EU MARKET SURVEY 2003

PRESERVED FRUIT AND VEGETABLES

CENTRE FOR THE PROMOTION OF IMPORTS FROM DEVELOPING COUNTRIES

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PRESERVED FRUIT & VEGETABLES

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New CBI publication with new format and contents, partly replacing the following publications:
EU Market Survey Preserved Fruit and Vegetables for Industrial Use, 2002
EU Market Survey Preserved Fruit and Vegetables in Consumer & Catering Packs, 2002
EU Strategic Marketing Guide Preserved Fruit and Vegetables for Industrial Use, 2000
EU Strategic Marketing Guide Preserved Fruit and Vegetables in Consumer & Catering Packs, 2000

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REPORT SUMMARY

This survey profiles the EU market for preserved fruit and vegetables, both as an ingredient for industrial use and as consumer products. The emphasis of the survey lies on preserved fruit and vegetables for industrial use, as this segment offers the best market opportunities for suppliers from developing countries. The following EU markets are highlighted: Germany, France, United Kingdom, Belgium, The Netherlands and Italy.

The product groups discussed in this survey are used as industrial or consumer products or both. An indication of the main application is given for each group:

Fruit juices/concentrates	Industrial
Canned vegetables	Consumer
Canned fruit	Consumer
Frozen vegetables	Industrial
Frozen fruit	Industrial
Dried fruit	Consumer and industrial
Dried vegetables	Industrial
Jam	Consumer
Preserved mushrooms	Consumer and industrial
Provisionally preserved fruit and vegetables	Industrial

Market demand
It is not possible to give figures about the use of preserved fruit and vegetables for industrial demand. The larger part of preserved fruit and vegetables is imported as ingredients for the food processing industry. After import, these ingredients are processed to become consumer products (fruit juice) or used as an ingredient to prepare consumer products (dried vegetables).

The main industrial end-users are the beverage industry (fruit juice/concentrate), jam industry (frozen fruit), ready-meals industry (dried/frozen vegetables and preserved mushrooms), soup industry (dried vegetables and mushrooms) and breakfast cereal industry (dried fruit).

Trends which have an impact on the demand for food products and, consequently, on the demand for preserved fruit and vegetables include: increasing preference for safe and healthy food, more fruit and vegetable consumption (they contain vitamins and natural oxidants), increasing interest in organic products, more convenience meals (ready meals), interest in exotic and ethnic food and 'grazing' (i.e. eating more snacks in between the usual meals).

Another trend is that the relationship between ingredients supplier and industrial users has changed: the industrial user buys not only additives and ingredients from the supplier, but also his expertise and experience. Another change is that ingredients stocks held by manufacturers are increasingly minimised and, as a consequence, just-in-time delivery has become an important aspect in the European food market.

Production
Italy (orange and apple juice concentrate), Spain (orange juice concentrate) and Germany (apple juice concentrate) are the only countries in the EU that supply considerable amounts of fruit juice concentrate. Italian and Spanish orange juice concentrate is shipped solely to the soft drink industry, as these products are not suitable (different production process) to reconstitute into fruit juice.
EU production of frozen vegetables is estimated at 2 million tonnes, of which around one quarter is supplied by Belgium. The only two countries in the EU supplying notable volumes of dried fruit are Greece (currants) and France (prunes). The Netherlands is the leading supplier of preserved mushrooms, whereas dried vegetables are mainly produced outside the EU.

Imports
In 2001, 13.4 million tonnes of preserved fruit and vegetables were imported into the EU, representing a value of €12 billion of which more than 25 percent came from developing countries. Germany is the major import market for preserved fruit and vegetables, accounting for 26 percent of total imports by EU member countries (in terms of value) in 2001, followed by France (15%), the United Kingdom (14%) and The Netherlands (12%).
It is important to mention that preserved fruit and vegetables are often imported as a raw material from countries outside the EU, processed and packed in EU countries and re-exported to other EU countries. Therefore extreme care should be given in interpretation of the figures used in this survey.

Fruit juices and concentrates were the leading imported product category, accounting for 31 percent of imports (in value) by EU member countries. Other important categories were, in descending order, canned vegetables (18%), canned fruit (13%) and frozen vegetables (13%). Less important categories were dried fruit (7%), frozen fruit (7%), dried vegetables (4%), jam (3%), preserved mushrooms (3%) and provisionally preserved fruit & vegetables (2%). Between 1999 and 2001, the imported values of all products decreased by 6 percent, but the imported volume increased by 10 percent.
This implies that in most product groups, due to large supplies, import prices were under pressure.

The share of developing countries in imports by EU member countries of preserved fruit and vegetables

amounted to 25 percent in 2001.Leading developing country suppliers are Brazil (fruit juice/concentrate), Turkey (canned vegetables, dried fruit and vegetables), China (frozen vegetables, dried vegetables, canned vegetables, preserved mushrooms, provisionally preserved fruit & vegetables) and the South Africa (canned and dried fruit).

Exports
In 2001, the EU exported 10 million tonnes of preserved fruit and vegetables, representing a value of € 9.7 billion.
The leading exported product group was fruit juice/concentrate, accounting for 29 percent of total exports in terms of value in 2001, followed by canned vegetables (26%), canned fruit (16%), frozen vegetables (13%) and jam (5%). Intra-EU exports accounted for 80 percent of total exports of preserved fruit and vegetables. Leading export destinations were Germany (21% in value), France (15% in value) and the United Kingdom (12% in value).
Export destinations outside the EU were USA (6% in value), Switzerland (1% in value) and Japan (1% in value).

