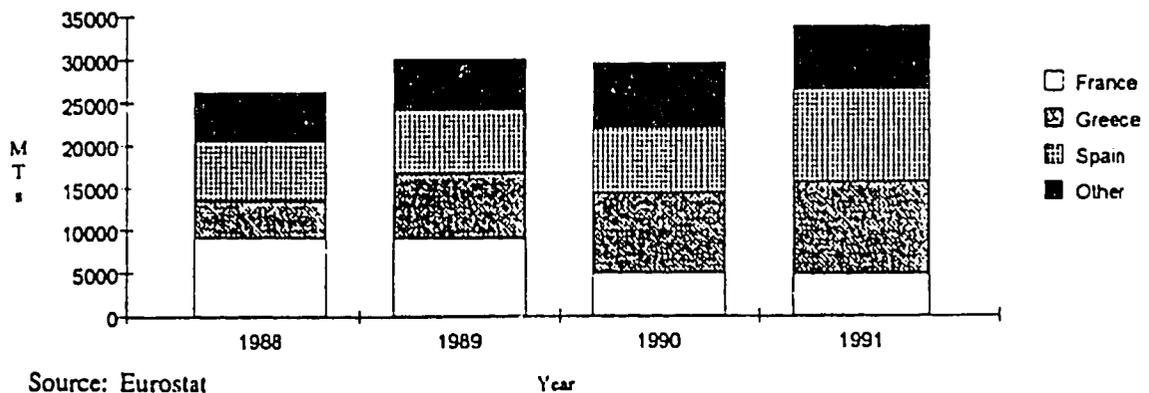
<u>Product</u>	<u>Ranking</u>	<u>Notes</u>
Fresh Asparagus	2*	Mainly a market for white asparagus; *narrow window for green needs further research.
Frozen Asparagus	2	Possible market but China emerging as a significant and cost-effective supplier
Canned Asparagus	1	Supplied by China at very competitive prices

Domestic Production

Germany produces on average 16,000 tons of asparagus. They are available in May/June.

Imports

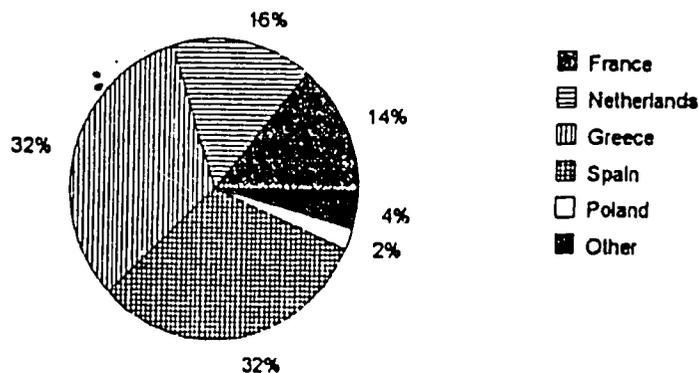
German Asparagus Imports, 1988-1991, MTs



Imports of fresh asparagus by West Germany are the highest in Europe, averaging just below 34,000 tons in 1991. This represents a steady increase from 1987 when total imports were 26,300 tons, increasing to 30,000 tons in 1989 and 1990. The total value of imports into Germany in 1991 amounted to over 104 million ECUs, which was 73% of total EEC imports (12 countries).

The fresh market is mainly catered for by four countries, viz. Greece, Spain, the Netherlands and France. In 1991 both Greece and Spain supplied over 10,000 tons, with the Netherlands supplying 5,000 tons and France 4,800 tons. France has seen a significant reduction in its position over the last few years, having been the dominant supplier between 1987 and 1989. Spain has steadily increased supplies and Greece has made a significant advance from just 3,700 tons in 1987 to the 1991 figure mentioned above. The only other suppliers of note in 1991 were Poland, Argentina and South Africa, whereas in 1990 supplies also came from the USA and Thailand. The four major suppliers, in 1991, combined to supply 94% of total imports.

German Import Market Share - Fresh Asparagus, 1991



Source: Eurostat

There is only a small demand for frozen green asparagus, although one importer has been bringing in 100 tons per annum regularly from Chile. The major suppliers of white asparagus are Spain, France, Taiwan (China province), Chile, and Peru.

Consumer Preferences

Although numerous different varieties are grown and are acceptable in Germany, the most notable are University of California (UC) 157, F1 and F2 UC157, UC 72, Mary Washington, Mary Washington 500W, Lucullus, Argenteuil, UC800, Balenco Aleman, Franklin, Rutgers Beacon and Boomlin.

Fresh asparagus spears are classified into three groups according to color - white, violet (with tips and part of the shoot colored between pink and purple), and green, when the tips and part or all of the stem are green in color.

The German market is predominantly a market for white asparagus which accounts for more than 80% of sales. Demand for green asparagus was increasing but seems to have stabilized at around 20% of sales, mainly in the gourmet outlets.

Spears must be closed, undamaged and with a straight stem. German consumers expect

white asparagus to be extremely soft ("as soft as butter") where the green varieties can have more 'bite'. Asparagus must not be stringy, or in any way woody.

Seasonal Patterns of Demand

The German market for fresh asparagus is relatively enormous and, given its importance in the average consumption budget, it is a product traded in large volumes at low prices. This normally occurs once new crop product starts arriving in March/April and so between that time and the end of July/August there is very little opportunity on the market for any new suppliers.

South Africa, the USA, Argentina and Mexico have established market niches in the winter months between November and January and get reasonable prices at that time for their air freighted product. Once March/April arrives and the product starts coming in very large quantities by truck from Spain and Greece, France and Holland, then the market price collapses and air freighted product would not be able to attain a feasible price level. German production comes on stream in May and June.

Prices

Winter prices for fresh asparagus are, on average, around 50% higher than in the spring and summer months, reaching levels of between DM12 and DM18 per kilo at wholesale market for the white product and DM6-10 per kilo for green. Prices vary with supply however, and when excess supplies appear on the market prices can fall as low as DM3 per kilo. There is also a significant premium for the larger size spears, with those over 16mm regularly selling at prices approximately 50% higher than the 12-16mm spears.

For frozen asparagus, prices vary significantly but tend to center around US\$3,000 per ton C&F Hamburg.

Market Distribution

Fresh asparagus is imported mainly through the traders working in the major wholesale markets, notably Hamburg and Frankfurt. Winter asparagus from different sources is flown in to Frankfurt and is mainly sold from there through the wholesale market. For small quantities from distant sources all major retail outlets use importers.

Grades and Standards

Asparagus grades are defined by EEC regulation No. 183/64, the last amendment being 1677/88 of June 1988. Quality standards have also been issued by UN/ECE:No.FFV-04 and by the OCED:No.19.

Subject to special provisions for each class and the tolerances allowed the fresh asparagus must be:

- whole
- fresh in appearance
- fresh smelling
- firm
- free from damage by rodents or insects
- practically unbruised
- free of earth or any other dirt
- free from excess external moisture.

Washed asparagus must be adequately dried, free from foreign smell or taste, cut at the base as clean and as square as possible. They must also be able to withstand transport and handling and arrive in satisfactory condition.

The contents of each packet should be uniform in terms of origin, quality, color and size. The shoots must not be hollow, split, peeled or broken and the product should not have been treated to any preservatives or restoratives.

There are three classes: "Extra" Class, Class I and Class 2.

- 1) The "Extra" Class asparagus spears must be of superior quality, well formed and practically straight. The spears should have compact tips. A trace of rust is allowed provided it can be easily removed by peeling. "White" asparagus tips must be white, with only a faint tint of pink allowed provided it appeared after cutting. To improve presentation of bundled asparagus, outside spears can be bevelled up to a height of 1cm. The German market requires large sizes of white asparagus - over 16mm in diameter and 18cm long.
 - a) Length of the spears in this class must be: 17cm to 22cm for long asparagus and 12 - 17cm for short asparagus. Sizes under 12cm are called asparagus tips.
 - b) The diameter of a spear is measured at its mid point, with "Extra" class having a diameter of between 12 - 16mm. Spears of 16mm must not have a diameter variation of over 8mm in each bundle.
 - c) Tolerances in terms of quality are that no more than 5% of the spears should fall short of "Extra" Class quality and then not below Class 1 standards.
- 2) The other two classes, Class 1 and Class 2 are similar to the above, except with greater tolerances in all aspects. Class 2 asparagus is not really acceptable in Germany.

Asparagus are usually packed in bundles or in trays which are over wrapped with micro perforated PVC film. The normal form of packaging is in 8 x 500 gm cartons, although the product is also accepted loose in 5 and 6 kilo trays. 6 kilo bulk packed asparagus require about 15 liters of internal volume, but when packed in 500 units, the internal space required is 14

liters for 4 kilos.

Winter asparagus coming from distant sources should be packed in 500gr. or 1 kilo bundles. Crates should contain 8-10 bundles or trays.

With regards to frozen white asparagus, specifications are that the spears must be around 16-17 mm in length, be pure white, well-peeled and packed in either 4x2.5kg or 10x1Kg poly bags within export quality cartons. The preferred diameter is around 17mm. Importers will allow only one broken spear per five packs of 1,250gms. The packs contain 250gm sashes within plain polybags; cartons are normally of 10 kilos.

There is also a market for frozen cuts and tips. Length must be between 2-3 cm and diameter between 8-12mm. A 10% tolerance is normally allowed on these specifications. Cuts and tips can also be 1/2 inch and 1 inch.

Import Regulations and Duties

As regards the effect of tariffs on price, asparagus from Kenya would face duties ranging between 7.2% in the first 15 days of January, to 16% between March and September. Average winter rates are 9.6%. Asparagus falls under Tariff No. 07092000.

Market Opportunities for Kenyan Exporters

There are small opportunities in the fresh market for Kenya if it can produce top quality white asparagus in November, December and January. The market for green asparagus could perhaps be further investigated, but as noted is much smaller. Green asparagus from Mexico and one or other Southern Hemisphere countries are in existence on the wholesale markets in these winter months and do, if they are of the best quality, command relatively good prices.

Climate, and events on the fresh market impact on the supplies and prices of frozen asparagus, which might present a possible market for Kenya -- though it should be noted that China, who is presently a major supplier of canned asparagus, is developing its frozen facilities very quickly and is fast emerging as a significant (and highly cost-effective) supplier.

SECTION II: AVOCADOS

Ranking Overview

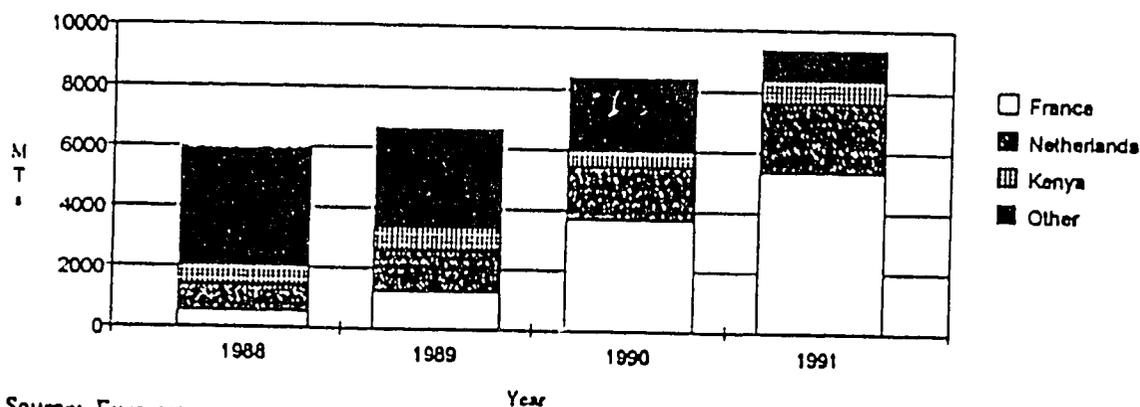
<u>Product</u>	<u>Ranking</u>	<u>Notes</u>
Avocados	3	Good Existing Market for Kenya; Intense Competition from Israel and South Africa

Imports

By other European country standards, imports of avocados into Germany are relatively small. In 1991 Germany imported 9,400 tons of the product, as compared with, for example, 88,500 tons for France and over 15,600 tons for the United Kingdom.

Of note, however, is the fact that the market has been growing steadily in Germany from a total of 2,755 tons in 1982 to 5,600 tons in 1985 and to 9,400 tons in 1991.

German Avocado Imports, 1988-1991, MTs



Source: Eurostat

Market Share

Until 1990 the major suppliers of avocados to Germany were Israel and South Africa. In 1986, for example, Israel supplied over 6,000 tons, representing 77.7% of the market. By 1989 this figure had fallen to 45% with the rest of the market being supplied by South Africa, Kenya and the USA.

Figures for 1990 and 1991, however, are highly unusual in that Israel practically disappeared from the market, supplying only 34 tons. AGREXCO, the marketing board for Israel, based in Frankfurt, report that the reason for this is that frosts in Israel caused almost a complete failure of the crop.

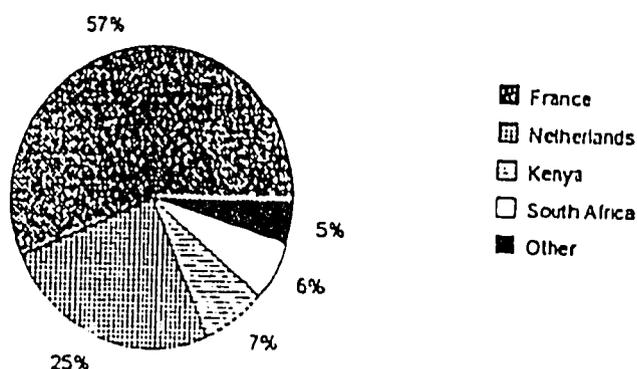
some 41,800 tons, the majority of which found its way to France. France, on the other hand, which supplied just over 12,000 tons to Europe as a whole, directed over 5,000 tons of that to Germany. The other major supplier to Germany in 1991 was the Netherlands with some 2,300 tons.

It is difficult to pinpoint exactly what happened in these two years but one possibility is that the Netherlands and France were reexporting fruit from Spain, from some South American countries and from West Africa.

As regards distant suppliers, South Africa contributed almost 600 tons in 1991 - a significant reduction on its totals of 962 tons in 1985 and 966 tons in 1986.

Supplies of avocados from Kenya in 1991 amounted to almost 699 tons, exceeding total supplies from South Africa in that year. The 1991 total for Kenya compares with 530 tons for 1990 and represents a gradual increase in the Kenyan contribution to the German market since the early 1980s when tonnages were between 130 and 300 tons. Since 1986, tonnages have averaged around 500 - 600 tons.

German Import Market Share - Fresh/Dried Avocado, 1991



Source: Eurostat

Consumer Preferences

In Germany green varieties such as Fuerte, Ettinger and Nabal are the most popular. The dark, crumpled Hass variety, although acceptable in the UK, is not so popular in Germany.

The fruit should essentially be pear shaped, green, with no marks on the skin and without a stalk if possible. The internal characteristics of the fruit are that it should not be too unripe with no bruising. A smooth, creamy taste is required with little, if any, fibre texture. The taste should have no bitterness.

As regards sizes, the optimal market dimensions are between 260-360 grams - counts of 12-14 in a box. Fruit within the range 10-16 are also acceptable. The most popular sizes are 270-330

Seasonal Patterns of Demand

The market takes about 700 tons per month from October to March but supplies fall to about 400 tons per month from April until September. Israel was the major supplier in the winter months starting in mid September, and supplying through winter to mid-March. From early April South African and Kenyan supplies arrive on the market and are available from April through into September of each year. Spain tends to supply the market from October through January/February, as does the USA.

There are no obvious gaps in the flow of products to the market, although climactic disturbances in major supplying countries can create opportunities for new or alternative suppliers (i.e. the Israeli frosts in 1990/91).

Prices

Avocados have low to medium prices, partly because they are not as popular in Germany as they are in some other European countries. AGREXCO, the Israeli marketing board has spent 15 years attempting to educate the German consumer in proper appreciation and usage of avocados. On average gross wholesale prices are around 3-4 Deutschmarks per kilo, although prices are higher in summer, particularly in September/October where they sometimes can reach more than 15% above the average. Lowest prices are reached in January/February of the year.

Market Distribution

The distribution of avocados in Germany is mainly a reflection of the major suppliers. Israel has its marketing board AGREXCO based in Frankfurt; a large number of the major importers are panelists for the board, i.e. they are involved in the pricing and marketing of the product on behalf of Israel. South Africa also organizes its distribution through selected importers. Both countries spend significant amounts of money on promotion.

In most cases, the avocados find their way to retail shelves via wholesale markets or importers' warehouses direct to the major supermarket chains. Contact with any of the importers itemized *in this report* would be an appropriate way to target the market. This of course is already being done by many Kenyan exporters, who are fully aware of the relative merits of using German importers.

Grades and Standards

The standards for avocado are set under UN/ECE No. FFV-42. EC minimum requirements are that the fruit must be:

- Sound: rotting and deteriorating produce which is unfit for consumption must be excluded
- Clean and practically free of foreign matter
- Maximum stalk length of 10mm, absent stalk acceptable
- Free of abnormal external moisture
- Free of foreign smell or taste and the ripe fruit free of bitterness
- Free of damage due to low temperature
- Sufficiently mature so that ripening process can be completed
- In packages that are uniform in terms of origin, variety, quality and size

Avocados, like many other fruit under EC standards are classed into "Extra" Class, Class 1 and Class 2.

"Extra" Class avocados must be of best quality, typical in shape and coloring of the variety. Skin must be blemish free, except for the most superficial of marks, and if there is any stalk present it must be intact. Tolerances are only 5% short of "Extra" Class quality standards, and they are not below Class 1 Standards.

Class 1 avocados must be of good quality, though some slight defects are allowed as long as the fruit is generally "typical" in quality and presentation. No more than 10% of the fruit should fall below Class 1 standard and then not below Class 2 standards.

Class 2 avocados are not normally imported into Germany.

The labelling on each package must be clearly legible and visible, and should state:

- Identification, name and address of packer or dispatcher
- "Produce", "avocados" and variety name
- Country of origin
- Commercial specifications, class, net weight, size in maximum and minimum weight, code number of size scale and number of fruits, if difference from reference number.