Opportunities for exporters
Market opportunities in the EU for developing country exporters lie in the production of tropical and subtropical products (exotics) which are hardly grown in the EU and in the production of organically grown products. Moreover, a general trend in the food ingredients sector is that importers and food processors in the EU require increasing documentation in order to guarantee food safety. This means that a product should have complete product specifications according to EU and customer requirements, a tracking and tracing administration, instructions on how to store and to process, information on quality assurance (e.g. HACCP) or even ISO certification. An exporter capable of meeting these requirements will have an improved competitive position in the EU market for preserved fruit and vegetables. Another positive argument in export business is that the raw materials used by processors and/or exporters of preserved fruit and vegetables are produced according to the standards on Good Agricultural Practice.

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INTRODUCTION

This CBI's survey consists of three parts: EU market information (Part A), EU market access requirements (Part B) and export marketing guidelines (Part C).

Market Survey

Part A **EU Market Information** *(Chapter 1 – 8)*	**Part B** **EU Market Access Requirements** *(Chapter 9)*
Product characteristics Introduction to the EU market Market demand and production Imports and exports Trade structure Opportunities for exporters	Quality and grading standards Environmental, social and health & safety issues Packaging, marking and labelling Tariffs and quotas

Part C
Export Marketing Guidelines: Analysis and Strategy

External Analysis *(Chapter 10)*	**Internal Analysis** *(Chapter 11)*

Decision Making
(Chapter 12)

Target markets and segments
Positioning and improving competitiveness
Suitable trade channels and business partners
Critical conditions and success factors

Marketing tools
(Chapter 13)

Matching products and product range
Building up a trade relationship
Drawing up an offer
Handling the contract
Sales promotion

Chapters 1 to 8 (Part A) profile the market for preserved fruit and vegetables. The emphasis of the survey lies on those products, which are of importance to developing country suppliers. The major national markets within the EU for those products are highlighted. The survey includes contact details of trade associations and other relevant organisations. Furthermore, statistical market information on market demand, production and trade, and information on trade structure and opportunities for exporters is provided.

Whereas Part A provides EU market information, Chapter 9 (Part B) describes the requirements, which have to be fulfilled in order to gain market access for the product sector concerned. It is furthermore of vital importance that exporters comply with the requirements of the EU market in terms of product quality, packaging, labelling and social, health & safety and environmental standards. These issues are therefore covered in Part B.

After having read Parts A and B, it is important for an exporter to analyse the target market, sales channels and potential customers in order to formulate marketing and product strategies. Part C subsequently aims to assist (potential) exporters in developing countries in their export-decision-making process.

After having assessed the external (Chapter 10) and internal environment (Chapter 11), the (potential) exporter should be able to determine whether there are interesting markets for his company.
In fact, by matching external opportunities and internal capabilities, the exporter should be able to identify suitable target countries; market segments and target product(s) within these countries, and possible trade channels for exporting the selected products (Chapter 12).

Chapter 13 subsequently describes which marketing tools can be used to build up successful business relationships.

The survey is interesting for starting exporters as well as exporters already engaged in exporting (to the EU market). Part C is especially interesting for more experienced exporters starting to export to the EU and exporters looking for new markets, sales channels or customers. Starting exporters are advised to read this publication together with CBI's Export Planner, a guide that shows systematically how to set up export activities.

Part A
EU market information

1 PRODUCT CHARACTERISTICS

1.1 Product groups

This market survey deals with preserved fruit and vegetables for both industrial use and for the consumer and food service market. Preserved fruit and vegetables consist of a range of product groups, which can be subdivided in an extensive range of individual products. The best opportunities for exporters in developing countries lie in supplying preserved fruit and vegetable products in the form of ingredients to the food processing industry in EU countries, or in acting as subcontractors by supplying consumer and food service products, like canned fruit and vegetables, to food processing companies or multiple retail chains under their label.

The Eurostat statistics used in this survey do not make a distinction according to application. This means that the figures include both preserved fruit and vegetables as ingredients for the food processing industry as well as consumer and food service packing.

The market survey distinguishes the following product groups:

Fruit juices and concentrates
In the country of origin, water is evaporated from fruit juice, in order to maintain quality, to prolong shelf life, and diminish the transport and storage costs. The residue is fruit juice concentrate. In the country of destination, the juice is restored to its original properties by adding water up to the original juice strength.
According to EU Directive 93/45/EEC, fruit juice consists of juice without the addition of water. The fruit juice industry in particular uses (frozen) fruit juice concentrate. The directive also states that fruit nectar consists partly of fruit juice and partly of added water and sugar. The minimum share of fruit juice in the nectar depends on the kind of fruit and varies between 25 percent and 50 percent. The directive has been incorporated in the legislation of all European countries.

The best-known and most-consumed fruit juice is orange juice. Apple, pineapple and grapefruit are other fruit species, which form the basis for popular fruit juices.

Besides the beverage industry (juices and soft drinks), the dairy industry also accounts for considerable volumes of fruit juices and concentrates.

Although the majority of imports by EU member countries consist of fruit juice concentrates, trade figures cannot be split up between fruit juice and fruit juice concentrate. Therefore, in the remaining part of the survey, this product group will be referred to as fruit juice/concentrates

Canned fruit and vegetables
To ensure sufficient storage life for fruit and vegetable preserves, micro-organisms (yeast, moulds and bacteria) have to be inactivated. In fruit products, due to their natural acidity, only yeast and moulds will develop. Simple pasteurisation (heating to approx. 90∫ C) is sufficient for preservation of fruit products. In vegetables, where there is a lack of natural acidity, bacteria (including dangerous pathogenic bacteria) can also develop. To inactivate bacteria, sterilisation (heating to at least 121∫ C) is required. Vegetable products can also be preserved as 'pickles', through acidification, creating non-favourable conditions for the growth of bacteria by means of the addition of vinegar or acetic acid.

The most popular pickles are based on gherkins, cocktail onions, carrots, sweet peppers and celery. Canned vegetables mainly consist of tomatoes and of different kinds of beans, peas, carrots, etc. Please note that in the trade figures we have not included canned tomatoes, as they are not very interesting products for growers in developing countries to export to the EU.

The main canned fruit varieties are pineapples, peaches, apricots and fruit mixes. Other interesting canned fruit species are lychees, mandarins and other citrus fruits. Please note that in trade statistics for canned vegetables (vegetables preserves sterilised in a closed recipient) vegetables preserved in glass jars are also usually included.

Dried fruit and vegetables
Fruit and vegetables, consisting of more than 80 percent of water, are dried in order to stop the multiplication of micro-organisms. These organisms obtain the water and nutrients they need for growth from the fruit or vegetable in which they grow. By drying or dehydrating fruit or vegetables, the water is removed from the food and from the bacterial cell, thus ending the multiplication.
The dried fruit and vegetables described in this survey are whole, cut, sliced, broken or powdered, but not further prepared.

Dried fruit can be divided into vine fruit and tree fruit. The best-known vine fruit species are raisins, sultanas and currants, whereas apples, apricots, bananas, dates, figs, papayas, peaches, pears and prunes are the most important tree fruits. Dried fruit is mainly used as a

snack or a constituent for breakfast cereals, muesli, bakery products, dairy products and desserts.

Although some vegetables are sun-dried or field-dried, most vegetables are dehydrated industrially. The main dehydrated vegetables are onions, tomatoes, garlic, carrots and olives. The Netherlands Horticulture Commodity Board's definition of dried vegetables is used in this survey, resulting in the exclusion of dried leguminous vegetables (for example, dried peas and beans). The sauce, soup and ready meal industries are the main users of dried vegetables.

Frozen fruit and vegetables
Freezing and deep-freezing is based on the same idea: turning water into ice so that bacteria cannot live and reproduce on the raw food product. The two processes are different. Freezing achieves low temperatures slowly, resulting in relatively large ice crystals, which damage the food cells. When defrosted, a part of the proteins, sugars and vitamins are removed by leaching. In the case of deep-freezing, low temperatures are quickly achieved, resulting in smaller ice crystals and consequently causing less damage to the food cells.

Fruit and vegetables can be blanched before freezing (to inactivate enzymes that might remain active even at very low temperatures, and affect the structure and colour of the product). The freezing of fruit and vegetables is increasing in popularity. Generally, the quality of the frozen product is nearly the same as the original fruit. Of course higher transport and storage costs have to be taken into account. Frozen vegetables are mainly processed for ready meals, vegetable preserves and salads. Frozen fruit is processed into jam, bakery products and dairy products.

Provisionally preserved fruit and vegetables
In the case of fruit, this method of preservation (packing in wooden casks or plastic drums, in a sulphite solution as a preserving agent) is outdated and has for a large part been replaced by freezing. Fruit preserved in this manner generally contains substantial amounts of sulphite. As EU regulations are strict with respect to sulphite content, imports by EU member countries of provisionally preserved fruit are small. Provisional preservation of fruit still takes place in some East European countries (mainly Bulgaria). The quality of this type of fruit is low, but so is the price. Provisionally preserved fruit is mainly used as an ingredient in the jam industry.

Vegetables such as gherkins and mushrooms can be temporarily preserved in the country of origin, but in this state they are unsuitable for immediate consumption. Temporarily preserved vegetables are packed in drums (200 litres). The products are washed, cleaned and repacked in smaller volumes in the country of destination.

Jam
These products are preserved by sugar. The principle of the technology is to add sugar in a quantity that is necessary to augment the osmotic pressure of the product's liquid phase at a level, which will prevent micro-organisms from developing. In practice, however, water is usually partially removed (through boiling) from the product to be preserved, with the objective of obtaining a higher sugar concentration. Sugar generally assures food preservation in concentrations of more than 60 percent of the total weight of a finished product.

The most common kind of jam has strawberries as a basis. Marmalade has citrus fruit as a basis, but is preserved in the same way as jam.

Fruit jelly, fruit or nut purée, and fruit or nut pastes (being cooked preparations, whether or not containing sugar or other sweetening matter) are also included in this product group.

In the remaining part of the survey, this product group will be referred to as jam.

Preserved mushrooms
Preserved mushrooms are mainly used by the soup and ready meal industry and are important (when canned or in glass jars) as a consumer product. Contrary to other product groups in this survey, this product group consists of all types of preserved mushrooms and truffles, irrespective of the method of preservation or preparation. Please note that frozen and dried mushrooms are included under the categories dried and frozen fruit and vegetables.

Pulp and purée
Please note that fruit pulp and purée are not separately defined in Eurostat trade data. There is a substantial trade in these products for food industries in Europe, e.g. mango puree from India. However, as there is no consistent information on these products, they are not dealt with as a distinct product group in this survey.