Other useful labelling information, while not legally required by the EC, which would assist with marketing includes:

- "This Side Up" symbol
- "Fragile" symbol
- Temperature symbol with indication of correct storage temperature for fruit, i.e. maximum 8°C, minimum 5°C
- Date of packing, often in code
- Tare weight in kilograms with maximum deviation in percentage
- Identity of grower

boxes should have ventilation holes. Fully lidded boxes are best to give strength and rigidity. Dividers may be used but are not a necessity.

Import Regulations and Duties

Avocados fall under Tariff 0804.40100100 (December 1st to May 31st) and 0804.4090010 (June 1st to November 30th). Products from ACP countries pay zero duty during both calendar periods. Israel pays 0.8% duty from December to May and 1.6% duty from June to November. The full rate of duty is 4% in the first calendar period and 8% in the second.

Market Opportunities for Kenyan Exporters

As mentioned above, AGREXCO has spent 15 years attempting to develop the German taste for avocados, and though it has worked to a certain extent, the German market is still considerably smaller than France and the UK. (Also, typical of Israeli marketing efforts, the demand created has been for their own brand name product, Carmel.) Israel is the main supplier in winter months, and South Africa supplies the market during the summer. Although in 1991 Kenya did supply more tonnage than South Africa, it is possible that situation will reverse itself as South Africa becomes more integrated into the international trade system.

Also, as can be seen from the data for the last two years, there are occasions when countries, because of climactic problems, disappear from the market (though the normal pattern usually reverts over the next few years, as is anticipated in this case). In such instances, demand does exist though, for however short a time, and the market potential is there to be developed. Taking advantage of short term market opportunities in different parts of Europe is very much in line with the Israeli concept of marketing. AGREXCO, for example, sends shiploads of avocados in containers to main European ports - notably Marseilles, and distributes the product from there according to the highest price offered in European countries. This of course requires significant organization, a fully fledged and efficient marketing board, and a well established distribution network within Europe.

Another potential problem for Kenya is transportation -- some high quality avocados are imported by air, usually between the two major suppliers' seasons, but it is normally very difficult to attain a price in the market which will cover the difference between air and sea transported product, which is the reason most avocados are sea-freighted. Limited technology and service hinder Kenya in the area.

SECTION III: GREEN BEANS

Ranking Overview

<u>Product</u>	<u>Ranking</u>	<u>Notes</u>
Fresh Green Beans	4	Good Existing Market and Reputation for Kenyan Beans; Growing Competition from Mediterranean
Frozen Green Beans	2	Kenya Would Need to Produce 5mm Diameter Individual Quick Frozen (IQF) Extra Fine Beans; Intense Competition from Poland and China

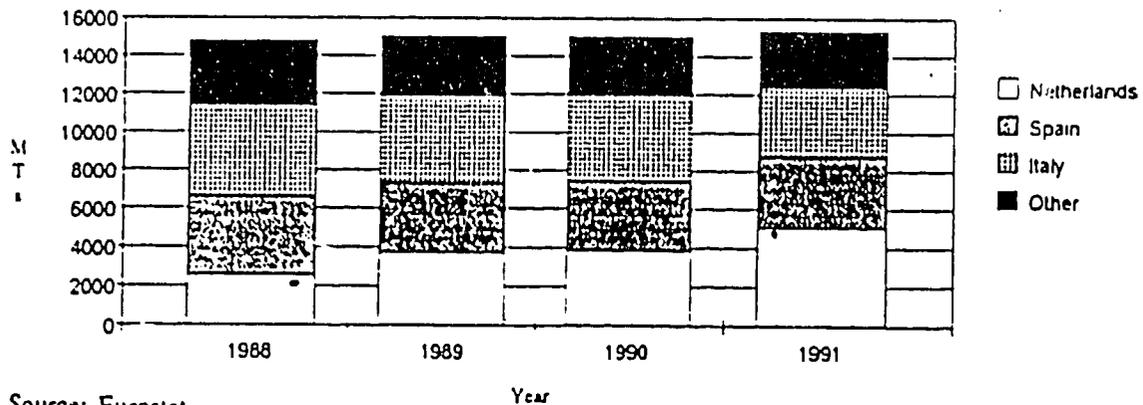
Domestic Production

Germany produces about 40,000 tons of green beans annually (large variety).

Imports

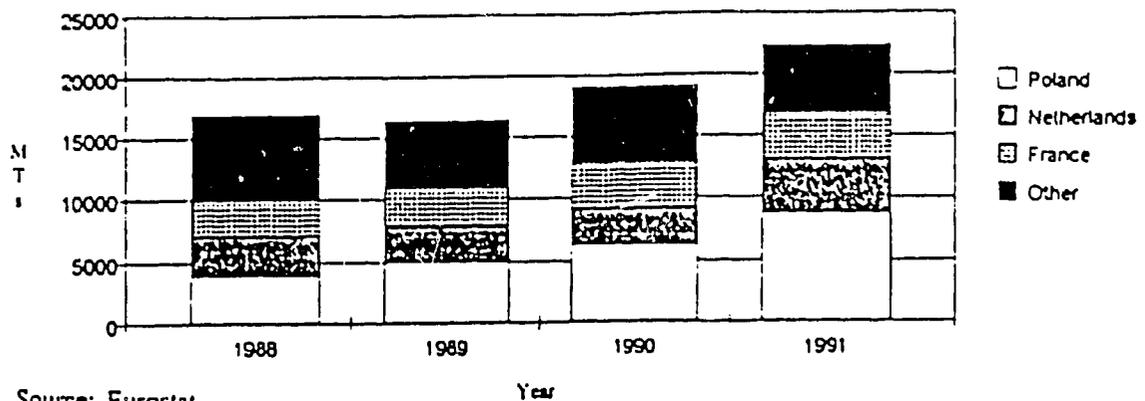
Fine and bobby beans are not distinguished in the official import statistics of beans into Germany. In the four years between 1987 and 1990, there was very little growth in imports of beans, averaging 15,000 tons. In 1991, total imports of fresh beans into Germany amounted to 15,386 tons of which almost 10,000 tons were received in the nine month period between October and June and 5,800 were received in the 3 months between July and 30th September.

German Fresh Bean Imports, 1988-1991, MTs



Source: Eurostat

Frozen beans imported into Germany in 1991 amounted to 22,372 tons.



Source: Eurostat

Market Share

In 1991, the major supplier of fresh beans to Germany was the Netherlands with just over 5,000 tons, most of which arrived in the three months between July and the end of September. The next largest supplier in 1991 was Spain; practically all its produce came in the period between October and June. Italy, which was only marginally below Spain, had a more even distribution of product, although there is a far greater incidence of supplies from Italy on a monthly basis, between July and September.

Distant suppliers to the market in 1991 were: Kenya, with some 450 tons, Egypt with 367 tons, Ethiopia with 364 tons and Turkey with 370 tons. The total coming from Kenya was a reduction on its exports of some 550 tons in 1989 and 500 tons in 1990. On average, however, between 1987 and 1991 Kenya has been exporting 400-500 tons of its fine beans to Germany.

In terms of value, the total worth of the fresh German market in 1991 was some 18.8 million ECUs, of which Kenya captured demand to the value of almost 700,000 ECUs. This compares with a market value of over 800,000 ECUs in 1989.

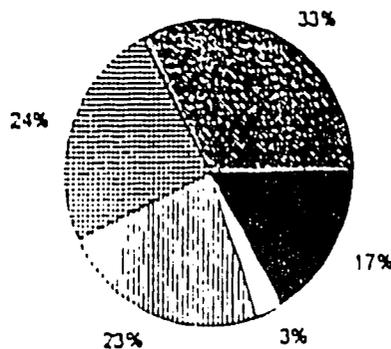
Of the 22,372 tons of frozen beans imported in 1991, the split between intra and extra regional EC sourcing was relatively equal. The major supplier was Poland with over 8,700 tons followed by the Netherlands with 4,300 tons, France with 3,700 tons, and Belgium/Luxembourg with 2,000 tons.

Frozen beans were also imported from distant sources, including Peru with almost 300 tons, and China with 236. Although Kenya did export 63 tons of frozen beans in 1991, only one ton found its way to Germany, the rest going to the Netherlands and Denmark.

Other distant countries processing and exporting frozen beans include Morocco with over 8,000 tons in 1991 (going almost exclusively to France); South African with over 500 tons (going almost exclusively to the U.K.); Cameroon with 570 tons (all of which went to France); and

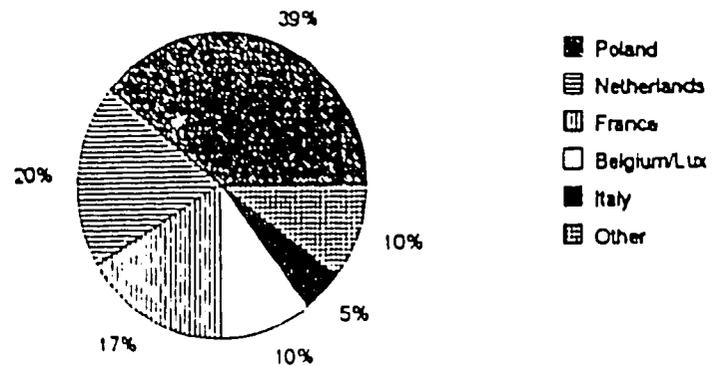
Egypt with 200 tons (all of which went to Belgium/Luxembourg).

German Import Market Share - Fresh/Chilled Beans, 1991



Source: Eurostat

German Import Market Share - Frozen Beans, 1991



Source: Eurostat

Consumer Preferences

In Germany stringless fresh Bobby bean types are the most popular green beans consumed. Fine and Very Fine beans, as supplied by Kenya, are sometimes called Princess beans. Large Cora or Bobby beans are the normal consumption item in the German consumers' expenditure basket however, whereas fine and very fine beans are normally consumed in quality restaurants and gourmet shops.

The beans must be green, fresh, whole and healthy in appearance and with straight pods.

The only prospects for distant supplying of frozen product is for the Extra Fine variety.

Seasonal Patterns of Demand

The peak import month is June when on average some 3,000 tons of fresh beans are imported. The main suppliers are Spain, the Netherlands, and Italy. Spain starts supplying Germany from the middle of March, although it is getting earlier each year. Italy usually arrives on the market in April and the Netherlands from the beginning of June. In the three months from 1st July to 30th September 1991, Germany imported some 5,800 tons of beans. This amount has been a relatively steady import total since the mid-1980s with, for example, the same period in 1986 seeing an import of 6,400. In the other nine months of the year, from October to the end of June, total imports were some 9,500 tons in 1991. During the summer months, the market is supplied almost entirely by other European countries with the exception of some beans coming in from Kenya – very small quantities.

In the winter months the predominant suppliers have been Egypt, Ethiopia and Kenya, although in recent years product from Turkey has also been arriving in the close season.

Prices

Fine fresh beans sell at a premium to Bobby beans with, for example, wholesale prices in 1990 being some DM5.5 - DM6.5 per kilo during winter months. Bobby beans prices for air freighted produce are lower at between DM4 - DM5 per kilo during the winter period

In the frozen category, France is supplying Germany, and getting around \$131.00 per kilo. Although this price is relatively cheap, it is for beans with a diameter variation up to 10mm. Attainable prices for Extra Fine frozen of 5-6mm diameter could attain a price of 80-90 US cents per pound, but quality would have to be consistently high.

Market Distribution

The pattern of distribution for fresh beans is divided into two sections: -

- (1) The large volume market for European Cora and Bobby beans, often by direct contract with major retailers and industrial and food industry users.
- (2) For smaller quantities of air freighted produce from distant sources in winter months, the distribution pattern is similar to that for most of the other products included in these studies viz, via air to importers and from them on to wholesale markets or direct to food service industry users and retailers. (all Extra Fine and Fine beans are air freighted)

Grades and Standards

The EEC have a common quality standard for fresh beans, applied to the varieties *phaseolus vulgaris* L and *phaseolus coccineus* L. The standard is EC regulation No. 58/62 - the most recent amendment No.920/89 being in April 1989. EC minimum requirements are that the vegetable must be:

- Whole, intact
- Sound: rotting and deteriorating produce which is unfit for consumption must be excluded
- Of fresh appearance
- Clean, in particular free from any impurity or any visible trace of the chemicals used
- Free from foreign smell or taste
- Free from all abnormal external moisture
- The beans must be of sufficient size and the state of the produce must be such as to enable it to be able to withstand transport and handling, to be kept in good condition until it reaches its place of destination and to meet market requirements there
- The contents of each packet should be uniform in terms of origin, variety and quality, and, in the case of needle beans, the same size.

The EC standard divides beans into two groups, viz. Fine Beans (Needle Beans) and other

Fine beans are graded into three classes, "Extra" Class, Class 1 and Class 2, while other beans are graded into two classes, Class 1 and Class 2.

Extra Class Needle Beans must be of superlative quality and of the shape, size and color characteristic of the variety. They must be turgid, very tender, seedless, stringless, and free from any defect.

Extra Class Beans must be classified as Very Fine, or Extra Fine, with a maximum pod width of 6mm. Quality tolerances are that no more than 5% of the beans can fall short of Extra Class quality standards and then not below Class I standards. A maximum of 10% can be outside the size specifications.

Class 1 Needle Beans must be of good quality, but slight defects are allowed. Beans can be graded into two sizes, Very Fine and Fine with a maximum width of 9mm. Quality tolerances are that no more than 10% of the beans can fall short of Class 1 quality standards.

For other beans, such as Bobby beans, Class 1 must be of good quality and must have the shape, size and coloring characteristic of the variety. Such beans must be in such a condition that they can be easily broken by hand, young and tender, stringless - except in the case of beans for slicing, and practically blemish free. The seeds must be small and tender for the variety concerned; pods must be closed. Quality tolerances are the same as those for Class 1 Needle Beans.

Internal characteristics are that stringless bobby beans should have round cross sections and be harvested when the seeds are still small, the pod stringless but beginning to swell. Fine beans normally need to be harvested daily while bobby beans can be harvested on alternate days.

Labelling must be legible and indelibly marked on the outside of the package. Both packer and dispatcher should be identified, either by name and address or code mark. The nature of the produce included in the package should be identified, i.e. whether or not they are fine beans, (Prinzessbohnen), with size classes Very Fine, Fine, and Average. Other beans should be labelled either Green Beans or Bobby Beans. The country of origin, the commercial specifications, the class, the net weight in kilos should also be placed on the package.

It is also advisable that the following information is provided on the labels, since it assists in marketing:

- "This Side Up" symbol
- "Fragile" symbol
- Temperature symbol, with indication of correct storage temperature
- Date of packing, tare weight in kilo, with maximum deviation percentage, and identify of grower

liters.

Specifications for frozen Extra Fine beans are 3.5 inches in length and diameter of between 5-6mm. (Length is not crucial but diameter is...) The product must be packed in 10x1kg bags, all laid in the same direction.

Import Regulations and Duties

ACP countries face a zero import tariff on green beans.

Market Opportunities for Kenyan Exporters

Large Cora and Bobby beans are the most popular in Germany. The market for fresh Fine beans is a developed one, albeit essentially restricted to "gourmet" outlets. Kenya exported some 450 tons of Fine beans to the German market in 1991, compared with 367 tons from Egypt and 364 tons from Ethiopia. It is, therefore, an established market for Kenyan exporters and they are regarded as the benchmark suppliers. This is fortunate because there will always be a threat in this market niche from other distant suppliers, and perhaps increasingly from those nearer to Germany, e.g. Turkey. The Kenyan market image is created, however, and all efforts should be made to promote and develop any consumer loyalty associated with it.

With regards to opportunities for frozen beans, there is a market in Germany for individually quick frozen beans, although competition from Poland, albeit for different types of beans than Extra Fine, is intense. Quantities from distant sources are more likely to be used by manufacturers to fill short-term gaps in supply schedules -- and it is also likely that supplies from China would be very cheap making competition extremely difficult. France is supplying large quantities of frozen beans to other European countries however, some of which are imported from Kenya fresh, and frozen in France. If Kenya could produce 5mm diameter Individual Quick Frozen (IQF) beans, there is a potential market.

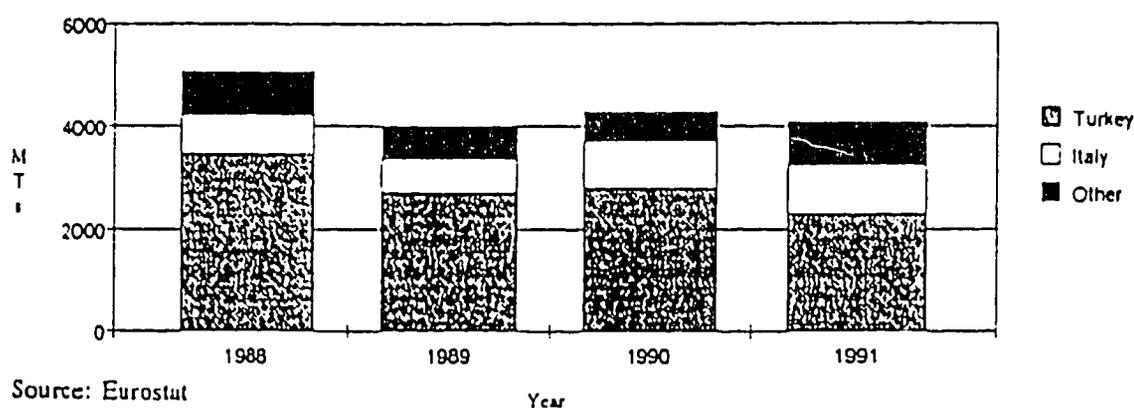
SECTION IV: CHILIES

Ranking Overview

<u>Product</u>	<u>Ranking</u>	<u>Notes</u>
Fresh Chilies	2	Small Market Already Exists For Kenya; Expansion Unlikely Due to Limitations of Demand and Large Turkish trade
Ground Chili Powder	3	Growing Industrial Market; Strict Phytosanitary Controls

Imports

German Fresh Pepper Imports, 1988-1991, MTs



Source: Eurostat

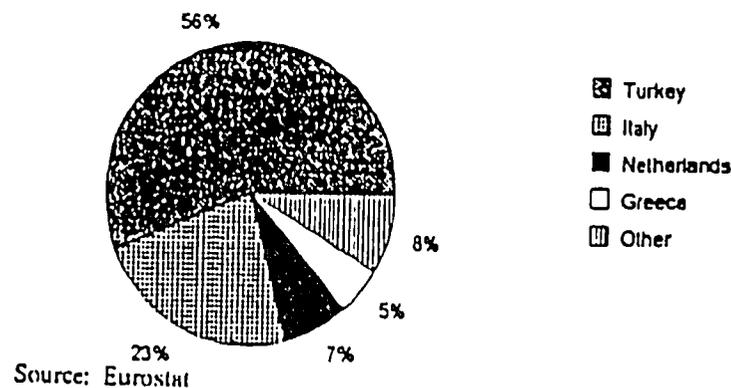
Germany is the largest European market for fresh chilies of the specific type grown in Turkey (and consumed by the large Turkish population in Germany), but is a relatively insignificant market for the types of peppers consumed by the Asian and West Indian communities in the U.K. (and exported by Kenya). Germany is a major market however for ground chili pepper, but mainly of paprika and mild chili mixes vs. some of the hotter types.