1.2 Customs/statistical product classification

On January 1, 1988 a unified coding system was introduced to harmonise the trading classification systems used worldwide and to allow for improved international comparability of foreign trade statistics. This system, the Harmonised System (HS), is based on a ten-digit product classification. The World Customs Organisation (WCO) is introducing alterations to the HS and these have been included in the combined nomenclature as of January 1, 2002.
Chapters 7, 8 and 20 of the Harmonised System, cover the preserved fruit and vegetables discussed in this

survey. Not all product groups covered by these chapters deal with preserved fruit and vegetables. Product groups covering fresh fruit and vegetables are left out.
Appendix 1 provides a detailed list of HS codes (and corresponding product names) of the product groups covered by this survey. HS codes/product groups printed in bold are specifically discussed in this survey.

2 INTRODUCTION TO THE EU MARKET

The European Union (EU) is the current name for the former European Community. Since 1 January 1995, the EU has consisted of 15 member states. Ten new countries will join the European Union in 2004. Negotiations are in progress with a number of candidate member states.

In 2002, the size of the EU population totalled 379.4 million; the average GDP per capita amounted to approximately € 21,023 in 2002.

More than 20 million enterprises are active in Western Europe, covering 15 EU member countries, Iceland, Liechtenstein, Norway and Switzerland. Small and medium-sized enterprises (SMEs) accounted for the lion's share. In 2002, the average turnover per enterprise of SMEs and large enterprises amounted to € 600 thousand and € 255 million respectively.

EU Harmonisation
The most important aspect of the process of unification (of former EC countries), which affects trade, is the harmonisation of rules in the EU countries. As the unification allows free movement of capital, goods, services and people, the internal borders have been removed. Goods produced or imported into one member state can be moved around between the other member states without restrictions. A precondition for this free movement is uniformity in the rules and regulations concerning locally produced or imported products. Although the European Union is already a fact, not all the regulations have yet been harmonised. Work is in process in the fields of environmental pollution, health, safety, quality and education. For more information about harmonisation of the regulations visit AccessGuide, CBI's database on European non-tariff trade barriers at www.cbi.nl/accessguide

Monetary unit: Euro
On 1 January 1999, the euro (€) became the legal currency within twelve EU member states: Austria, Belgium, Finland, France, Germany, Greece, Italy, Ireland, Luxembourg, The Netherlands, Spain and Portugal. In 2002 circulation of euro coins and banknotes replaced national currency in these countries. Denmark, United Kingdom and Sweden have decided not to participate in the Euro.

The most recent Eurostat trade statistics quoted in this survey are from the year 2001. In this market survey, the € is the basic currency unit used to indicate value. Trade figures quoted in this survey must be interpreted and used with extreme caution. The collection of data regarding trade flows has become more difficult since the establishment of the single market on 1 January 1993. Until that date, trade was registered by means of compulsory customs procedures at border crossings, but since the removal of the intra-EU borders, this is no longer the case.
Statistical bodies like Eurostat cannot depend on the automatic generation of trade figures. I
In the case of intra-EU trade, statistical reporting is only compulsory for exporting and importing firms whose trade exceeds a certain annual value. The threshold varies considerably from country to country, but it is typically about € 100,000. As a consequence, although figures for trade between the EU and the rest of the world are accurately represented, trade within the EU is generally underestimated.
Furthermore, the information used in this market survey is obtained from a variety of different sources.

Overview 15 EU countries, 2002

Population	379.4 million
Area	31,443,000 km²
Density	83 people per km²
Languages	15 (excl. dialects)
GDP/capita	€ 21,023
Currencies	€, UK£, DKr., SKr.
Exchange	€ 1 = US$ 0.99

Source: The World Factbook 2002

Population and GDP of selected EU countries, 2002

Countries/category	Population in millions	Age 15-64	GDP (€ billion)
Germany	83.3	68%	2,206
France	59.8	65%	1,556
UK	59.8	66%	1,485
Italy	57.7	67%	1,416
Spain	40.1	68%	836
The Netherlands	16.0	68%	417

Therefore, extreme care must be taken in the qualitative use and interpretation of quantitative data, both in the summary and throughout the text, as also in comparison of different EU countries with regard to market approach, distribution structure, etc.

For more information on the EU market, please refer to the CBI's manual Exporting to the European Union.

3 INDUSTRIAL DEMAND

Most of the product groups mentioned in this survey are used as ingredients for food processing. However, where relevant, information on end-products is given in this chapter.

3.1 Market

Canned fruit and vegetables, fruit juice, frozen vegetables and jam in consumer packing are branded products. Next to producers' brands like Del Monte and Dole (canned fruit), Bonduelle (canned vegetables), Tropicana and Minute Maid (juices), Iglo and Birds Eye Wall's (frozen vegetables) and Hero (jam), multiple retail chains like Carrefour, Ahold, Tesco, Sainsbury and Rewe sell these products under their own (private) label. Private labels are usually less expensive than producer's brands and have established strong market positions, especially in the United Kingdom.

Dried fruit and frozen fruit, dried vegetables, preserved mushrooms and provisionally preserved fruit and vegetables are mainly used as ingredients for the food processing industry.

Overview of packaged foods market

The global packaged foods market is forecast to grow by 12 percent in real terms between 2000 and 2004, i.e. at just under 3 percent per annum. The three largest sectors are bakery products, chilled food and dairy products. These three are forecast to account for almost 50 percent of sales in 2004. The four smallest sectors are baby food, spreads, fruit/nut/cereal bars and meal replacement drinks, which are forecast to account for almost 3 percent of total packaged grocery sales. Oils/fats, canned food and frozen food are forecast to be the fastest growing sectors at 29 percent, 23 percent and 19 percent respectively. Product groups forecast to grow more slowly than the global average are dairy products (10%), spreads (9%), confectionery (9%), bakery products (8%), chilled food (8%) and fruit/nut/cereal bars (3%).