In 1988 the imports of fresh or chilled peppers of the genus *Capsicum* or *Pimenta* amounted to 5,070 tons. This fell to just below 4,000 tons in 1989, increasing to 4,300 tons in 1990. Although the official trade statistics did not classify imports of unground capsicum (chilies) and pimento (allspice) separately, an analysis by origin of these imports enables some identification of the products involved. Mexico, Jamaica and Guatemala for example export mainly pimento, whereas Italy, Greece, the Netherlands and Turkey export the milder varieties of capsicum. African countries export a range of chilies which include the Long Thin, Hot Bonnet and Birdseye varieties. Imports from sources such as China and Papua New Guinea are mainly Birdseye chilies.

Turkey was easily the main supplier of fresh chillies to Germany in 1990 with 2,793 tons or 65% of total volume of imports in that year. These chillies were directed almost exclusively at the large, ethnic Turkish population in Germany. The other major suppliers in that year were Italy and the Netherlands. Small tonnages came in from Kenya and Zambia. In 1991, Turkey provided 2,300 tons or 56% of total German imports, with other major suppliers Italy (933 tons) and the Netherlands (306 tons). Senegal, Thailand, India and Kenya (11 tons) were the main distant suppliers.

Spain and Hungary are the main suppliers of ready-ground product (important ingredients in spice mixtures for the processed foods sector, particularly the meat and ready-made meal industries which account for 30 to 40% of total ground imports, with the industrial sector for paprika also important in the preparation of goulash, soup, fish, potato chips and cheese).

German Import Market Share - Fresh/Chilled Peppers, 1991



Consumer Preferences

Numerous varieties are in demand in Germany. These include the Long Thin chili (Fresno and Jalapino), the Hot Bonnet (also called Lantern) and the shorter varieties, notably Birdseye.

Chilies should be regular and smooth in shape, all with stalk, straight for long chillies with pointed ends, although some curving is allowed in all varieties. The color is to be a deep green for Long Thin chillies, red for Short and Birdseye, and green or orange for the Lantern chillies.

All chillies must have shiny skin with no crumpling or withering of the outside surface. They must be firm. The taste must be juicy and hot according to the variety.

Acceptable sizes in the market are:

- Long thin - 6-8cm length
- Short - 3-6cm length
- Lantern - 2.5cm diameter (minimum)

Although the Turkish and Italian imports of chili peppers are of the long and short chili varieties, the type preferred by the Turks is much larger than the thin Asian type pods. They measure up to 5-6 inches in length with a top diameter of an inch or more tapering in the form of carrot.

Seasonal Patterns of Demand

Turkey, Italy, the Netherlands and Thailand (Birdseye) supply fresh chilies throughout the year. Kenya also supplies long, short and Birdseye chilies throughout the year. Other countries currently able to supply year round are the Gambia, Zambia, Zimbabwe and Jamaica. Uganda, which was once a major market supplier, is attempting to make a comeback although serious logistical problems have yet to be overcome.

Seasonal supplies come from Spain and Sri Lanka between June and September, Mexico between September and January, Israel between July and February and Cyprus between April and November.

Prices

Because all products are described as "chilies" it is difficult, on the basis of desk research, to identify prices for individual varieties. A figure of DM4-6 per kilo CMF Hamburg would appear the norm.

Market Distribution

Ground chili products fit into the spice trade as distinct from the fresh vegetable trade and are mainly imported through Hamburg which is the center of the spice trade in Germany. There has been an increasing trend, however, for industrial users and large retailers to import product directly through other main European ports, notably Rotterdam and Amsterdam.

Grades and Standards

No international standards are in force for the quality of chilies but it is advisable that packaging be labelled by origin, chili variety, color, weight and date of packing.

Packaging is usually in cartons (by air) and wooden boxes (by surface) of 2kg, 3kg and 5kg net in which the chilies are normally jumble packed (loose). Occasionally baskets of 12.5kgs are shipped and wholesalers split these into smaller quantities for retailing. Even the larger 5kg packs of long chilies are repacked into 2kg packs by some retail outlets. Sometimes tissue paper is used to fill the carton and improve the presentation.

Chilies are also sometimes imported pre-packed for sale by multiples, although this is not

Market Opportunities for Kenyan Exporters

Ground capsicum might well represent an opportunity for Kenya, with the total imports into Germany for 1991 amounting to almost 11,000 tons at a value of over DM52m. This seems to be a growing market, though the enforcement of stringent phytosanitary controls could pose potential problems.

Pre-packing, although not impossible, is difficult in Germany since the market is not so "package oriented" as that of the UK. Exporters of pre-packed chili products might be better advised to look at other markets, perhaps the Middle East.

The fresh market for chilies in Germany is relatively small and what there is of it is mainly a specialized trade for the ethnic Turkish and other communities. It seems unlikely that it will develop into as significant a market as the UK.

SECTION V: MANGOES

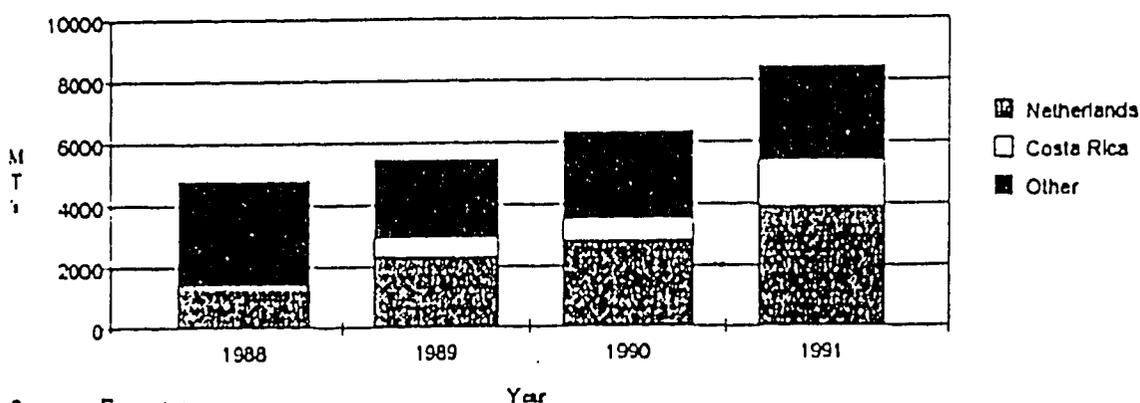
Ranking Overview

<u>Product</u>	<u>Ranking</u>	<u>Notes</u>
Fresh Mangoes	3	Steady Existing Market for Kenya; Expansion Limited By Preference for Red-Blush Varieties

Imports

The market for mangoes in West Germany grew rapidly in the 1980s from under 1,000 tons in 1982 to over 5,000 tons in 1989 and to almost 8,500 tons in 1991. In 1991 the largest import market in Europe for mangoes was the United Kingdom with 13,700 tons, followed by France with 10,000 tons, the Netherlands with 9,000 tons and Germany in fourth place. Despite a rapid increase in volume for Germany between 1985 and 1989, i.e. from 1,746 tons to almost 5,000 tons, the unit value per kilo of imports fell from DM5.51 to DM3.4. The main reason for this is that over this period mangoes began to be transported by sea rather than by air.

German Fresh/Dried Mango Imports, 1988-1991, MTs



Source: Eurostat

Market Share

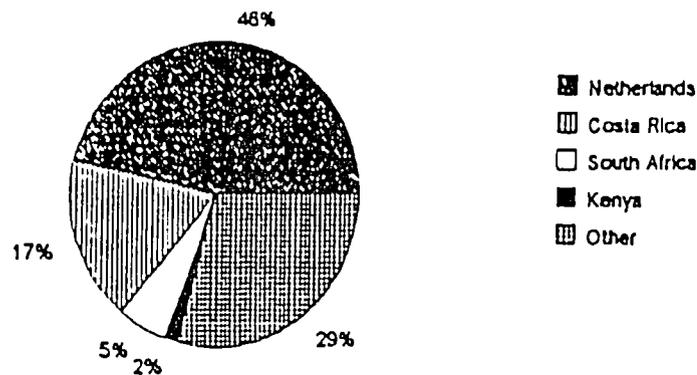
In 1991, the major supplier of mangoes to the German market was the Netherlands, with almost 4,000 tons (re-exports). The next largest supplier was Costa Rica with almost 1,500 tons. Other suppliers, although considerably lower in volume than Costa Rica, included: Israel, South Africa, the USA, Nicaragua, Guatemala, Venezuela, Brazil and Kenya (with 134 tons in 1991). In 1990, the major suppliers to Germany were again the Netherlands, followed by Costa Rica, Brazil, the USA, South Africa, and Kenya (with over 300 tons).

Total imports to Germany in 1990 were 6,358 tons, thus revealing again the significant increase between 1990 and 1991 (8,500).

Up until 1989 it was distant countries that supplied the largest percentage of imported mangoes into Germany with Brazil, Costa Rica and the USA being foremost. By 1991, however, the Netherlands had emerged as the major supplier with 46% of total imports and, apart from Costa Rica which increased its position, all the other major importers lost ground. This was also partly true in 1990 where the Netherlands again provided 44.5% of the total of 6,358 tons imported into Germany in that year.

It is believed that these supplies of mangoes from the Netherlands are re-directed from sources of supply such as South and Central American countries and even Far Eastern countries. It is particularly the case since sea freighting became dominant with Rotterdam and Amsterdam becoming key points of entry.

German Import Market Share - Fresh/Dried Mangoes, 1991



Source: Eurostat

Consumer Preferences

In Germany the most popular varieties are Haden, Tommy Atkins, Keitt and Kent. There is also a special demand for the Alfonso and Totapuri type mangoes for the Indian ethnic community. These latter mangoes come from India.

In terms of appearance the fruit should have an oval shape and a smooth skin, the color depending on the variety. As in many other countries in Europe, the preferred color is a reddish yellow, succulent looking fruit.

The internal characteristics of the fruit are such that it has to be ripe with tender flesh, no fibrosity, an aromatic flavor and reasonably strong scent. The flesh of the fruit should be a good yellow color.

The fruit should be oval with no turpentine flavor, easy stone removal with no bruising or disfigurement.

Brazil, traditionally the major supplier of mangoes to Germany, ships primarily in the winter months from October through February, with its main supplies coming in the first two months of the year. Kenya has its main supply in February/March and November/December although it is able to get product to market throughout the year. South Africa supplies in January through March, whereas most of the Central American countries have their products on the market between May and October.

Costa Rica regularly exports mangoes on banana boats arriving every Monday in Hamburg following a two week voyage. Brazil and the USA have also been sending significant quantities by sea freight until a few years ago, when the Netherlands emerged in the official statistics as the major supplier. It is possible that distant sources arriving by sea now dock in Amsterdam and Rotterdam and are re-allocated from there, showing up in the official statistics as exports of the Netherlands. (This is not known for certain). Essentially the increase in availability of product by sea freight has significantly reduced the opportunities for air freighted produce to command competitive prices.

Peak supply months are April and May when 600-700 tons per month are imported. This declines to around 450 tons between June and September and lows of about 300-350 tons between October and November. The Christmas market in December always shows a peak which can sometimes increase to 500 tons, dropping to around 400 tons in January and February.

Prices

For most of the year mangoes are a medium priced product, typically in the range of DM4-5 per kilo on the wholesale market. The December period can see prices going as high as DM20-22 for a 4 kilo carton although the counts would need to be between 8-12 for retail outlets and 6-8 for the catering trade. Counts of 14-16 per carton are difficult to sell and are heavily discounted.

Grades and Standards

Export quality standards are provisional (see UN/ECE AGRI/WP.1/R.142 Rev.3) Normal EC minimum requirements are applicable, as with most other fruit and vegetables; hinging on wholeness; firmness; cleanliness; lack of bruising; no rotting or deteriorating matter; ability to withstand the ripening process and; the contents of each package to be uniform in terms of origin, variety, quality and size.

For mangoes there are two classes: Class 1 and Class 2. Class 1 fruit are to be superior in quality and size, with only a 10% tolerance, not satisfying the requirements of the Class but meeting those of Class 2.

Size Code A - 200-250gms
Size Code B - 351-550gms
Size Code C - 551-800gms

For the German market the most popular weights are between 300 and 550 grams with the 350-450 grams being particularly popular. There is, however, a small shift to the larger mangoes and the trade has noticed an increasing preference for Counts of 8's and 10's rather than 12's as in the past.

The maximum permissible difference between fruit in the same package belonging to either size Group A, B or C shall be 75 to 125gms. The minimum weight of the mangoes must not be less than 200gms.

For Germany, the net weight per box should be 4.5 kilograms (plus or minus 500gms). The cartons should be single layer fiberboard with the fruit wrapped individually on one layer. Numbers per box are between 6 and 14 but as mentioned earlier, preferred sizes are between 8 and 12.

There are numerous different box sizes. Internal volume for 5 kilo of fruit without inserts is 8.5 - 9.5 liters whilst a cell pack requires 11-13 liters per 5 kilo of fruit. New carton sizes according to Euro specifications will be 40x30x10/12cms.

As usual the labels must be clearly legible and visible. They must include: the identification name and address (or code) of packer or dispatcher; the name of the produce (MANGUES); the variety name; country of origin; commercial specifications; class; size and maximum and minimum weight or size code number; number of fruit and net weight in kilos. To assist in marketing, labels should also contain various symbols relating to temperature, fragility, right side up, date of packing, tare weight and identity of grower.

Import Regulations and Duties

Mangoes from ACP countries face a zero import tariff into Germany.

Market Opportunities for Kenyan Exporters

Trade views about the opportunities for Kenya to further develop the German market are qualified somewhat by the varieties available from Kenya at this point in time. The most popular varieties have been identified above and the consumer preference for fruit with a red blush has intensified in recent years. The Kenyan Ngowe and Apple varieties are not as well liked for these reasons.

Sea freight is perceived as being essential if Kenya wishes to become a significant supplier to

periods, notably in December.

Often the German market is over supplied and prices can fall off significantly, especially between May and the end of August. The best future prospects will be for those suppliers who can provide significant quantities of top quality, well colored (red/yellow) mangoes by sea during the winter months.

Ranking Overview

<u>Product</u>	<u>Ranking</u>	<u>Notes</u>
Mango Juice	4	Good Market Prospects; Strict Adherence to Standards Essential
Canned Mango	2	Some Demand for a Mixed Range of Exotics
Dried Mango	1	Small Market Already Well-Supplied

MANGO JUICE**Imports**

International Trade Centre estimates are that on average, perhaps 2,000 tons of mango juice is imported into Germany but the actual figures may be considerably higher since data won't pick up significant quantities coming in as ready blends, and it is known that one of the major importers buys more than 500 tons per annum of mango puree, solely for its own products.

Market Share

The major suppliers of mango puree to Germany are South America and India. India supplies the Alónso and Totapuri varieties; South American countries supply puree made from Haden, Irving, Tommy Atkins, Chatto de Ica, Criolo and Kent varieties.

Consumer Preferences

Mango is a well established flavor in Germany. Consumers recognize and like it. It is available in retail outlets as a straight nectar or a drink, and is also included in most multi-fruit blends, yogurt, ice cream and baby foods.

Prices

On average, mango prices vary around US \$1,300/ton, CIF for concentrate and, where single strength is acceptable (only for top quality produce), a price of around US\$650-680/ton C & F is normal.

The market for exotic fruit juices in Germany is mainly dominated by a few large bottlers of juices, nectars and fruit drinks. The major companies using exotics are Granini, Eckes, Dittmeyer, Stutte, Junita, Vaihinger, Nordgetranke, Weser-gold and Jobmann. Addresses are provided in Appendix B. These major bottlers/packers source their material directly where large volume products are concerned e.g. orange and apple. For smaller volume products, such as exotic juices, the normal practice is to purchase such products either from a blending house somewhere in Europe or from a recognized importer/trader in Hamburg or in the Netherlands.

The normal distribution system for exotic juices in Germany is either via a trader, to a blender, then to a bottler, then to a wholesaler and then to the final outlet or, through a trader, direct to a bottler with own blending facilities.

Direct approaches to large blenders or bottlers can sometimes be effective, although in the case of a relatively small supplier of a low volume product the process can be expensive and time consuming.

All the major companies involved in processing the intermediate or final product in Germany recommend that new and relatively small suppliers should contact them via one of the accepted traders. Addresses are provided in Appendix B. The major trading companies working in the exotic juice market are Klaus Bocker, Jobmann, Standard Ubersee, Kemna, Rickertsen and Pittrex. In some cases these companies are agents for suppliers from distant sources and sometimes importers in their own right. Most of them are located in the Hamburg area. Hamburg remains the main conduit for physical products received by sea into Germany.

To some extent, the demand for mango juice by processors has been a reflection of the extreme fluctuations in the price of passion fruit juice. Arguably, today, mango juice has superseded passion fruit juice as the second largest tropical juice traded after pineapple. During 1990/early 1991, passion fruit prices rose to very high levels after being relatively depressed and this had a negative impact on the market. As a result, most processors presently prefer to handle the more stable and balanced trade in mango.

Most mango product imported into Germany comes either via traders in Hamburg and the Netherlands or as part of a multi-juice blend from blending companies in neighboring countries.

Grades and Standards

Most of the Indian product is delivered in 3-5kg hot pack or aseptic. The single strength frozen puree is required in 200 liter drums with a minimum level of 15° brix and a total acid rate of between 5-7 grams/kilograms.

The problem concerning penetration of the mango juice market by new Kenyan suppliers is essentially that it is already very well supplied by several countries in South America, and by India. Also, the Alfonso mango is very popular for juice, and currently is only grown in India.

Nevertheless, if Kenya can produce comparable quality mango puree with a minimum of 14-5° brix, and supply it in regular full containers, either frozen in 200 liter drums or as an aseptic product, it should be able to find a steady demand. Exporters should target established traders in Germany, in the Netherlands or in Switzerland.

CANNED MANGOES

Imports

Although no official statistics exist concerning the size of the German market for canned mangoes, trade estimates give a total of the order of 8,000-10,000 cases of 24x425gms cans per annum. (The only significant German market for canned exotic fruit is exotic fruit cocktail, in which the import market is estimated at between 200,000-400,000 cases of 24x425gm cans per annum.)

Market Share

The supply situation is an extremely competitive one with canned mango available from all over the world, notably from Thailand and South American countries.

Prices

A 425gm can of mango was retailing in various stores in Germany at around DM4.95 - quite expensive relative to a price of around DM2.95 for a similar sized can of other main line fruit, such as peaches, pears, apricots, etc.

It is unlikely that any producer would receive a better C & F price than around \$6.50 per carton of 12x425gm cans.

Market Distribution

Almost all cans of mango slices are imported via traders and agents. In most cases, these agents receive canned mangoes from factories with which they have long established relationships and which provide them with more main line products such as pineapple and/or seafood. One or two importers have been trying over a number of years to develop a good business in canned mango but have found difficulty in ensuring a steady supply of the same variety. This is what is required by supermarkets and, in most cases, there has been a failure to meet these

requirements. Another problem has been that mango is not that suitable for canning in that the edges of the slices are fragile and fibrous and can crumble within the medium of the can. All in all, retailers and in turn, traders, are reluctant to recommence active promotion of this product and only take it from established suppliers as an alternative line.

There are two specialist importers in Germany for canned exotic products, viz, Kattus and Scandinavian Zuid Import. Their addresses are provided in the Appendix B and they should be the primary targets for anyone wishing to export canned mangoes in Germany.

Grades and Standards

Most product comes in 425gm cans, although A10 size cans are also used by the food industry and catering sector.

Import Regulations and Duties

An import duty of between 7-9% is imposed on canned mangoes, subject to sugar content in the syrup.

Market Prospects

The market is small, probably stagnant, and not one which is large enough to justify investing significant sums in development - if mango is the only line. Canned mango could be produced, however, if a factory was established to can other fruit. Since exotic fruit cocktail is already competitively supplied though, another mainline product such as pineapple is recommended to achieve regular volume orders. Exotic fruit cocktail could then be added, with mangoes canned at times of excess capacity or off-season.

DRIED MANGO

Imports

Unfortunately, official statistics do not distinguish between fresh and dried mango and guava. It is thus very difficult to get a clear idea of the quantities and values of the dried mango imported into Germany. Imports of the overall product category into Germany increased from 4,834 tons in 1988 to 8,448 tons in 1991, though it is likely that these volumes were probably almost entirely of fresh mangoes. It can be estimated that in any one year imports of dried/sugared mango do not exceed 120 tons, and are often considerably lower.

Market Share

Again, the problem with the statistical categories, or lack thereof, makes it difficult to list out market shares per supplying country, though Thailand, Mexico, Costa Rica, Brazil, and

Prices

Although prices fluctuate, over the last three or four years dried mango has been bought at any average of between DM7-8 per kilo C&F.

Market Distribution

The market is very small and essentially controlled by well-established relationships between importers and factories in Thailand. These factories offer a range of product of which dried mangoes is only one.

Grades and Standards

In most cases, the dried mango imported into Germany is sugared and either diced or sliced. There is some experimentation with vacuum and freeze dried, but this has not yet taken off in a significant sense. The sugared, diced or sliced mango mainly finds its way into tropical snacks or tropical muesli.

Measurements for the dices are 5x5mm or 10x10mm, usually packed in 5 kilo bags with two or four bags to a carton.

Quality inspection is high and the major traders regularly visit suppliers factories and carry out full audits. Use of chemicals is essentially limited to correct amounts of SO₂ and nothing else.

Import Regulations and Duties

Import duty on sugared product into Germany is around 9% plus 60 pfennig import and a sugar levy, depending on the percentage inclusion of sugar.

Market Opportunities for Kenyan Exporters

There is little, if any, justification for factories in Kenya getting involved in sugared, dried mango, unless of course it is a small subsidiary line to established, diverse lines of production within a factory.

SECTION VII: PASSION FRUIT JUICE

Ranking Overview

<u>Product</u>	<u>Ranking</u>	<u>Notes</u>
Passion Fruit Juice	4	Potential of Supplying 1-2 Containers Monthly; Volatile Prices; Strict Adherence to Standards Essential

Imports

It was only in 1990 that official Eurostat data started distinguishing the juice of "Passion-Fruit or Guavas with and without Sugar", viz 2009.80/32 and 2009.80/83 respectively. Total imports into Germany in 1991 under these two categories only amount to some 31 tons. This data, therefore, cannot be regarded as representing the import of passion-fruit concentrate and puree into Germany. Furthermore, even if precise data did exist, they would still not provide an indication of the total amount of juice entering the country because a considerable proportion comes in as part of ready made blends from blending companies in other European countries.

World supplies of passion-fruit in 1990 were estimated at about 9,000 - 15,000 tons and a reasonable trade estimate for the amount of product used in Germany would probably be a minimum of 1,000 and a maximum of 2,000 tons per annum.

Market Share

Columbia heads world trade in passion fruit juice, followed by Ecuador, Brazil and Peru. The EEC imported around 8,300 tons from these countries last year, but imports from Brazil have shrunk to less than half of the 1990 levels. This is partly due to the fact that imports from Brazil face duties while those from Columbia, Ecuador and Peru are duty free because of special dispensations to diversify away from the drug trade.

Consumer Preferences

Passion fruit is one of the very few exotic juices that has a position on the market. It has a well established and distinct flavor and is recognized and liked by German consumers. It is sold as a single fruit product, either as a juice, nectar or drink and is also in most multi fruit drinks which have a tropical or exotic nature. It is used in yogurt and ice cream as well. In this respect, it is directly competitive with mango in that they are the two most established of the exotic juices, (excluding pineapple) and a certain amount of substitution does take place on a regular basis.

else, except a small amount of SO₂ if necessary. The residual SO₂ should not exceed 60mg/kg passion fruit juice. The product needs to be deep frozen and stored in a cooling cell at 18°C below zero.

It is normally the yellow passion-fruit that is most in demand, although purple passion-fruit is also acceptable, especially where the product is mixed in with other juices. Any company producing a new product should attempt to produce concentrates, as this has wider acceptability.

The total acid content, calculated as citric acid, should be 30-50kg. Aroma should be typical aromatic fresh, without strange odor, with an evaluation minimum of 5 points according to IFJU Analysis No.25 and the flavor should be a typical sourish fruity flavor with a minimum of 8 points according to the same IFJU Analysis.

Prices

An average price level would be between US\$3,000-4,000 per ton CIF main European port and any factory could, if they had the capacity and the efficiency, probably sell 1-2 containers a month to Germany at around that price. Almost every processor is looking for a good source of passion fruit concentrate (and single strength) at a stable price, although few believe they will be successful.

Market Distribution

Although some passion fruit juice is bought directly from suppliers by the large blenders and packers in Germany, most of it comes via traders in Hamburg, the Netherlands or Switzerland. The Passi company in Switzerland is particularly well known as a major source of passion fruit concentrate.

Targeting the German market for passion fruit juice can therefore be done just as easily via Switzerland and the Netherlands as via traders in Hamburg.

Furthermore, since many of the large bottlers in Germany buy ready made blended recipes of mixed juices from compound/blending companies in the Netherlands, Belgium and Switzerland, the direct targeting of Germany is once again not essential.

Grades and Standards

The product should be frozen and **packed** in double polyliner in 200 liter drums. The drums should be of steel rather than plastic construction because of the new environmental laws in Germany which require a recyclable product. Aseptic packaging is also acceptable, but again, there should be a double polyliner to prevent the sides of the packaging material contaminating the outside of the aseptic pack.

Import Duties and Regulations

A.C.P. countries have duty free access.

Market Prospects for Kenyan Exporters

There is no doubt that Kenya could find a market in Germany for passion fruit concentrate between 30-50° brix and, if the right importer was found, sales could probably be of the order of one to two containers per month, depending on price.

Potential problems should be noted however -- for example, the history of extreme fluctuations in CIF prices have sensitized the market to the possibility of using more price stable substitute products, so there's always a motive to reduce demand. During the last few years, volatile prices have caused processors to be reluctant to commit themselves to new recipes which contain a significant proportion of the product. They are, however, committed to existing products which have consumer acceptability and their purchasing practices have reflected the realities of the trade. What most large buyers in Germany now do is to buy large quantities of passion fruit juice when they think the price is at an average level, and hold stock, for up to a year, until prices again reach levels which they regard as reasonable. There is of course a high inventory cost associated with such a practice and this in effect is included in the real price of the product. Again, this system reduces the attractiveness of the product to the processors.

Attempts have been by passion fruit juice exporters to establish stability and to cooperate to promote the market. The Latin American Passion Fruit Juice Producers Association was set up two years ago, representing around 90% of world exports and they meet on a regular basis to evaluate the market situation. Although they are making serious efforts to stabilize prices, the history of producer cartels is well known to be a relatively unsuccessful one and most fruit juice processors do not think the association will have a major impact on price stability.

The optimum channel of distribution for passion fruit concentrates sent directly to Germany is through agents and importers.

Ranking Overview

<u>Product</u>	<u>Ranking</u>	<u>Notes</u>
Fresh mangetout	1	Very small market but worth monitoring
Frozen mangetout	1	Cost effectively supplied by EC and China

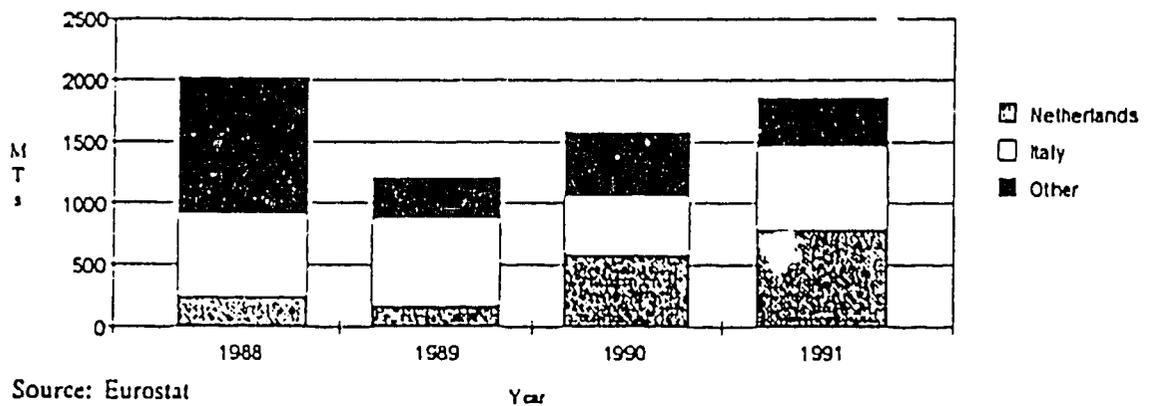
Domestic Production

Little, if any, mangetout (snow peas) are grown in Germany (though there are large domestic production levels of regular peas).

Imports

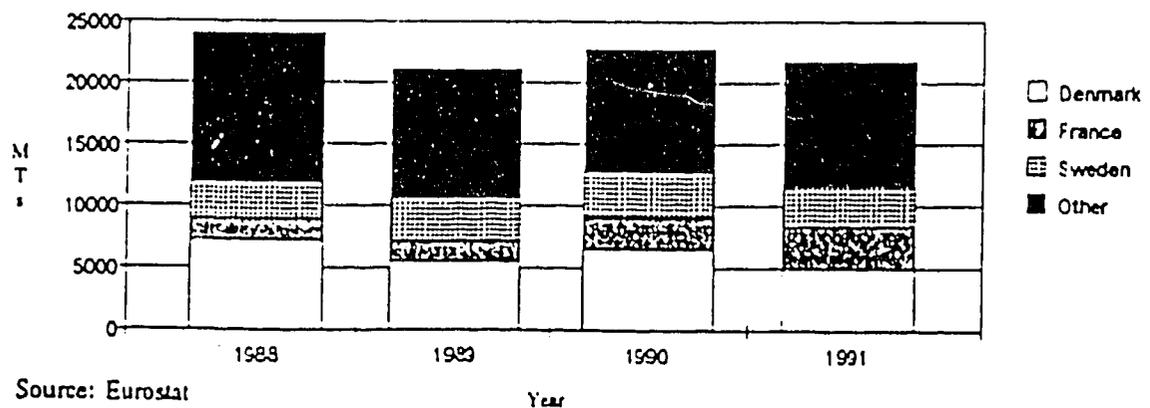
Fresh snow peas, or mangetout, are not distinguished as separate items in official German import statistics, but rather are absorbed within the category for fresh or chilled peas generally. The German market is relatively undeveloped for this product however, particularly as compared to the U.K., and to a lesser extent, the Netherlands.

German Fresh/Chilled Pea Imports, 1988-1991, MTs



Source: Eurostat

German Frozen Pea Imports, 1988-1991, MTs



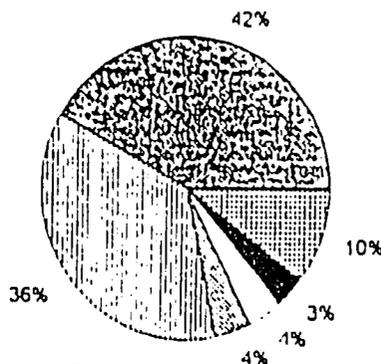
Source: Eurostat

frozen peas generally, in which 16,500 tons were imported into Germany for 1991 (second only to the Netherlands). Suppliers were EC and Eastern European countries, with the only distant supplier of note being China with 700 tons.

Market Share

Although it is impossible to specifically distinguish imports of snow peas from other peas in the official data, the source of supply does provide a clue as to the quantities of snow peas actually being traded. During the months from September to May in 1991, the major supplier of snow peas to Germany was Italy, followed by the Netherlands. Distant suppliers during that period were Guatemala with 59 tons, Zimbabwe with 24 tons, and the USA with 13 tons. Kenya recorded only one ton of snow pea exports to Germany in 1991 and, according to official statistics, only exported 28 tons total to the 12 European countries. It would appear from an analysis of overall European statistics in fact that Zimbabwe and Zambia supply snow peas all year round to Europe, with Guatemala a major supplier in the winter period.

German Import Market Share - Fresh/Chilled Peas, 1991



Source: Eurostat

Consumer Preferences

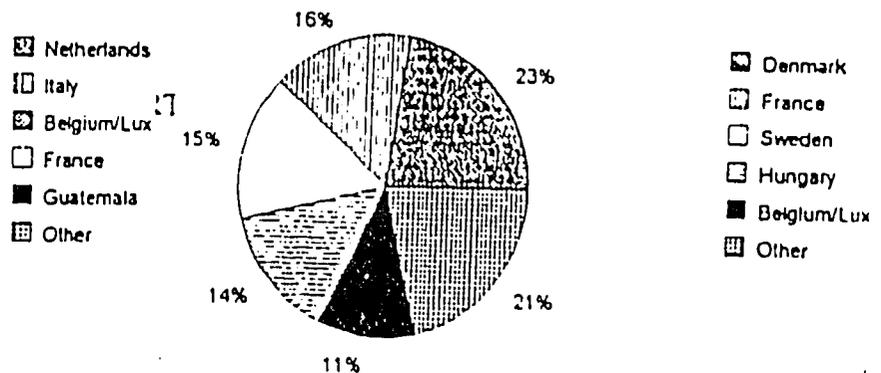
Most multi-noded plant varieties are acceptable although varietal choice is important for producers as harvest costs are minimized according to what variety is suited to the growing conditions. The taste and texture should be juicy, crunchy and sweet, and the ripeness should be at a level where the pea actually snaps in the hand. Sizes of 7-10cm length and circa 2cm width are acceptable.

Mangetout is a highly perishable product which must be cooled immediately after picking and held in cool conditions right through to the retail or catering outlet. The initial color should be dark green because the color fades quite quickly and a yellow pod is unacceptable.

Seasonal Patterns of Demand

As recorded in the official Eurostat data for 1990 and 1991, Zambia and Zimbabwe supply

German Import Market Share - Frozen Peas, 1991



Source: Eurostat

Guatemala on the other hand mainly supplies in the winter period (from September until May). For Germany itself the tonnages are so small that it is difficult to discern a seasonal pattern. Until 1989 only Guatemala was supplying produce on a regular basis but since that time Zimbabwe and Zambia are regular suppliers.

Prices

C&F prices for fresh mangetout are normally of the order of between DM10-15 per carton, but the market is so small that prices can vary significantly.

Frozen mangetout brings in around 1750 dollars per metric ton CIF main European port.

Market Distribution

Most mangetout is channelled to gourmet and luxury outlets.

Grades and Standards

There are common quality standards for fresh peas which include mangetout. They are the same in general terms for most other fresh produce in that the peas must be:

- whole
- sound (firm)
- fresh in appearance
- clean
- free from foreign smell or taste
- free from abnormal external moisture

Mangetout are classified into Class 1 and Class 2. To qualify as Class 1 mangetout must be: of good quality and characteristic of the variety in color, shape and size. The product should be young and tender so that they can be easily broken in the hand the seeds must be small, tender and the pods must be closed. The product must be stringless and free from blemish. Some traces of wind damage are allowed. To qualify for Class 2 the mangetout must be similar to Class 1, although the seeds may be larger, some stringiness and minor superficial blemishes are allowed.

The pod must be flat with the peas just showing. It should be straight with a very small stem and pale green in color. The taste and texture should be juicy, crunchy and sweet and the ripeness should be at the level where the pea actually snaps in the hand. Sizes of 7-10cm length and circa 2cm width are acceptable.

Product from Guatemala seen in the German market was packed loose in 2.2kg waxed cartons. In the UK the mangetout are usually sold to the consumer in PVC overwrapped trays, some of

which are packaged at source (ZIMBABWE AND ZAMBIA) AND SOME ON ARRIVAL. IF NOT PRE-PACKED AT SOURCE THAN WAXED 5lb cardboard boxes, well ventilated, are the preferred type of packaging. For Germany, where pre-packing is not so developed, it is the 5lb waxed carton that is the normal format for trade.

The normal form of labelling as identified in all other fresh produce for Germany is also applicable to mangetout. There are no special requirements.