Euromonitor data show that Germany is the largest food market in Europe, followed by France and Italy.

No industrial demand figures are available for preserved fruit and vegetables. Preserved fruit and

Table 3.1 Global packaged foods markets, 2001-2004
US$ 1,000,000 / € 1,000,000

	2001		2002		2003		2004		% of total
	US$	€	US$	€	US$	€	US$	€	(2004)
Bakery products	238.1	267.5	242.8	272.8	247.8	278.4	253	284.3	17.1
Chilled food	221.7	249.1	225.4	253.3	230.3	258.8	235.3	264.4	15.9
Dairy products	206.7	232.2	211.6	237.8	217.1	243.9	223	250.6	15.1
Dried food	102.5	115.2	106.1	119.2	110.2	123.8	114.9	129.1	7.8
Confectionery	107.9	121.2	110.2	123.8	112.7	126.6	115.3	129.6	7.8
Ice cream/ yoghurts/ chilled desserts	102.2	114.8	105.5	118.5	108.8	122.2	112.2	126.1	7.6
Frozen food	92.3	103.7	96.4	108.3	101	113.5	105.8	118.9	7.2
Canned food	74.9	84.2	77.4	87.0	81	91.0	84.7	95.2	5.7
Oils/fats	63.2	71.0	66.1	74.3	69.6	78.2	73.4	82.5	5
Sauces/dressings/ condiments	60.3	67.8	62.6	70.3	65.2	73.3	68.1	76.5	4.6
Savoury snacks	47.9	53.8	49.4	55.5	51	57.3	52.7	59.2	3.6
Baby food	17.8	20.0	18.4	20.7	19.1	21.5	19.9	22.4	1.3
Spreads	13.3	14.9	13.5	15.2	13.9	15.6	14.2	16.0	1
Fruit/nut/cereal bars	3.1	3.5	3.2	3.6	3.4	3.8	3.5	3.9	0.2
Meat replacement drinks	1.7	1.9	1.8	2.0	1.9	2.1	2	2.2	0.1
Total	**1,353.5**	**1,520.8**	**1,390.6**	**1,562.5**	**1,432.8**	**1,609.9**	**1,478.0**	**1,660.7**	**100**

Note: Totals may not be the exact sum, due to rounding off
Price indications in € are calculated on the basis of an average exchange rate for 2001: € 1= US$ 0.89
Source: Euromonitor (2001)

vegetables for industrial use are supplied to, and further processed by, the food industry. Therefore, developments in the markets for the various product groups are given.

Fruit juice/concentrate
Sales in this product group reached 9.5 billion litres in 2001, accounting for 11 percent of the total EU soft drink market. With consumers increasingly concerned with healthier life styles and innovations in this market, it is estimated that the market will continue to grow. In particular, functional drinks, like juices and nectar with the addition of vitamins and calcium, are becoming more popular. Moreover, new (exotic) flavours and dual-flavours (orange/strawberry) have been introduced, spurring market growth continuously. According to European fruit juice legislation, drinks made from fruit juice can be divided into three segments:

Pure juice:	100 percent fruit with the same strength and consistency as freshly squeezed juice and no preservatives added
Nectars:	Base of concentrated juice or a pasteurised purée of fruit pulp to which sugar and water are added. Citrus fruit nectars usually have more than 50 percent fruit juice content
Juice drinks:	Fruit juice from 6 to approx 50 percent with sugar and water added. Fruit juice drinks with low or no sugar content, sweetened with artificial sweeteners, form a growing sector in this market (lower costs, lower calorie content)

Price fluctuations, competition from other non-alcoholic drinks and warm/cold weather affect the juice and nectar consumption. Nevertheless, the fruit juice and nectar consumption is characterised by a high per capita consumption in West-European countries (in particular Germany) and low, but strongly rising, consumption growth in southern European countries.

The production of fruit juices is concentrated mainly in Germany, which is not surprising since Germany has the highest per capita consumption of fruit juice and nectar in Europe, accounting for 37 percent of the overall volume in 2000. France and the United Kingdom are the only other two countries where fruit juices have a share of over 10 percent of total EU fruit juice sales, followed by Spain in fourth place. Several fruit juice producers are also located in the United Kingdom and these supply substantial amounts of fruit juices.

Canned fruit and vegetables
Although the image of canned food is considered old-fashioned, canned vegetables are more popular among younger consumers. Nevertheless, the packaging in glass jars instead of metal cans is still gaining popularity in the EU, partly because fruit and vegetables in glass are totally visible and stand for a quality product. The share of glass as a packaging material is particularly high in The Netherlands (60% in 1999), however in Germany and Belgium the use of glass jars is gaining popularity (each around 30%).

The canned vegetable sector is very fragmented. Nevertheless, canned green beans, peas with carrots and peas are very popular in almost every single EU member country. HAK and Bonduelle are the leading A brands in The Netherlands, Belgium and in Germany. Bonduelle is a French brand, and is, as such, mainly imported from France.
The EU market for canned fruit is largely dominated by private label brands, followed by producers' brands, which are led by Del Monte and Dole. Considering the imports of canned fruit, canned pineapples, peaches and mixtures are popular canned fruit in the EU.

Dried fruit
Dried fruit can be divided into vine fruit and tree fruit. The best-known vine fruit species are raisins, sultanas and currants, whereas apples, apricots, bananas, dates, figs, papayas, peaches, pears and prunes are the most important tree-fruit species. Dried fruit in consumer or food service packing is mainly consumed as a snack.