Specifications for frozen mangetout are that they should not be in excess of 8cm length and be dark green in color, non-stringy, and medium-sweet.

Import Duties and Regulations

Mangetout come under Tariff heading 070890 and ACP countries have duty free access to the German market, although as with all other products the produce must be accompanied by appropriate forms: EUR 1 for ACP countries. Certain hygiene standards must be met and all fresh produce entering the EEC must be accompanied by the original of a Phytosanitary Certificate.

Market Opportunities for Kenyan Exporters

Kenya has no real presence in mangetout in the German market and, at present, the size of the market does not justify a real marketing effort. The entire country only takes some 5 tons per week and it is unlikely that any one importer could take a full container load at any one time. There would need to be a mixed container with tonnages of other compatible products within. Perhaps it is better for Kenya to target the markets of the UK and especially the Netherlands where bulk can be broken and mixed containers put together for the German market.

The German market is becoming more gourmet conscious however, and tastes are changing slowly, especially amongst the younger generation. Given the relative size of the market a close eye should always be kept on developments. Contact with any of the main major importers identified in Appendix B will suffice to keep Kenyan exporters abreast of possible opportunities in the market.

It is not felt that the German market for frozen mangetout is an attractive one for Kenya because, although there have been complaints about quality of product from China, the producers in that country are improving their standards continuously and now very much have control over the imported frozen snow-pea market for distant producers. And the price level which they offer may prove too low to attract Kenyan exporters.

SECTION IX: FRESH AND FROZEN STRAWBERRIES

Ranking Overview

<u>Product</u>	<u>Ranking</u>	<u>Notes</u>
Fresh Strawberries	2	Large but Risky Market; Best Quality Only
Frozen Strawberries	2	Trade is Almost Entirely Centered on Senga Sengana; Potential for Premium Small Calibration Berries Below 20mm

FRESH STRAWBERRIES

Domestic Production

German strawberry production in 1991 was just over 48,000 tons, representing a reduction on volumes over the last six years. The peak year was 1988, with a volume of almost 55,000 tons. The main months of German strawberry availability are May and June, with product falling off significantly from July onwards (although in some years, significant quantities were available into July).

Germany does not have a sufficient domestic supply however to meet total demand. In 1991, domestic strawberry supplies totalled 48,299 tons, which was equal to 43% of total imports that year, and just over 30% of total strawberries available.

Table 1: German Strawberry Market Statistics

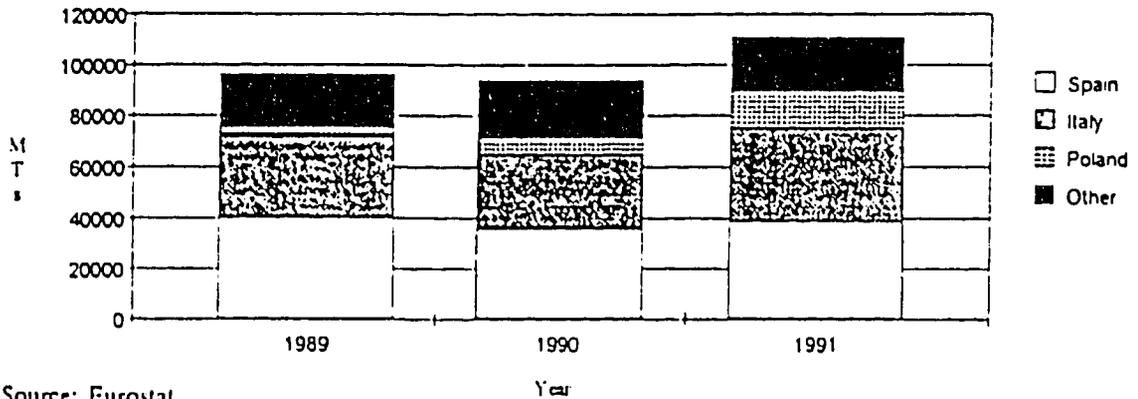
	1991	1990	1989	1988	1987	1986
Crop Areas in Yield (ha)	5,105	5,012	5,128	5,351	5,321	4,948
New Plantings ¹	2,548	2,667	2,506	2,433	2,382	2,479
Yields (100kg/ha)	94.6	100.9	104.6	102.7	100.6	101.9
Production (t)	48,299	50,573	53,629	54,968	53,530	50,433
Sales via Producer organizations (t)	16,351	16,568	16,520	16,464	16,199	15,042
Earnings (DM m)	63.9	50.2	49.6	49.0	46.8	41.1
Average Earnings (DM/100kg)	391	303	300	299	289	273
- Class I	397	309	305	302	304	286
- Class II	192	187	200	240	157	187
- Processing Strawberries	66	543	70	105	90	76

Planted or planned by July 20

Sources: Federal Statistical Office, ZMP.

Germany is the largest European importer of fresh (and frozen) strawberries. In 1991 for example it had almost six times the volume of UK imports in fresh strawberries. Germany imported over 111,000 tons of fresh strawberries in 1991, compared with less than 95,000 in 1990 and slightly higher figures for 1988 and 1989. In value terms, the 1991 imports of fresh strawberries came to US\$207,941, again showing an increase over the previous three years.

German Fresh Strawberry Imports, 1988-1991, MTs

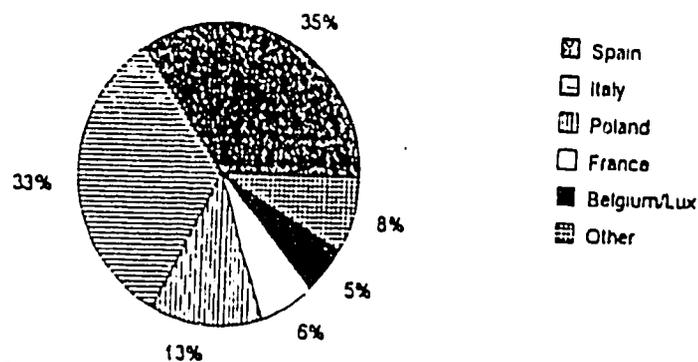


Source: Eurostat

Market Share

The major supplier of fresh strawberries to Germany in 1991 was Spain, with almost 40,000 tons, followed by Italy, with 36,000 tons and Poland, with 14,000 tons (although it is suspected that this figure for Poland is false, containing data for frozen produce as well as fresh). France has lost ground steadily since supplying a total of over 11,000 tons in 1987 and both Italy and Spain have fluctuated over the six years since 1986, both having recorded higher export levels to Germany in earlier years - Italy with over 41,000 tons in 1987 and Spain also with over 41,000 tons in 1989.

German Import Market Share - Fresh Strawberries, 1991



Source: Eurostat

As regards "distant" suppliers, the USA has seen a steady increase in exports from 272 tons in 1986 to 547 tons in 1990 and 520 tons in 1991. Mexico has also seen a steady increase over

decline in its position in the market over the six years, although it is expected that the aggressive activities of Agrexco, the Israeli Marketing Board, will redress the situation somewhat in 1992/1993. The only new supplier of note is Colombia with over 200 tons in 1991, compared with nothing in 1986; it is expected once again that this figure will increase significantly this year.

Table 2: German Strawberry Imports (tons)¹

	1991	1990	1989	1988	1987	1986
Total Fresh	111,214	94,229	96,720	100,326	106,710	76,090
France	6,714	5,201	6,824	8,336	11,211	7,577
Belg/Lux.	5,841	8,377	5,187	6,120	5,649	2,953
Netherlands	4,481	4,593	2,948	4,256	3,999	3,273
Italy	36,440	29,266	31,881	33,881	41,868	34,030
Portugal	205	277	464	437	228	-
Spain	39,868	36,606	41,450	41,219	34,636	19,230
Poland ²	14,446	6,755	4,013	3,304	6,194	5,579
Romania	532	118	1,336	311	797	947
Bulgaria	385	1,116	1,141	947	260	740
USA	520	547	341	254	249	272
Mexico	607	496	424	559	487	380
Israel	119	442	310	457	760	677
Ecuador	96	86	133	169	72	26
Colombia	204	146	42	5	-	-
Frozen³						
For processing	41,405	33,458	22,961	23,847	18,166	19,267
For consumption	695	1,107	1,744	1,956	1,013	1,003

¹ From 1991 for 16 Länder;

² Due to false information, large quantities of frozen produce included under fresh product (1990 about 2,000 tons, 1991 5,500 tons);

³ Imports minus Exports.

Sources: Federal Statistical Office, ZMP.

Consumer Preferences

The German consumer is very well versed in the use of strawberries. There is little need for instructions on how to use the product and the majority of retailers promote berries through price discounts rather than point of sale promotion *per se*. Unlike the British consumer, the average German consumer is not prepared to pay high prices for top quality strawberries packaged in superior material.

The majority of supermarkets sell strawberries in uncovered cheap papier maché punnets, placed in boxes in the fruit and vegetable sections of the stores. These stores are relatively cramped compared with UK supermarkets and are not designed or decorated to provide high comfort shopping in relatively opulent surroundings. Policy seems to be more "stack them high and sell them cheap", although of course, being Germany, the average quality is still relatively high

impossible to sell a 500g punnet of berries to the German consumer for any more than DM2.90 and often this can fall to less than DM2.00 if there is a relative glut on the market - notably in June. Around the Christmas period, consumers can be found spending up to DM3.90 or even sometimes DM4.90 for a small punnet, but these are essentially one-off purchases.

The varieties acceptable would be Chandler, Selva, Pajaro, Tioga, Fresno, Brighton, Douglas, Osogrande and Fern.

Seasonal Patterns of Demand

The major months of fresh strawberry availability in the German market are April through June. After mid-July, local, cheap and acceptable quality European supplies disappear from the market and although strawberries are available, they have higher prices and are not in great demand. There is a gap in the market from mid-July through August, although it is not a large one, partly because of the consumer's reaction to the higher prices following a period of very low prices and partly because it is a holiday period when a lot of people are away from the country. There is some pick-up in business in September, although this is catered for by supplies produced under cover from neighboring European countries.

October is a relatively dead month, because large supplies of domestic fruit such as apples and pears are available and there are also large quantities of very cheap grapes, peaches and nectarines from neighboring countries such as Italy and France.

The real market opportunity starts in November when more distant sources, notably Israel, arrive on the market and prices begin to increase significantly, up to peak levels in December and the Christmas period when even long distance supplies from Zimbabwe, New Zealand and Australia are profitable. January/early February also provides a small market opportunity because prices are still high and other European suppliers have not yet come on to the market. It is not a period of heavy volume demand, however, as consumers are still recovering from the expenditure of Christmas and the New Year period.

From mid-February onwards, supplies start coming at an increasing rate from Spain and prices start to fall off very rapidly. It is at this stage that the acceptable packaging changes from the 250g punnet which is the only one saleable at a time of high prices, to the 500g punnet which is the normal form of retail packaging during the period of abundance.

Spain supplied over 23,000 tons of its 39,000 tons in the six months between August and the end of April, with most arriving in March and April. Again, the balance coming from Spain between 1 May and 31 July would mainly be coming in the months of May and early June.

Italy, on the other hand, supplies almost 30,000 tons out of its total 36,000 tons between May and the end of July, with most product coming in the high summer months.

Essentially, the pattern of supply of fresh berries to Germany is as follows:

- Jan & Feb: Supplies from Israel, Colombia and very small tonnages from other distant sources. Spain is also shipping earlier every year.
- Mar through May: Spain is easily the largest supplier at this time; prices decline significantly as soon as large quantities arrive on the market.
- May to End-Jun/
Mid-Jul: Domestic German strawberries appear on the market; supplies also come from the Netherlands, France, Belgium, Luxembourg and Italy.
- Mid-Jul to End-:
Aug: This period represents something of a gap in the market, with the cessation of domestic supplies, the tailing off of quality supplies from other European countries, and the absence of many vacationing Germans are absent from the country on holiday.
- Sep/Oct: Again, these are not very active months, although strawberries are available from Italy and from "covered production" in Belgium, Luxembourg and the Netherlands. During October there are not many strawberries in the retail outlets because there are enormous quantities of other fruit available at extremely low prices, e.g. apples, pears, and grapes coming from German orchards and European suppliers.
- Nov/Dec: Increasing supplies start arriving from Israel and, of late, from Colombia. Small tonnages also come in around the Christmas period from Australia, New Zealand, Zimbabwe, etc.

Table 3: German Seasonal Strawberry Supplies

	Feb/Mar	April	May	June	July	Aug/Oct
Domestic Supplies¹						
1986	-	-	20	29,160	20,170	1,080
1987	-	-	10	21,560	30,860	1,100
1988	-	-	1,510	44,030	8,190	1,40
1989	-	-	2,670	46,080	4,180	700
1990	-	-	8,350	37,080	4,140	1,000
Imports						
1986	4,087	12,529	33,151	16,266	7,442	1,738
1987	6,874	22,143	38,473	24,223	11,631	2,657
1988	9,604	24,023	40,318	16,851	4,708	4,054
1989	12,479	21,906	40,334	13,036	4,673	3,147
1990	13,540	21,016	36,105	11,644	5,755	4,333

TABLE 3 (continued)	February	April	May	June	July	October
Available						
1986	4,090	12,530	33,170	45,430	27,610	2,820
1987	6,870	22,140	38,480	45,780	42,490	3,760
1988	9,600	24,020	41,830	60,880	12,900	5,290
1989	12,480	21,910	43,000	59,120	8,850	3,850
1990	13,540	21,020	44,460	48,720	9,900	5,330

¹ Seasonal distribution according to sales by producer organizations
Sources: Federal Statistical Office, ZMP.

Prices

The obvious windows in the market are November, December and January. At this time, retail prices can reach levels of up to DM5.00 per 250g punnet, although more normal levels would be at between DM3.00-DM4.00 per punnet. Once Spanish strawberries appear on the market in quantities, i.e. from late February onwards, price falls drastically to less than DM3.00 for 500g punnet, falling to even lower levels as domestic German and near European supplies become available. Israel is very active in the market from November into February and even has its own charter aircraft (Boeing 747) arriving each day in Frankfurt with full consignments of strawberries at a subsidized freight rate. This, in addition to Agrexco's aggressive marketing and promotion campaigns, would make it difficult for Kenya to compete at acceptable prices.

There is one small gap in the market in late July and through August, although as can be seen from the monthly availability figures in Table 3, the total available in the market has never been more than just over 5,000 tons. It can be noted, however, that there has been a steady growth over the five-year period since 1986, increasing from 2,820 tons (in the period from August through October) to 5,330 tons in 1990. The monthly figures for July are heavily skewed towards the beginning of the month, with demand falling off in the latter two weeks. Although it is obviously a growing market window, and one which has a relatively significant tonnage, the major problem would be price and distribution. Strawberries would probably not be able to retail for much more than DM3.00 for a 250g punnet. It is unlikely that the major retailers would be interested in handling the product at this time at such a price, given the fact that they would have to purchase it at around DM2.20-DM2.30 per punnet. The more specialized fruit and vegetable stores would probably handle the product, but it is unlikely that demand would be particularly stimulated. The housewife will have been used to at least two and a half months of buying top quality strawberries at very low prices, i.e. around DM2-3 for 500g. She is not, therefore, likely immediately to respond to a similar price level for half the quantity.

Market Distribution

Although the major supermarket chains are involved in direct purchase of bulk fruit and vegetables, they generally use importers and agents for smaller supplies of imported produce. It is highly unlikely that they would be interested in dealing directly for relatively small quantities of strawberries. They do buy strawberries through direct contract with suppliers, but

and Germany itself.

Strawberries are sold in the retail outlets, pre-packed in 250 or 500g punnets. None of the retailers interviewed were prepared to consider selling the product in bulk. They all argued that to sell in bulk would require an attendant at the point of sale, and that this was not in line with their merchandising policy.

There is no doubt that if strawberries are to find a place on retail shelves in Germany, they will have to be either pre-packed or re-packed after arrival in Germany (as is done presently in the UK). Some small quantities of 5kg flats do find their way on to wholesale markets and these are bought by small shopkeepers for sale in the major cities. In most cases, these are back-street shops and are not optimal outlets for high-quality berries.

Grades and Standards

EC grading standards apply (EC Specification Number 899/87 of March 30 1987) under which strawberries are classed into Extra Class, Class 1 and Class 2.

The specifications are almost identical to those for other European countries, with a 10% white shoulder, uniform shape, intact calix, 12mm maximum stalk, and a minimum size of 25mm for "Extra" Class and 22mm for Classes 1 and 2.

Strawberries need to be packed in 250g or 500g punnets of recyclable card, marked with a green spot. The punnets would be packed in trays of 8's or 12's and exported in LD 3's, LD 7's or LD 9's.

Labelling on each package is to be clearly legible and visible and should state identification name and address of packer or despatcher, name of produce and the variety, country of origin, and commercial specifications class, number of punnets and weight. In Germany, the plastic-lid type punnets are not yet in vogue because of the price sensitivity of the German consumer.

Import Regulations and Duties

Imported strawberries normally face an import duty of 14% for most of the year except between May 1 and July 31 when it goes up to 16% as a form of protection for domestic strawberries. Berries from most other European countries face no import duty, with the exception of Spain, and that will disappear by 1995. Duty-free privileges are also extended to Turkey and Morocco, with Cyprus receiving a reduced (3.5%) duty concession.

Market Opportunities for Kenyan Exporters

The only significant window of opportunity for strawberries would be between November and mid-February, a time that Israel has targeted for promotion (Israel even has its own charter

freight rate). This could eventually make it difficult for Kenya to compete at acceptable prices.

Once Spanish supplies come on to the market, the retail price falls to below DM2.20 per 500g punnet wholesale (circa US\$1.50) and can go even lower. The market at that time becomes increasingly competitive, with transportation from Spain taking only 2-4 days by controlled atmosphere truck. (Prices are usually fixed a maximum of 2 days after sale and in some cases, if quality can be guaranteed, the importers can pre-sell the product before arrival. In such cases, the truck is often instructed to drop off various pallets in cities throughout Germany en route to the final wholesale market. This is the kind of competition in existence from March through into July.)

FROZEN STRAWBERRIES

Imports

Germany has had a significant growth in its imports of frozen strawberries in the four years from 1988 to the end of 1991, with volume increasing by 69% over the 1988 figure. In similar vein, value has also increased by over 50% since 1988, reaching in excess of ECU 40 million in 1991.

Total German imports were 49,672 tons in 1991, making it the world's largest importer of frozen strawberries.

Market Share

The major supplier of frozen strawberries to Germany in 1991 was Poland, with over 38,000 tons or some 81% of total imports, followed by the Netherlands with 6,129 tons, Yugoslavia with 1,750 tons, Turkey with 1,203 tons and "other countries" with 1,197 tons. Though no breakdown of "other" is provided in the official statistics, analysis of Latin export trends points to Chile, Ecuador, Mexico, Argentina and occasionally Brazil.

Poland has increased its supplies by 279% since 10,000 tons in 1987, though other suppliers have been very slow to increase, and in the case of Spain, Turkey and "other countries" have actually decreased. It is probable that the supplies from Yugoslavia will have fallen to insignificant quantities because of civil strife in 1992.

Consumer Preferences

Of particular relevance to the growth in demand for frozen strawberries has been the increasing popularity of fruit-based yogurt and associated products over the last few years.

Source Countries		1987 tons	1988 tons	1989 tons	1990 tons	1991 tons
Poland	industrial	9,936	14,166	13,901	27,490	37,163
	other uses	159	596	467	856	1,113
Netherlands	industrial	4,597	4,894	6,718	7,559	5,823
	other uses	556	657	326	595	306
Spain	industrial	2,631	1,134	1,188	523	171
	other uses	255	543	832	47	1
Turkey	industrial	1,907	2,349	1,697	1,535	1,061
	other uses	37	82	91	60	142
Yugoslavia	industrial	765	2,596	2,506	1,533	1,642
	other uses	39	87	245	52	108
Other Countries	industrial	1,288	1,851	1,460	972	905
	other uses	110	171	215	220	292
Total	industrial	21,124	26,990	27,470	39,612	46,765
	other uses	1,156	2,136	2,176	1,830	1,962

Source: *Warenverein der Hamburger Bourse*

Almost all fruit imported in now individually quick-frozen, although some puree is accepted.

The dominant variety of frozen strawberry used in Germany is the north European *Senga Sengana*. This is normally a small strawberry with a dark red color both inside and outside, with the main crop from August through September. Contracts are normally signed up to the end of November for delivery.

Other imported varieties include Chandler and Tioga, with the main criteria of the importer being that the calibration is below 35mm and that the color is good. Of course, the inside of the strawberry will not be as red as the *Senga Sengana* in these cases and therefore its range of uses will be limited. What this means is that it is unlikely to command a premium price unless it has a very small calibration, i.e. below 20mm.

Seasonal Patterns of Demand

There is no seasonality *per se* to the supplies of frozen strawberries because, by their nature, they can be stored all year round. However, the Polish berry is in season in September/October and major quantities arrive during that time, although orders are placed earlier in the year. Much the same is true for supplies from other countries.

The price structure for the frozen berries tends to reflect the standards with, for example, in 1992, a 35mm calibrated berry receiving between DM1.70-1.72 "delivered duty paid" in client's warehouse. This year (1992) the Class 2 uncalibrated product has commanded prices around DM1.60 ddp - a price level higher than normal because of the reported drought in Poland. The Class 1 calibrated berry of 15-25mm commands a premium price of around DM2.20 per kilo, although, again, this is higher than normal.

Market Distribution

The pattern of demand has established a certain structure of distribution:

1. The yogurt and dairy industries rarely buy frozen strawberries directly. This is because they require the product as a taste ingredient in their products - a complex process which is normally done by specialist companies. In most cases, therefore, they buy frozen strawberries indirectly through "compound" companies which prepare special tastes, aromas and colors according to recipes and ideas provided by the yogurt and dairy industry. The product delivered to the industry is normally a liquid base, which can be either a pure strawberry flavor with pieces of berry included or a mixture of strawberry flavor with other fruit flavors. (Compound companies include Zentiss, Rudolf Wild, DEKA, Dohler, Sund and IFF (Deutschland)).
2. The jam industry purchases most of its frozen strawberry requirements directly from Poland. The jam manufacturers demand two types of strawberry, Class 1 which are included as entire berries in their gourmet products and Class 2 which are used in their mass-produced jams.

There are two major jam manufacturers in Germany, viz: Zentiss (Aachen) and Schwartau (Lübeck).

The normal purchase practice in the past was to trade with the "state trading corporations" of Poland, but during the last two years the situation has changed, with a large number of independent companies being established. The system of purchase in present times, therefore, is for the jam manufacturers to send their representatives to Poland in February of each year to discuss sales with a number of private processors. They normally expect to close the contracts down by the end of March so that the companies' sales departments can be given prices in April and May for planning their marketing of the final product. The contract signed is very specific on quantity, price and, particularly on quality. Payment terms are normally 30 days and the supplier is expected to quote a price free delivered duty paid. Most of the major factories now work to what's known as "just-in-time" delivery, with quantities coming in by refrigerated truck as required. In most cases, the large jam factories have their own and leased coldstores and attempt to hold a minimum but significant level of inventory at all

For small quantities of frozen berries from distant sources the major jam manufacturers and compound companies invariably purchase through importers. They did state, however, that should direct contact be made with them by a reputable supplier, then they would not be averse to a direct trading relationship.

3. **Importers:** All the major users of frozen strawberries in Germany buy part of their requirements through a few "well-known", established importers. This is particularly the case either for spot deliveries when users suddenly find themselves short of product or for deliveries from sources other than Poland. Most users prefer not to be totally reliant on Poland and have one or two "filler" suppliers from other sources. The largest and most established of the importers is Gustav Wulff, although others of note are Hartwich and Kaden (mainly works as an agent), W.Plog, Trofi, Lindt & Co., Nölting, Henri Lamotte, and Vitaminus.

Most importers buy at a fixed price "free on truck", Poland. Some also handle product from distant sources and work on the basis of a CIF price. Others act as agents on a free consignment basis, deducting their commission according to price achieved. All, however, report that they only handle relatively small quantities of products from different sources and only then when shortages appear in the market. This situation is expected to arise this year as a result of reported droughts in Poland and the consequent relatively high prices for the Polish product. All importers and agents, by their very nature, are interested in receiving quotes and samples from new suppliers. The crucial variable, however, will be price and calibration and, as will be seen below, this will be what presents problems for new supplies.

4. **Retail Groups/Supermarket Chains:** The major supermarket chains and the "home service" companies buy frozen strawberries directly from source and via agents. In most cases, they make contracts with Polish factories from March through May and in most years receive all their supplies from these sources. The berries can be pre-packed in retail packs in Poland or re-packed in Germany under "store" or "private" label. If they are at all interested (very rarely) in berries from other sources, it would only be in response to offers from importers/agents.

Grades and Standards

There are three standards for frozen strawberries in Germany:

1. Totally uncalibrated, Class 2: These normally measure between 10-40mm diameter, although there has to be a guarantee of a regular number of the smaller berries within the package. These are normally used for purées and for jams where whole berries are not required.

25mm and are used in food products where whole strawberries are required.

3. Class 1, calibration of 25-35mm max: These are used for the higher quality jam and food products.

In most cases, strawberries with a calibration of higher than 40mm tend to fall apart during processing.

The strawberries need to be without stalks, very clean and with a good, strong red color. Almost all fruit imported is now individually quick-frozen, although some purée is also accepted.

Product purchased directly from factories in Poland arrives in refrigerated trucks, packed either in 10, 15 or 20kg bags. Sometimes, packaging is also in 4 x 2.5kg cartons. Normally, delivery is around 2 days.

Import Duties and Regulations

The normal import duty on product is 18%, compared with 13% for Poland and Yugoslavia. Sometimes minimum import prices are levied by the EEC, with, for example, a border price of DM1.53 per kilo established in 1991. No MIP has been set at this time because of the relative shortage of product.

Market Opportunities for Kenyan Exporters

The German trade is almost entirely locked into Senga Sengana strawberries from Northern Europe. These are bought in large quantities at fixed prices which are around \$1.10 per kilo delivered duty paid. Taking into account the preference for the Senga Sengana variety, together with this low price level, it tends to follow that this would not be a profitable business for frozen strawberries from Kenya. Firstly, they would only be purchased in relatively small quantities in the months of January through April - when total imports are generally around a level of 1,000 tons per annum. Secondly, because the varieties would be Chandler, Tioga, Douglas, etc., they would probably be priced at a discount to the Polish strawberries, unless, of course, there were real shortages on the market.

The only price levels pertaining in Germany for frozen strawberries which could bring a return to Kenya are those for the premium small calibration berries of below 20mm. In such cases, it is possible that Kenya could attain a price level of \$1.50 per kilo CIF and in times of scarcity, up to \$2.00.

There will always be some agents in Germany who will be prepared to take product from Kenya. In most cases, however, they will only do so on a free consignment basis and the entire risk will be on the supplier as to what price level would eventually be attained. It is not recommended that Kenyan exporters proceed on such a basis. Even if importers could be convinced of the

SECTION X: CHERRY TOMATOES

Ranking Overview

<u>Product</u>	<u>Ranking</u>	<u>Notes</u>
Cherry Tomatoes	2*	Intense Competition; Best Prepacked; Growing Market; *Further Research Recommended.

Domestic Production

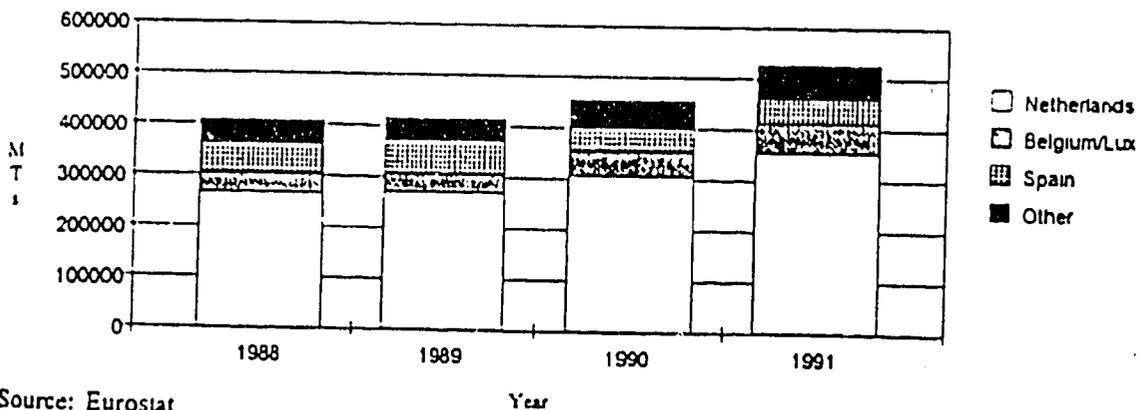
Germany has limited tomato production, with product available during the summer months. Cherry tomatoes account for a small unspecified percentage.

Imports

Official German import statistics do not differentiate cherry tomatoes from total imports of tomatoes, and it is not therefore possible to get an idea of the total tonnage imported, except by reference to some of the supplying countries.

In 1991, Germany imported some 530,000 tons of main crop tomatoes -- a significant increase over its imports of 458,000 tons in 1990. Total European (EC) imports by volume in 1991 amounted to 1,300,000 tons of which Germany took over 40%. This makes it the largest importer in Europe, ahead of France, the Netherlands, and the U.K.

German Fresh Tomato Imports, 1988-1991, MTs



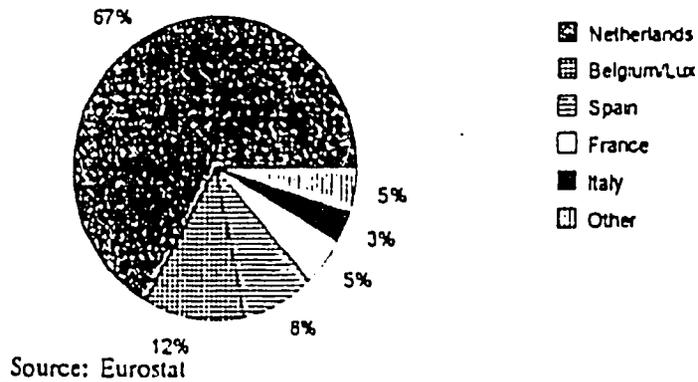
Source: Eurostat

Market Share

It is difficult to allocate percentages to cherry tomato suppliers because of the statistical reporting methods, but we do know that during the main European season, the Netherlands, Spain and Germany itself are key suppliers. Other times of the year are covered by Zimbabwe, South

below for more details).

German Import Market Share - Fresh Tomatoes, 1991



Consumer Preferences

The varieties of cherry tomatoes most in demand in Germany are: Sweet 100, Cherita, Evita and Gardener's Delight.

As regards appearance, the product should be of a small size with a good, ripe red color. Yellow types do not sell in Germany.

Their flavor should be distinctive and should meet the minimum acid/sugar levels to achieve a flavor balance, i.e. titratable acids 1.1%, sugars by refractometry 5.5% of minimum soluble solids. These properties should be tested three days after picking.

Seasonal Patterns of Demand

During the European main season (summer months), cherry tomatoes are supplied from the Netherlands, Spain and from within Germany itself.

During the winter months supplies come from countries such as Zimbabwe, South Africa and Senegal between November and mid-March. It is at this time that the higher prices can be captured.

There is very little gap in the market except perhaps at the end of March/early April. In reality, however, that period is covered by product from the Canary Islands and Spain, which is getting earlier every year.

Imported tonnages from distant sources in 1991 included Venezuela with 94 tons, South Africa with 42 tons, Zimbabwe with 35 tons, Senegal with 72 tons and Egypt with 41 tons. Given the relatively high cost of air freight it is probable that these imports were of cherry tomatoes rather than of main crop tomatoes.

Prices

In winter months the prices of cherry tomatoes are approximately DM4-6 per kilo.

Grades and Standards

Although there are no specific standards for cherry tomatoes as distinct from tomatoes, there is a difference concerning size.

The minimum EC requirements for tomatoes are that they be intact, fresh looking, sound, clean, practically free of visible foreign matter, free of abnormal external moisture and free of foreign smell and/or taste.

Although four classes are defined for ordinary tomatoes, viz "Extra" and Classes 1, 2 and 3, only two classes are defined for cherry tomatoes. These are "Extra" Class and Class 1, with Extra Class requiring superior quality and no defects and Class 1 allowing slight defects. It is also specified that cherry tomatoes must be uniformly round.

Specifications applied by buying organizations include the following:

"Extra" Class cherry tomatoes must be firm and free from "greenbacks" and other defects, with the exception of very slight superficial defects which should not affect the general appearance of the produce, shelf life and presentation. No more than a 5% tolerance is allowed below Extra class quality and then not below Class 1 standard.

Acceptable size ranges for cherry tomatoes are from 10 - 30mm diameter, depending upon variety. 25-30mm are most popular, although uniformity within the punnet is essential.

Taste and texture must be sweet/juicy. Product must be ripe (color 8/9 on the Dutch color chart), although green is allowed provided it reaches the store ready to eat.

Cherry tomatoes are normally pre-packed at source to minimize handling damage. Packing is normally in 250gm punnets with 8-12 per tray (Senegal) and 9 punnets per tray (Netherlands). At the time of packing it is advisable to include an additional 5-10% weight to make up for travel weight loss.

Packages must be labelled by origin, name of packer and/or dispatcher, as cherry tomatoes (Kirschtomaten), and by variety (optional). Labels must also have date of packing and class of tomato. Net weight in Kg and minimum and maximum diameters would also assist in marketing, along with the usual "This Side Up", "Fragile" and Temperature symbols.

Import Duties and Regulations

ACP countries pay 11% import duty from November 1st to May 14th and 18% from May 15th

Market Opportunities

The market for cherry tomatoes has been expanding in Germany although it is not yet as large as that of France or the UK. Opportunities for pre-packed 250gm punnets do exist in the winter months and it is of interest to note that in the winter of 1991/92 and the winter of 1990/91 South American countries exported more cherry tomatoes to Germany than did African countries. It is obvious therefore that market potential does exist, but that competition is intense, not only from South America but also from Spain and the Canary Islands, which will obviously have lower freight costs and face lower import tariffs.

Exporters in Zimbabwe have secured forward contracts with major multiples in the United Kingdom. Kenyan exporters should perhaps attempt to do this in Germany, even though German retail chains are not as advanced in their direct purchasing patterns for non-volume products as are those in the United Kingdom. The product is also likely to increase in popularity in the catering trade and some targeting of food service industries might be appropriate. Further research is necessary.

International Trade Centre, "Fresh Fruit and Vegetables Report," 1987.

Eurostat, 1988 - 1991.

ITC Market News Service, 1988 - 1991.

Commonwealth Secretariat "Guidelines," 1991.

"Eurofruit," various issues 1992.

Primary Interviews in Germany, David Jones, 1988 - 1992.

"Food News," various issues 1992.

International Trade Centre, "Fruit Juices Report," 1991.

"Fruit Trades Journal," various issues, 1992.

The Fresh Produce Book 1993, Lockwood Press, London 1993.