The demand for dried fruit is positively influenced by increased usage as an ingredient in the food industry for breakfast cereals, healthy ready-to-eat snacks and desserts. Bakeries and breakfast cereal mixers are one of the largest end users of dried fruit. According to Frost & Sullivan, the EU bakery market is expected to grow to a value of € 99 million in 2002.

The principal end users of dried fruit in all EU markets can be divided into two end-user segments: retail and industrial sector. In most markets, the ratio is moving towards higher relative usage by the industrial sector, reflecting the growing popularity of ready-to-eat healthy snacks, muesli, and processed foods using more healthy ingredients like dried fruit. Considering the imports of dried fruit, sultanas are the most popular (mainly for industrial use) dried fruit in the EU, accounting for more than a quarter of the total imports by EU member countries of dried fruit. Sultanas, other raisins, dates, prunes, apricots and figs are the major imported dried fruit species.

Dried vegetables
Dried vegetables are mainly consumed by the dried soup industry. It uses most types of dried vegetables, especially potatoes, onions, tomatoes, leek, carrots and peas. A few large multinational companies dominate the soup industry in the EU. These are Unilever (Knorr, Unox), and Nestlé (Maggi).

Frozen vegetables
Exact figures on the consumption of frozen vegetables by the industrial sector are not available. However, since the main buyer of frozen vegetables is the industry for ready meals and the overall consumption of ready meals has increased, the market for frozen vegetables is expected to grow. Frozen vegetables in consumer packing also grow at the expense of vegetables in canned and glass packing. Market leaders in ready meals in the EU are Nestlé and Unilever. Private labels take an important share of the market for frozen food. The market for frozen ready meals is boosted largely through the increasing sales of ethnic ready meals. The market is particularly large in Germany and the UK. Frozen food consumption per capita is not particularly high in Germany (see Table 3.2).

However, frozen vegetables are the most frequently used type of frozen product. Growth is sluggish in the leading markets (the United Kingdom and Germany), but in Spain, the frozen food market is among the more dynamic sectors.

Table 3.2 Frozen food consumption in the EU (excl. ice cream), 2000, kg per household

Country	Volume
United Kingdom	64
Belgium	36
Netherlands	33
France	30
Germany	25

Source: Retail Intelligence, 2001

Frozen fruit
Frozen fruit is mainly used by the jam industry for further processing into jam. In 2001, the consumption of jam and preserves in the EU amounted to 500,000 tonnes, which represented an average per capita consumption of 1.3 kg per year (Euromonitor, 2002).

Preserved mushrooms
Dried mushrooms are mainly consumed by the dried soup industry. The canned soup industry uses frozen mushrooms and semi-sterilised mushrooms, while semi-sterilised mushrooms are also supplied to the food service sector and pizza producers. Provisionally preserved mushrooms are supplied to the mushroom industry where they are further processed for ready consumer packs (canned or packed in glass).

Jam
Jam is mostly used as a sandwich filling. Sweet sandwich filling (and jam in particular) is very popular amongst children. In general, jam consumption in EU is gradually decreasing since bread consumption is decreasing and other sandwich fillings are entering the market. Strawberry jam is by far the most popular jam in the EU, accounting for approximately half of total consumption, followed by apricot (25%), and cherry (15%). Among tropical fruits, pineapple is the most preferred, while other fruits (such as mango, passion fruit, and guava) are gaining in popularity. Products similar to jam, although usually with added flavour and colour (which are not allowed in jam) are also used in bakery products like cakes, pies and cookies, and as fillings in the dairy industry and ice-cream industry.

The most common kind of jam has strawberries as a basis. Marmalade has citrus fruit as a basis, but is preserved in the same way as jam.
Fruit jelly, fruit or nut purée, and fruit or nut pastes (being cooked preparations, whether or not containing sugar or other sweetening matter) are also included in this product group.
In the remaining part of the survey, this product group will be referred to as jam.

3.2 Market segmentation

The market for preserved fruit and vegetables can be divided into three segments:

3.2.1 Ingredient sector
The food processing industry is the largest segment for preserved fruit and vegetables. As the trade in these products takes place on a business-to-business basis, there is very little information available on market sizes and trends. In this sector, preserved fruit and vegetables are used as ingredients in a wide range of food products. Food processors use these ingredients to produce end products in consumer packing for the retail sector and in catering packing food for the food service sector.

The major food processors, using preserved fruit and vegetables, operate in the following sectors:
- beverage industry. The beverage industry is the largest end-user of fruit juice concentrate. Fruit juice concentrate is reprocessed, by blenders and mixers, into fruit juice or nectar. The most important fruit juices in the EU are orange juice and apple juice, followed by pineapple juice and grapefruit juice.
- ready-meals industry. The ready-meals industry is a significant end-user of frozen vegetables, preserved mushrooms and dried vegetables (mainly for pizzas and pasta dishes).
- soup industry. The soup industry is the largest end-user of dried vegetables. Preserved mushrooms are also used by this industry. The main products are

packet soups (dried) including soup bases, instant soups (dried), canned soups and, to some extent, frozen soups.
- breakfast cereal industry. The breakfast cereal industry uses substantial amounts of dried fruit in its production of cereals, muesli and cereals bars.
- jam industry. The jam industry uses considerable amounts of frozen fruit to produce jam products and marmalade. This industry hardly uses fresh fruit anymore.
- other food sectors, like pet food (dried vegetables), confectionary, baby and infant food.

3.2.2 Consumer sector

Preserved fruit and vegetables like canned fruit and vegetables, frozen vegetables, fruit juice and jam are processed and packed in consumer units and sold through retail outlets to consumers. The consumer sector of preserved fruit and vegetables consists mainly of branded products and private labels. Supermarkets in the EU dominate retail sales at the expense of specialised shops, like greengrocers, bakeries, butcheries and deli shops.