APPENDIX A

GERMAN IMPORT STATISTICS

	Metric Tons				1,000 ECUs			
	1988	1989	1990	1991	1988	1989	1990	1991
France	9,141	9,072	5,022	4,814	36,555	35,281	19,812	20,464
Belgium/Lux	n/a	62	125	92	n/a	215	495	414
Netherlands	4,326	4,108	5,198	5,332	17,554	19,761	24,213	22,558
Italy	n/a	n/a	258	92	n/a	n/a	824	294
Greece	4,397	7,677	9,395	10,852	12,846	23,233	29,150	25,957
Spain	6,996	7,375	7,599	10,668	19,630	20,222	22,016	29,442
Poland	n/a	588	831	708	n/a	1,280	1,493	1,556
South Africa	403	449	377	247	968	1,376	914	842
USA	69	202	268	367	195	529	713	975
Peru	n/a	50	41	73	n/a	146	122	246
Chile	42	45	58	45	147	161	201	159
Argentina	334	294	244	280	945	1,033	696	1,031
Other	620	200	149	254	1,507	549	344	693
Total	26,328	30,122	29,565	33,824	90,347	103,786	100,993	104,631
Intra-EC	24,964	28,362	27,598	31,942	86,962	98,947	96,512	99,331
Extra-EC	1,364	1,760	1,967	1,882	3,385	4,839	4,481	5,300

Source: EUROSTAT

Table 2: German Imports of Fresh/Chilled Asparagus, 1988-1991, Unit Value

	ECU/MT			
	1988	1989	1990	1991
France	3,999	3,889	3,945	4,251
Belgium/Lux	n/a	3,468	3,960	4,500
Netherlands	4,058	4,810	4,658	4,231
Italy	n/a	n/a	3,194	3,196
Greece	2,922	3,026	3,103	2,392
Spain	2,806	2,742	2,897	2,760
Poland	n/a	2,177	1,797	2,198
South Africa	2,402	3,065	2,424	3,409
USA	2,826	2,619	2,660	2,657
Peru	n/a	2,920	2,976	3,370
Chile	3,500	3,578	3,466	3,533
Argentina	2,829	3,514	2,852	3,682
Other	2,431	2,745	2,309	2,728
Total	3,432	3,446	3,416	3,093

Source: EUROSTAT

Table 3: German Imports of Fresh/Dried Avocados, 1988-1991

	Metric Tons				1,000 ECUs			
	1988	1989	1990	1991	1988	1989	1990	1991
France	529	1,245	3,668	5,318	748	1,643	4,788	6,119
Belgium/Lux.	n/a	125	171	75	n/a	178	245	95
Netherlands	883	1,366	1,803	2,359	1,410	2,030	2,602	2,802
Spain	337	229	577	165	495	381	772	192
Kenya	633	726	528	699	976	1,127	723	851
South Africa	641	831	587	585	1,053	1,219	863	729
USA	439	363	120	97	658	570	180	128
Israel	2,244	1,779	861	34	3,158	2,978	1,192	24
Other	250	40	120	71	408	64	171	94
Total	5,956	6,704	8,435	9,403	8,906	10,190	11,536	11,034
Intra-EC	1,934	2,967	6,218	7,934	2,951	4,232	8,408	9,233
Extra-EC	4,022	3,737	2,217	1,469	5,955	5,958	3,128	1,801

Source: EUROSTAT

	1988	1989	1990	1991
France	1,414	1,320	1,305	1,151
Belgium/Lux.	n/a	1,424	1,433	1,267
Netherlands	1,597	1,486	1,443	1,188
Spain	1,469	1,664	1,338	1,164
Kenya	1,542	1,552	1,369	1,217
South Africa	1,643	1,467	1,470	1,246
USA	1,499	1,570	1,500	1,320
Israel	1,407	1,674	1,384	706
Other	1,632	1,600	1,425	1,324
Total	1,495	1,520	1,368	1,173

Source: EUROSTAT

Table 5: German Imports of Fresh/Chilled Beans (vigna spp., phaseolus spp.), 1988-1991

	Metric Tons				1,000 ECUs			
	1988	1989	1990	1991	1988	1989	1990	1991
France	375	314	437	336	561	540	773	588
Belgium/Lux.	497	399	309	515	480	672	469	470
Netherlands	2,584	3,718	3,850	5,054	2,599	4,674	3,958	4,554
Italy	4,810	4,495	4,603	3,596	4,453	4,562	5,515	5,563
Spain	4,055	3,629	3,581	3,706	4,839	4,661	5,065	5,157
Turkey	n/a	458	n/a	372	n/a	472	n/a	412
Egypt	607	318	369	367	754	395	454	383
Senegal	81	64	81	81	110	118	112	138
Ethiopia	135	205	116	364	161	285	174	555
Kenya	610	638	611	459	692	896	859	682
Other	1,088	830	1,111	536	684	513	1,033	403
Total	14,842	15,068	15,068	15,386	15,333	17,788	18,412	18,905
Intra-EC	12,428	12,684	13,060	13,223	13,038	15,241	16,060	16,352
Extra-EC	2,414	2,384	2,008	2,163	2,295	2,547	2,352	2,553

Source: EUROSTAT

Table 6: German Imports of Fresh/Chilled Beans (vigna spp., phaseolus spp.), Unit Value

	ECU/MT			
	1988	1989	1990	1991
France	1,496	1,720	1,769	1,750
Belgium/Lux.	966	1,684	1,518	913
Netherlands	1,006	1,257	1,028	901
Italy	926	1,015	1,198	1,547
Spain	1,193	1,284	1,414	1,392
Turkey	n/a	1,031	n/a	1,108
Egypt	1,242	1,242	1,230	1,044
Senegal	1,358	1,844	1,383	1,704
Ethiopia	1,193	1,390	1,500	1,525
Kenya	1,134	1,404	1,406	1,486
Other	629	618	930	752
Total	1,033	1,181	1,222	1,229

Source: EUROSTAT

	1988	1989	1990	1991	1988	1989	1990	1991
France	2,848	3,067	3,734	3,744	2,848	2,960	3,621	3,729
Belgium/Lux.	3,289	2,569	2,823	2,193	2,037	1,648	1,923	1,792
Netherlands	3,203	2,857	2,825	4,374	2,425	2,162	2,292	4,247
Italy	1,252	913	1,222	1,065	1,153	794	1,071	984
U. K.	429	411	338	129	323	318	274	105
Poland	3,908	4,963	6,288	8,710	1,459	1,734	2,531	3,732
Yugoslavia	n/a	258	n/a	535	n/a	76	n/a	241
Hungary	n/a	390	418	249	n/a	172	241	143
Kenya	n/a	n/a	n/a	1	n/a	n/a	n/a	1
Peru	n/a	n/a	n/a	297	n/a	n/a	n/a	401
China	n/a	n/a	n/a	236	n/a	n/a	n/a	212
Other	2,060	1,036	1,460	839	1,535	1,403	1,495	1,044
Total	16,989	16,464	19,108	22,372	11,780	11,267	13,448	16,631
Intra-EC	11,200	9,822	11,130	11,661	8,930	7,888	9,383	11,025
Extra-EC	5,789	6,642	7,978	10,711	2,850	3,379	4,065	5,606

Source: EUROSTAT

Table 8: German Imports of Frozen Beans, Unit Value

	ECU/MT			
	1988	1989	1990	1991
France	1,000	965	970	996
Belgium/Lux.	619	641	681	817
Netherlands	757	757	811	971
Italy	921	870	876	924
U. K.	753	774	811	814
Poland	373	349	403	428
Yugoslavia		295		450
Hungary		441	577	574
Kenya				1,000
Peru				1,350
China				898
Other	745	1,354	1,024	1,244
Total	593	684	704	743

Source: EUROSTAT

Table 9: German Imports of Fresh/Chilled Capsicum or Pimenta, 1988-1991

	Metric Tons				1,000 ECUs			
	1988	1989	1990	1991	1988	1989	1990	1991
Netherlands	n/a	382	210	306	n/a	820	485	793
Italy	759	636	911	933	1,004	827	1,282	1,547
Greece	n/a	n/a	n/a	211	n/a	n/a	n/a	198
Spain	n/a	14	54	54	n/a	21	67	91
Turkey	3,455	2,711	2,793	2,300	2,399	2,549	2,500	1,922
Morocco	40	16	10	42	56	24	14	78
Kenya	n/a	7	12	11	n/a	15	19	18
Zambia	n/a	n/a	20	8	n/a	n/a	50	14
Jordan	n/a	n/a	n/a	42	n/a	n/a	n/a	89
Thailand	n/a	n/a	n/a	58	n/a	n/a	n/a	258
Other	817	258	285	131	1,196	332	480	165
Total	5,071	4,024	4,295	4,096	4,655	4,588	4,897	5,173
Intra-EC	1,234	1,145	1,293	1,546	1,815	1,805	1,986	2,706
Extra-EC	3,837	2,879	3,002	2,550	2,840	2,783	2,911	2,467

Source: EUROSTAT

	1988	1989	1990	1991
Netherlands	n/a	2,147	2,310	2,592
Italy	1,323	1,300	1,407	1,658
Greece	n/a	n/a	n/a	938
Spain	n/a	1,500	1,241	1,685
Turkey	694	940	895	836
Morocco	1,400	1,500	1,400	1,857
Kenya	n/a	2,143	1,583	1,636
Zambia	n/a	n/a	2,500	1,750
Jordan	n/a	n/a	n/a	2,119
Thailand	n/a	n/a	n/a	4,448
Other	1,464	1,287	1,684	1,260
Total	918	1,140	1,140	1,263

Source: EUROSTAT

Table 11: German Imports of Fresh/Dried Mangos and Mangosteen, 1988-1991

	Metric Tons				1,000 ECUs			
	1988	1989	1990	1991	1988	1989	1990	1991
France	34	38	125	146	83	93	200	235
Belgium/Lux	261	208	261	108	435	301	389	165
Netherlands	1,436	2,304	2,829	3,925	2,419	3,570	4,377	5,744
Mali	1	6	2	0	1	11	3	0
Burkina Faso	0	0	5	0	0	0	2	0
Ivory Coast	286	325	132	9	490	488	200	12
Kenya	264	250	306	134	525	419	480	229
South Africa	202	218	340	456	366	378	543	805
USA	139	73	346	236	198	94	472	313
Mexico	483	185	132	56	718	269	179	61
Costa Rica	n/a	633	716	1,465	n/a	1,052	961	2,080
Guatemala	n/a	n/a	n/a	415	n/a	n/a	n/a	533
Venezuela	191	127	139	149	323	197	209	251
Peru	265	47	11	19	510	76	16	33
Brazil	551	517	499	339	1,099	970	868	524
Israel	n/a	170	234	406	n/a	217	307	503
Pakistan	8	19	47	40	14	26	61	57
India	30	19	20	29	61	26	43	59
Thailand	n/a	74	n/a	53	n/a	207	n/a	225
Other	683	294	214	463	1,146	509	477	711
Total	4,834	5,507	6,358	8,448	8,388	8,903	9,787	12,540
Intra-EC	1,751	2,555	3,242	4,187	2,975	3,975	5,014	6,157
Extra-EC	3,083	2,952	3,116	4,261	5,413	4,928	4,773	6,383

Source: EUROSTAT

	1988	1989	1990	1991
France	2,441	2,447	1,600	1,610
Belgium/Lux	1,667	1,447	1,490	1,528
Netherlands	1,685	1,549	1,547	1,463
Mali	1,000	1,833	1,500	
Burkina Faso			400	
Ivory Coast	1,713	1,502	1,515	1,333
Kenya	1,989	1,676	1,569	1,709
South Africa	1,812	1,734	1,597	1,765
USA	1,424	1,288	1,364	1,326
Mexico	1,487	1,454	1,356	1,089
Costa Rica		1,662	1,342	1,420
Guatemala				1,284
Venezuela	1,691	1,551	1,504	1,685
Peru	1,925	1,617	1,455	1,737
Brazil	1,995	1,876	1,739	1,546
Israel		1,276	1,312	1,239
Pakistan	1,750	1,368	1,298	1,425
India	2,033	1,368	2,150	2,034
Thailand		2,797		4,245
Other	1,678	1,731	2,229	1,536
Total	1,735	1,617	1,539	1,484

Source: EUROSTAT

Table 13: German Imports of Canned Passionfruit and Guavas, 1990-1991

	Metric Tons		1,000 ECUs		Unit Value, ECU/MT	
	1990	1991	1990	1991	1990	1991
France	n/a	-	n/a	1		
Belgium/Lux	n/a	3	n/a	10		3,333
Netherlands	n/a	131	n/a	62		473
Italy	n/a	11	n/a	12		1,091
Switzerland	n/a	5	n/a	26		5,200
South Africa	n/a	452	n/a	256		566
India	n/a	37	n/a	42		1,135
Israel	n/a	14	n/a	14		1,000
Thailand	n/a	4	n/a	5		1,250
Vietnam	n/a	2	n/a	1		500
Malaysia	n/a	83	n/a	42		506
Other	747	0	451	0	604	
Total	747	742	451	475	604	640
Intra-EC	78	145	55	86	705	593
Extra-EC	669	597	396	389	592	652

Source: EUROSTAT

	1988	1989	1990	1991	1988	1989	1990	1991
France	164	28	72	71	103	56	87	95
Belgium/Lux.	n/a	2	1	79	n/a	3	1	28
Netherlands	246	166	580	783	138	323	522	656
Italy	668	708	479	678	664	735	564	802
Spain	50	26	14	54	92	51	31	96
Zimbabwe	1	11	33	47	3	17	68	89
Guatemala	12	50	67	64	28	114	165	156
Other	890	228	341	90	792	222	364	201
Total	2,031	1,219	1,587	1,866	1,820	1,521	1,802	2,123
Intra-EC	1,869	1,044	1,392	1,670	1,623	1,244	1,410	1,687
Extra-EC	162	175	195	196	197	277	392	436

Source: EUROSTAT

Table 15: German Imports of Fresh/Chilled Peas ("Pisum Sativum"), 1988-1991, Unit Value

	ECU/MT			
	1988	1989	1990	1991
France	628	2,000	1,208	1,338
Belgium/Lux.	n/a	1,500	1,000	354
Netherlands	561	1,946	900	838
Italy	994	1,038	1,177	1,183
Spain	1,840	1,962	2,214	1,778
Zimbabwe	3,000	1,545	2,061	1,894
Guatemala	2,333	2,280	2,463	2,438
Other	890	974	1,067	2,233
Total	896	1,248	1,135	1,138

Source: EUROSTAT

Table 16: German Imports of Frozen Peas, 1988-1991

	Metric Tons				1,000 ECUs ^a			
	1988	1989	1990	1991	1988	1989	1990	1991
France	1,725	1,725	2,540	3,396	1,752	1,641	2,405	3,192
Belgium/Lux.	2,555	2,132	2,248	2,394	1,720	1,419	1,554	1,660
Netherlands	727	1,512	1,597	1,989	565	1,133	1,257	1,533
Italy	n/a	278	561	483	n/a	267	514	461
U.K.	1,181	525	592	364	751	368	379	218
Denmark	7,201	5,453	6,500	4,940	5,732	4,511	5,393	4,123
Spain	200	n/a	n/a	n/a	121	n/a	n/a	n/a
Sweden	2,988	3,529	3,796	3,362	2,018	2,430	2,718	2,496
Yugoslavia	1,323	358	195	315	396	126	85	137
Poland	n/a	723	421	494	n/a	242	141	190
Czechoslovakia	n/a	n/a	n/a	450	n/a	n/a	n/a	184
Hungary	3,845	3,975	3,622	3,057	1,713	1,909	1,799	1,518
USA	487	n/a	n/a	n/a	247	n/a	n/a	n/a
China	n/a	412	349	471	n/a	640	512	695
Other	1,874	566	358	62	1,799	351	265	105
Total	24,106	21,188	22,779	21,777	16,814	15,037	17,022	16,512
Intra-EC	14,107	11,626	14,039	13,566	11,101	9,339	11,501	11,189
Extra-EC	9,999	9,562	8,740	8,211	5,713	5,698	5,521	5,323

Source: EUROSTAT

	ECU/MT			
	1988	1989	1990	1991
France	1,016	951	947	940
Belgium/Lux.	673	666	691	693
Netherlands	777	749	787	771
Italy		960	916	954
U.K.	636	701	640	599
Denmark	796	827	830	835
Spain	605			
Sweden	675	689	716	742
Yugoslavia	299	352	436	435
Poland		335	335	385
Czechoslovakia				409
Hungary	446	480	497	497
USA	507			
China		1,553	1,467	1,476
Other	960	620	740	1,694
Total	698	710	747	758

Source: EUROSTAT

Table 18: German Imports of Fresh Strawberries, 1989-1991

	Metric Tons			1,000 ECUs		
	1989	1990	1991	1989	1990	1991
France	7,504	5,766	7,021	17,918	14,757	18,490
Belgium/Lux.	5,259	8,391	5,981	12,065	11,569	11,667
Netherlands	3,618	4,953	5,693	7,295	7,559	11,440
Italy	31,873	29,201	36,360	63,450	63,186	69,773
Portugal	450	272	168	903	512	284
Spain	40,085	35,761	38,578	79,250	75,106	84,669
Poland	3,980	6,755	14,332	2,155	3,196	6,538
Romania	1,228	n/a	226	620	n/a	199
Bulgaria	1,141	1,116	439	596	459	645
Kenya	27	25	12	104	77	42
USA	315	479	531	471	637	711
Mexico	419	490	587	1,083	1,173	1,414
Ecuador	128	n/a	85	416	n/a	356
Colombia	n/a	140	188	n/a	422	682
Israel	302	434	107	1,285	1,503	489
Other	392	446	909	621	630	541
Total	96,721	94,229	111,217	188,232	180,786	207,940
Intra-EC	88,815	84,374	93,803	180,926	172,678	196,326
Extra-EC	7,906	9,855	17,414	7,306	8,108	11,614

Source: EUROSTAT

	1989	1990	1991
France	2,388	2,559	2,634
Belgium/Lux.	2,294	1,379	1,951
Netherlands	2,016	1,526	2,009
Italy	1,991	2,164	1,919
Portugal	2,007	1,882	1,690
Spain	1,977	2,100	2,195
Poland	541	473	456
Romania	505	n/a	881
Bulgaria	522	411	1,469
Kenya	3,852	3,080	3,500
USA	1,495	1,330	1,339
Mexico	2,585	2,394	2,409
Ecuador	3,250	n/a	4,188
Colombia	n/a	3,014	3,628
Israel	4,255	3,463	4,570
Other	1,584	1,413	595
Total	1,946	1,919	1,870

Source: EUROSTAT

Table 20: German Imports of Fresh/Chilled Tomatoes, 1988-1991

	Metric Tons				1,000 ECUs			
	1988	1989	1990	1991	1988	1989	1990	1991
France	15,966	15,030	23,428	27,678	10,626	12,459	21,209	26,798
Belgium/Lux.	38,276	39,603	49,913	61,442	36,353	35,364	42,894	57,480
Netherlands	266,306	269,140	306,175	353,960	271,194	258,487	278,536	347,169
Italy	12,461	11,415	12,315	17,843	8,994	8,770	9,691	16,352
Spain	58,579	62,344	43,560	44,198	34,035	36,199	31,330	37,137
Canary Islands	3,466	1,009	1,958	2,787	3,011	734	1,893	2,619
Romania	3,676	4,044	n/a	1,461	1,356	1,716	n/a	635
Bulgaria	n/a	n/a	n/a	2,005	n/a	n/a	n/a	778
Turkey	1,055	1,858	2,383	3,101	925	1,413	2,765	2,426
Albania	n/a	1,574	1,019	164	n/a	947	654	114
Morocco	3,735	7,136	10,237	12,146	2,628	4,981	8,205	10,554
Kenya	n/a	n/a	n/a	4	n/a	n/a	n/a	4
Israel	1,765	2,289	3,112	1,633	1,442	1,558	2,873	1,425
Other	5,158	2,677	3,742	1,626	2,864	1,817	3,772	1,376
Total	410,443	418,119	457,842	530,048	373,428	364,445	403,822	504,867
Intra-EC	382,347	398,468	436,403	495,727	361,623	352,149	385,826	485,636
Extra-EC	28,096	19,651	21,439	34,321	11,805	12,296	17,996	19,231