3.2.3 Food service sector

The food service sector has been growing during recent years. Out-of-home consumption increased as consumers saw their incomes rising, especially two-person households where both partners are working. Fast food outlets showed an increasing expansion in most EU countries.
The food service sector also includes company canteens and institutional outlets like hospitals, prisons, convalescent homes, schools and universities.
The market for preserved fruit and vegetables for industrial use can also be segmented according to whether the products are grown by organic farming or by conventional farming. This is particularly important since the demand for organic food is growing in several EU member countries and can offer interesting market opportunities for developing countries' exporters.
Organic products still account for a small share of the total food consumption in most of the EU markets, although the differences are quite large. In Denmark and Austria, organic products account for about 10 percent of the total food market, while in countries like Spain and France the share is between 0.5 and 1 percent.
Although growth of organic foods reached double digit figures in 2000 and 2001, since 2002 the markets have tended to grow much slower (3-4 percent). In some sectors like organic coffee, there is an oversupply causing prices to drop.
Because of its nature, organic production is highly suitable for small and medium-sized farmers working in areas, which may not be suitable for large-scale food production. Dried fruits like apricots, bananas and pineapple are important organic products within the segment preserved fruit and vegetables for industrial use. For more information on organic products, please check CBI's Market Survey 'Organic Food Products'.

3.3 Consumption patterns and trends

The population in Western Europe is still growing and will continue to grow until about 20 years from now. It is estimated that, thereafter, Western Europe will start to show a declining population size. However, already now the composition of the population is changing. It shows a rapidly growing number of elderly people combined with a decreasing number of young people. We also see a family 'dilution'; family households are getting smaller because people are having fewer children. Moreover, the number of single households in Western Europe is substantial and still increasing, making these people a highly significant consumer group for food suppliers.
Prosperity in the EU has increased over recent years, and eating behaviour is related to income and life style. Despite this increase in prosperity, the food market in the EU is highly competitive, since consumers are not going to eat more, but will only, at the very most, switch to other products.

Recent research into consumer behaviour shows that today's consumer has the following preferences concerning food and nutrition:

Safe food
Food products should be safe and eating them should not result in any danger or risk to health. For example, producers are encouraged to adopt an approved HACCP (Hazard Analysis and Critical Control Points) system, to show their commitment to the quality and safety requirements of the EU food industry. Please also refer to Chapter 9 of this survey for more information on HACCP.

Health food
Health food refers to food products, which are low in fat and have limited sugar and salt content; this includes functional foods, which have specific health promoting properties and food products with added vitamins and minerals or bacteria, which support the intestinal function.

Organic food
Since European consumers have recently experienced several food scares, many people are concerned about the safety of food and the effects of intensive farming on the countryside as well as on the environment in general. These factors, combined with the increasing awareness of the importance of diet and nutrition, have intensified interest in organic foods, which are grown according to principles laid down in Directive EC 2092/91, in short: without artificial fertilizers and

pesticide. For more information on organic food, please refer to the separate CBI EU Market Survey 'Organic Food Products.'

Fruit and vegetables
There is a growing interest in the consumption of fruit and vegetables in the West European food market. This is caused by the fact that fruit and vegetables contain vitamins and natural antioxidants, which are supposed to have properties, which help to prevent heart diseases and cancer.

Environment-consciousness
Food production, especially primary growing, should be environment-friendly (organic, see above). Waste, including packaging waste, should be avoided or at least reduced. In the scope of the increasing environment-consciousness in the EU, a group of leading European food retailers launched the EurepGap Protocol in 1999. The objective of EurepGap (Euro-Retailer Produce Working Group for Good Agricultural Practice) is to raise standards for the production of fresh fruit and vegetables by promoting food safety, sustainable use of natural resources and more environment-friendly production. For more information on the Eurep Group and EurepGap Protocol, please refer to www.eurep.org

Convenience
European people (including women) are working more and more in jobs outside their home and have busy social lives. Moreover, the number of single households increases. As a result, less time is left for the preparation of a full meal.

Therefore, West European consumers have a growing need for convenience meals, spurring the demand for peeled potatoes, canned soup, preserved vegetables, prefried fries, fish sticks, pizza, frozen pastry, ready meals (frozen, chilled or shelf-stable). The catering sector now also uses semi-processed fruit and vegetables.
Market development is closely linked to innovation and many new products have entered the market in recent years. Sales of meals packed in bags, the contents of which can be split up into individual portions, have increased considerably as a result of Individually Quick Frozen technology (IQF). This technology prevents the product from freezing into one large block, so it is easier to separate. Advertising for frozen food is increasing in most of the selected European markets.

'Grazing'
The modern consumer does not confine himself to the traditional three meals a day (breakfast, lunch and dinner), but is eating smaller bites at more frequent intervals: ready-to-eat products or products requiring very little ultimate preparation: take-out foods, hamburgers, mini-pizzas, instant soups, filled croissants, candy bars, muesli bars, cheese sticks and fruit yoghurts.

Tracking and tracing
As a result of several food scares (BSE, dioxine) consumers increasingly pose questions on the production process and demand open, honest, and informative labelling. This has resulted in a discussion in the fruit and vegetable processing industry about 'tracking and tracing'. With the help of good chain management and control within the chain, end-product processors are able to supervise all kinds of aspects of fresh fruit and vegetables and products derived from them, such as plant material, growth, harvest, storage, distribution and processing. The fruit and vegetable processing industry is increasingly paying attention to chain management and labelling systems, through which products can be traced back to the producer.