Source: EUROSTAT

61

	1988	1989	1990	1991
France	666	829	905	968
Belgium/Lux.	950	893	859	936
Netherlands	1,018	960	910	981
Italy	722	768	787	916
Spain	581	581	719	840
Canary Islands	869	727	967	940
Romania	369	424	n/a	435
Bulgaria	n/a	n/a	n/a	388
Turkey	877	760	1,160	782
Albania	n/a	602	642	695
Morocco	704	698	802	869
Kenya	n/a	n/a	n/a	1,000
Israel	817	681	923	873
Other	555	679	1,008	846
Total	910	872	882	952

Source: EUROSTAT

APPENDIX B

**KEY GERMAN CONTACTS
IN THE FRUIT AND VEGETABLE TRADE**

6/10

Agents/Importers

Klaus Böcker GmbH
2150 Buxtehude
Bahnhofstrasse 5
Tel: 04161 / 40 12
Fax: 04161 / 35 36
Tlx: 2 18 852 boeco d
Juice

Hartwich & Kaden
Neuer Wall 73-75
2000 Hamburg 36
Tel: 040 363061
Fax: 040 364358
Tlx: 0212380
Juice

Heinrich Harmsen GmbH
Am Hehsel 38
2000 Hamburg 63
Tel: 040 5388078
Fax: 040 5382645
Tlx: 2164007 härm d
Juice, Canned Fruit

Wolfgang Jobmann GmbH & Co.
Gudrunstrasse 73
2000 Hamburg 56
Tel: 040 818094-97
Fax: 040 810975
Tlx: 403887
Juice

Kemna Trading GmbH
P O Box 1524
Hamburger Strasse 16
D-2110 Buchholz
Tel: 0 41 81 - 60 48
Fax: 0 41 81 - 3 34 41
Tlx: 2 189 738 ktra d
Juice

Nöltig Gebrüder GmbH & Co.
P O Box 13 20 18
Alsterchaussee 9
2000 Hamburg 13
Tel: 040 441431
Fax: 040 450827
Tlx: 212507 ngh d
Juice

Pittrex Handelsgesellschaft mbH
P O Box 70 13 49
Wandsbeker Zollstr. 17
2000 Hamburg 70
Tel: 040 6829091
Fax: 040 6829094
Tlx: 2165246 lime d
Juice

Rickertsen Import GmbH & Co. KG
Sachsenstrasse 8
D-2000 Hamburg 1
California-Haus
Tel: 040 23717-210
Fax: 040 23717-207
Tlx: 2162008 RIMP
Canned fruit, Dried fruit, IQF, Juice

Kornelbaumschneise
200 Hamburg 13
Tel: 40 441041
Fax: 40 6829094
Tlx: 0211596
Juice

United Breweries Handels GmbH
Malerecke 14
7994 Langenargen
Tel: 07543 2082/3
Fax: 07543 2084
Tlx: 734806 mango d
Juice

E H Worlée & Co. (GmbH & Co.)
Grusonstrasse 22
D-2000 Hamburg 74
Tel: (040) 733 33-185
Fax: (040) 733 332 90
Tlx: 212 384 worl d
Dried fruit

Scandinavien und Zuiden Import GmbH
Frauenstrasse 31
8031 Maisach
Tel: 08141 90141-5
Canned fruit (Private & Other Labels)

Theodor Kattus GmbH
Meilersberger Strasse 730
4030 Ratingen 8
Tel: 02102 541-0
Fax: 02102 52143
Canned fruit (Private & Other Labels)

Werner W. Plog
Rontgenstrasse 6
2057 Reinbek
Tel: 040 722 5091-94
Fax: 040 722 5096
Tlx: 2163507
IQF

Hammelstrasse 90
D-2000
Hamburg
Tel: 040 234803-05
Fax: 040 232371
Tlx: 2165593
IQF

V. Lind & Co. GmbH
Spaldingstrasse 110a
Postfach 10 64 07
2000 Hamburg 1
Tel: 040 23610013
Fax: 040 23610034
Tlx: 02163786 LIN D
IQF

Gustav Wulf
Ballindam 26
D-2000 Hamburg 1
Postfach 10 66 03
Tel: 040 328192-0
Fax: 040 337751
Tlx: 2162341 gw d
IQF

Henry Lamotte
Auf dem Dreieck 3 (Hohentorschafen)
D-2800 Bremen 1
Postfach 10 38 49
Tel: 0421 54706-65
Fax: 0421 54706-99
Tlx: 244144 oils
Canned fruit, Dried fruit, IQF

EDKI mbH
Landgrafenstrasse 16
1000 Berlin 30
Tel: 030 2616023
Tlx: 183249 ekbl
Canned fruit

MBM
Palmaille 75
D-2000 Hamburg 50
Tel: 040 3808-261
Fax: 0403808-436
Tlx: 215095
Canned fruit

Harms Food Trading
Palmaille 35
2000 Hamburg 50
Tel: 040 3892793-94
Fax: 040 3892795
Tlx: 212113 hft d
Canned fruit, IQF

Trofi GmbH
Kontorhuas Grossmarkt
Lippeltstrasse 1
2000 Hamburg 1
Tel: 040 335596
Fax: 040 327549
Tlx: 2173211 trof d / 2162002
IQF

Producers of Compounds/Flavors/Essences

DEKA Duning & Krausse GmbH
Hansestrasse 33
3300 Braunschweig
Tel: 0531 31001-0
Fax: 0531 3100125
Juice

Döhler GmbH
Riedstrasse 7-9
D-6100 Darmstadt
Tel: (06151) 3 06-115
Fax: (06151) 306 350
Tlx: 4 19 386 doeh d
Bottler: Juice, IQF.

Reeser Strasse 60
4240 Emmerich
Tel: 02822 4021
Fax: 02822 4056
Tlx: 8125101
Juice

Rudolf Wild GmbH & Co. KG
Rudolf-Wild-Strasse 4-6
D-6904 Eppelheim-Heidelberg
Tel: 0 62 21 799-330
Fax: 0 62 21 799-520
Tlx: 461787
Juice

Processors/bottlers

Deutsche Granini GmbH & Co. KG
Kammerratsheide 3
Postfach 2023
4800 Bielefeld 1
Tel: 0521 7840
Fax: 0521 784355
Tlx: 932340
Juice

Junita Fruchtsaft Marketing GmbH
Darmstädter Str. 29
6080 Gross-Gerau
Tel: 06152 40929/40951
Fax: 06152 81232
Tlx: 4191166 juta d
Juice

Lindavia Fruchtsaft AG
Kellereiweg 6-22
8990 Lindau
Tel: 08382 2771-0
Fax: 08382 22601
Tlx: 54363 lidava d
Juice

2000 Hamburg 54
Tel: 040 570003-0
Fax: 040 5703871
Tlx: 215028
Juice

Peter Eckes KGmbH
Ludwig-Eckes-Allé 6
D-6501 Nieder-Olm
Tel: 06136 35578
Fax: 06136 35585
Tlx: 4187221
Packer/Bottler: Juice

Riha-WeserGold Getränkeindustrie GmbH &
Co. KG
Auf der Behrm 3-5
3260 Rinteln 3 (Exten)
Tel: 05751 404-0
Fax: 05751 40469
Tlx: 971891
Juice

Rolf H. Dittmeyer GmbH
Sulzbacher Strasse 40
6231 Schwalbach am Taunus
Tel: 06196 894486
Fax: 06196 82808
Tlx: 4072526
Juice

Stute Nahrungsmittelwerke KG
Abtsbreite 129
Postfach 24 26
4790 Paderborn
Tel: 5251 - 7050
Fax: 5251 - 705 104
Tlx: 93 68 63
Juice

7000 Stuttgart 80
Tel: 0711 7370-280
Fax: 0711 7370400
Tlx: 7255525
Juice

Retail/Buying Companies

Aldi Einkauf GmbH & Co. KG
P O Box 010140
4330 Mulheim a.d.R.
Tel: 0208 40991
Fax: 0208 4099321
Tlx: 855713
Juice

Edeka Produktions-und Handelsgesellschaft
mbH & Co.
New-York-Ring 6
2000 Hamburg 60
Tel: 040 73770
Fax: 040 63772231
Tlx: 21953311
Juice

Rewe Zentrale AG
Domstrasse 20
5000 Cologne 1
Tel: 0221 1655-1
Fax: 0221 1655555
Tlx: 8885206
Juice

Tengelmann Group
Wissollstraze 5-43
4330 Mulheim Ruhr
Tel: 0208 5806335
Juice

Grossmarkt
Amsinckstrasse 66
D-2000 Hamburg 1
Tel: 40 30 20 92 79
Fax: 40 21 62 808

Lutacofrucht
Lippeltstrasse 1
2000 Hamburg 1
Tel: 40 32 21 11
Fax: 40 33 10 39
Tlx: 21 62 411

Plaumann & Co
Fruchthof
D-2000 Hamburg 1
Tel: 40 331 311 - 331 316
Fax: 40 33 74 23
Tlx: 2161321

Wilhelm Kopke
Fruchthof
1000 Berlin 21
Beusselstrasse 44 N-Q
Tel: 30 39 57 056
Fax: 30 39 59 675
Tlx: 181890

Atlanta & Co.
Gotzingerstrasse 48
8000 Munchen 75
Tel: 897206-312
Fax: 897254377
Tlx: 5212352

Anton Durbeck
Grossmarkt
D-6000 Frankfurt/Main
Tel: 69 49 0282
Fax: 69 43 93 12
Tlx: 412011

Breitenweg 29/33 (Fruchthof)
D-2800 Bremen 1
Tel: 42 13 09 22 63
Tlx: 244512

Firma Paul Grassnick
Grossmarkthalle
D-6000 Frankfurt 1
Tel: 69 43 02 51/3
Tlx: 414829

J A Kahl
Bauernbrauweg 1
D-8000 Munich 70
Tel: 89 78 00 60
Fax: 89 78 55 824
Tlx: 5212456

APPENDIX C

KEY STRAWBERRY CONTRACTS IN GERMANY

Appendix C: Key Strawberry Contacts in Germany

EDEKA Fruchtkontor GmbH
Grossmarkt
2000 Hamburg 1
Tel: 040 30 20 92 24/28
Fax: 040 30 20 92 88
Tlx: 2 162 808
Contact: Francisco M. Contreras M.
Supermarket Chain

Rewe - Zentralorganisationen
Domstrasse 20
D-5000 Köln 1
Tel: 0 22 33 79 97-40
Fax: 0 22 33 79 97-22
Tlx: 8 89 283 rffd
Contact: Walter Nachtigall
Supermarket Chain

Aldi Einkauf GmbH
Postfach 010140
4330 Mulheim a.d. Rhein
Tel: 208 409 91
Fax: 208 409 9321
Supermarket Chain

Tengelmann Gruppe
Wissoll Strasse 4-43
4330 Mulheim Ruhr
Tel: 208 580 6335
Supermarket Chain

Kaufhof (Metro)
Leonhardt-Teitzstrasse 1
5000 Köln 1
Tel: 221 223 2987
Fax: 221 223 2300
Contact: H. Rosendahl
Supermarket Chain

Franz Zentis
Jülicher Strasse 125-181
5100 Aachen
Tel: 02 41 47 60-223
Fax: 02 41 47 60-451
Tlx: 832796
Contact: Roswitha Butler
Compound House/Jam Manufacturer

Sundi GmbH
Beim Struchenberge 4-6
2800 Bremen 21
Tel: 421 649 101
Fax: 421 649 0150
Compound House

IFF (Deutschland) GmbH
Reese Strasse 60
4240 Emmerich
Tel: 28 22 40 21
Fax: 28 22 40 56
Compound House

Rudolf Wild
Rudolf Wold Strasse 4-6
6904 Eppelheim-Heidelberg
Tel: 06221 7990
Fax: 06221 799398
Contact: H. Molitor
Compound House

Deka
Hansestrasse 33
3300 Braunschweig
Tel: 531 310 010
Fax: 531 310 0125
Compound House

6100 Darmstadt
Tel: 61 51 30 60
Fax: 61 51 30 62 78
Contact: H. Kraft
Compound House

Fruchthansa
Grelinger, Haessy & Heep GmbH
Grossmarkt
D-5000 Köln 51
Tel: 02 21 37 68 10
Fax: 02 21 3 76 81 54
Tlx: 8 882 753 + 8 881 769
Contact: Andreas Weidner
Importer

Weichert
Fruchthof
2000 Hamburg 1
Tel: 40 33 12 41
Fax: 40 33 60 83
Contact: I.Hoyer
Importer

Plaumann & Co. GmbH
Fruchthof
D-2000 Hamburg 1
Tel: 40 33 13 11
Fax: 40 33 74 23
Contact: A.Dietrich
Importer

Lutarco Frucht
Lippeltstrasse 1
2000 Hamburg 1
Tel: 40 322 111
Fax: 40 331 039
Contact: O.Erhorn
Importer

GROSSMARKT
D-6000 Frankfurt/Main
Tel: 69 49 02 82
Fax: 69 43 93 12
Contact: M. Dürbeck
Importer

Firme Paul Grassnick
Grossmarkt
D-6000 Frankfurt/Main
Tel: 69 49 02 82
Fax: 69 43 93 12
Contact: H. Wiesel
Importer

T.Port (Hamburg) GmbH & Co.
Kontorhaus Grossmarkt
Lippeltstrasse 1
2000 Hamburg 1
Tel: 49 40 30 10 00 31
Fax: 49 40 33 60 64
Tlx: 17 402 272, 2 161 301
Contact: Werner Busch
Importer

T.Port (Hamburg) GmbH & Co.
Kontorhaus Grossmarkt
Lippeltstrasse 1
2000 Hamburg 1
Tel: 040 30 10 00 32
Fax: 040 322 770
Tlx: 17 402 272, 2 161 301
Contact: A.Mike Rosell

Handel & Co. GmbH

Postfach 10 50 69
Breitenweg 29/33
2800 Bremen 1
Tel: 04 21 3 09 21
Fax: 04 21 136 95
Tlx: 2 44 512

Contact: Norbert Tebelmann
Importer

Früco Fruchthandel GMBH
Postfach 10 22 09
2000 Hamburg 1, Fruchthof
Tel: 040 - 30 84 266
Fax: 040 - 32 70 22
Tlx: 2 162 421

Contact: Sönke Hoffmann, Buyer
Importer

American Fruits
(Zielcke Fruchtimport GmbH)
Im Taubengrund 35
6092 Kelsterbach
Tel: 06107 610 54
Fax: 06107 48 86
Contact: Alexander Zielcke, Manager
Importer

Gustav Wulff
Ballindamm 26
D-2000 Hamburg 1
Postfach 10 66 03
Tel: 040 32 81 92-0
Fax: 040 33 77 51 + 33 11 77
Tlx: 2 162 341 gw d
Contact: Helgard Beecken-Nickel
Importer (Frozen Strawberries)

Handel & Co. GmbH (Kontaktdaten)

Postfach 10 38 49
D-2800 Bremen 1
Tel: 04 21 54 70 6-67
Fax: 04 21 54 70 6-99
Tlx: 2 44 144 oils d

Contact: Henry Lamotte
Importer (Frozen Strawberries)

Vitaminus Im- und Export GmbH
Sellstedter Strasse 13
D-2858 Schiffdorf
Tel: 0 47 06 - 71 55
Fax: 0 47 06 - 71 91
Tlx: 2 38 707 vitam d
Contact: Thomas Otte

Importer (Frozen Strawberries)

Lindt & Co. GmbH
Spaldingstrasse 110a
Postfach 106407
2000 Hamburg 1
Tel: 40 23 61 00 13
Fax: 40 23 61 00 34
Contact: D. Nietsche
Importer (Frozen Strawberries)

Nölting Gebrüder GmbH
Alsterchaussee 9
2000 Hamburg 13
Tel: 40 44 4431
Fax: 40 44 50827
Contact: H. Nölting
Importer (Frozen Strawberries)

W. Plögg GmbH
Rontgenstrasse 6
2057 Reinbeck
Mahburg
Tel: 40 722 509 194
Fax: 40 722 216 3507
Contact: Werner Plögg
Importer (Frozen Strawberries)

TROFI-Tropenfruchtimport GmbH
Kontorhaus Grossmarkt
Lippeltstrasse 1
2000 Hamburg 1
Tel: 040 33 55 96
Fax: 040 32 75 49
Tlx: 2173211 (trof d) 2 162 002
Contact: Norbert W.A. Timme, MD
Importer (Fresh & Frozen Strawberries)/
Wholesaler/Food Service Company

Fruchthof Hochgürtel
Drachenburgstr. 5
5300 Bonn
Tel: (02 28) 34 20 31-33/34 60 15-16
Fax: 34 60 10
Contact: Manfred Stumpf
Importer/Food Service Company

Schwartauer Werk GmbH
Lübecker Strasse 47-53
2407 Badschwartau
Lübeck
Tel: 451 2041
Tlx: 026826
Jam Manufacturer

Hartwich & Kaden GmbH
Neuer Wall 75
2000 Hamburg 36
Tel: 040 36 30 61
Fax: 040 36 43 58
Tlx: 02 12380
Contact: Peter Kaden, MD
Agent

The Netherlands

Mondi (De Leeuw)
Ziederwidj 8-10
2991 LB
Barenbrecht
Tel: 1 8 06 14 433
Tlx: 20101 NL
Compound House

S.V.Z.
P.O. Box 27
Oudkerkstraat 8
4870 AA
Etten-Leur
Tel: 1 608 27321
Fax: 1 608 13321
Contact: M.W. DeLissen
Compound House

Eurocitrus BV
Albusstraat 5
P O Box 227
4900 AE
Oosterhout
Tel: 1 620 27900
Fax: 1 620 54397
Contact: I. van der Sandt
Compound Company

Other Useful Addresses

Duales System Deutschland
Abteilung Vergabe "Grüner Punkt"
Rochusstrasse 2 - 6
5300 Bonn 1 (Duisdorf)
Tel: 0228 97 92-0
Fax: 0228 97 92-194
Contact: Ingrid Ohrband
Green Point Company