Tracking and tracing is becoming even more important in production (i.e. growing and processing) of organic products, where fully documented tractability is required from the raw material to the final product, to ensure the organic character of the product. In the near future, EU food legislation is expected to require full traceability for all food products (EU regulation (EC) 178/2002).

Internationalisation
As the world is increasingly turning into a global village, culinary traditions from other continents tend to be more widely accepted by European consumers, increasing the demand for ethnic and exotic ingredients. This development is also stimulated by the steady population growth of ethnic minority groups, which have significantly increased their purchasing power over recent years. Many products
containing exotic fruits (like fruit juice drinks, jams, ice cream) are manufactured by European food industries from ingredients that are imported as semi-manufactured products (fruit juice concentrate).

Key Consumption Trends to 2010

- Greater demand for convenience
- More diversity of choice
- Growth of demand for ethnic and exotic ingredients
- Increased demand for organic products
- More ready cooked, take-out foods
- High growth in private label products
- Polarisation of markets (premium and budget)
- Demand for open, honest, and informative labelling

Source: Food Marketing, October 1999

The food processing industry responds to the demands of consumers for safe, healthy and tasteful food by tightening their requirements and by placing increasing responsibility for the quality of the food in the hands of their suppliers (importers/exporters).
Unilever announced recently that it is going to require that suppliers of agricultural raw materials grow their products according to the principles of sustainable agriculture.

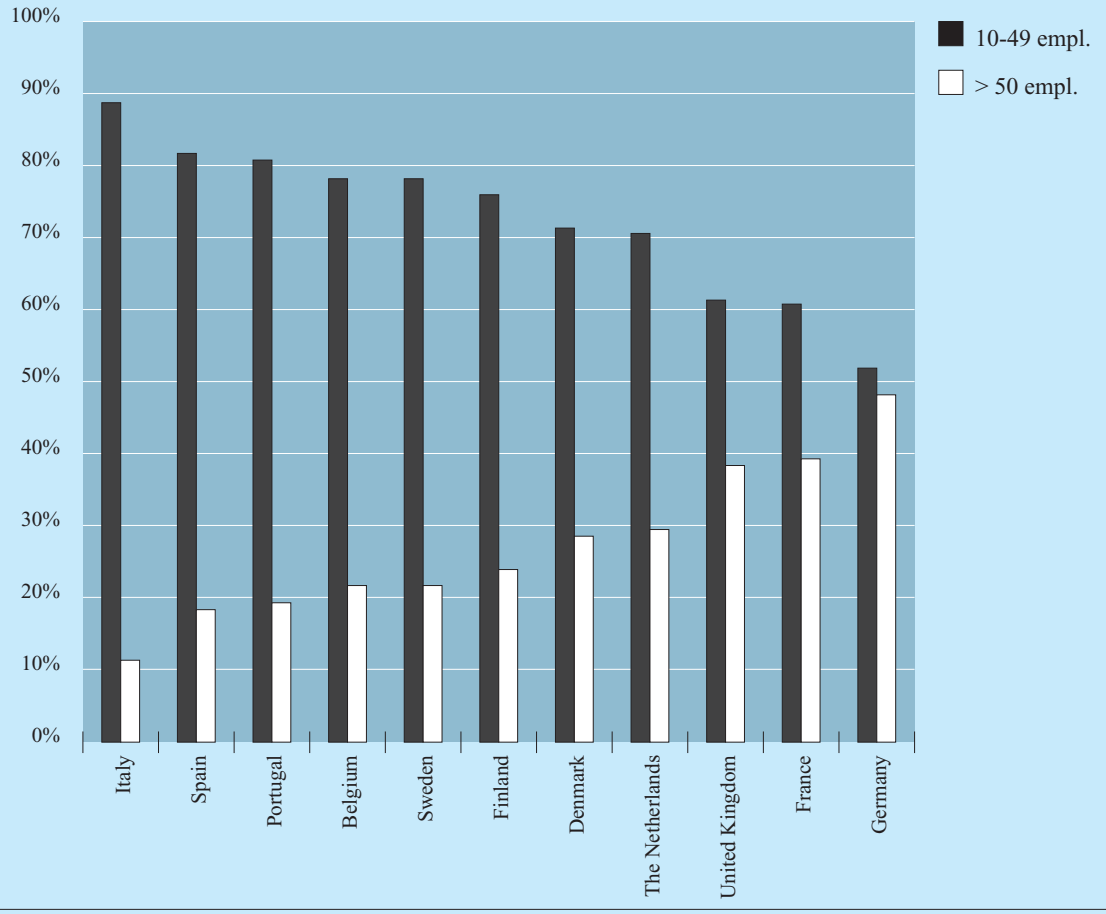
Moreover, for exporters of preserved fruit and vegetables, one trend in the food industry is very important. Over the years, the relationship between the ingredients supplier and the food manufacturer has been changing. In the past, the food manufacturer simply ordered ingredients and additives from his suppliers, carrying out his own programmes of evaluation and formulation to manufacture his end products. This scene has changed in so far that the food manufacturer is increasingly calling on and depending on the ingredients suppliers to carry out this development on his behalf. The food manufacturer not only buys additives and ingredients, but also expertise and experience. The influence of those ingredients suppliers who can offer experience will increase. For starting exporters, it is recommendable to contact traders and the food ingredients industry in Europe (already maintaining their relation to the food industry) rather than going directly to the food manufacturers.
A further change has been the minimisation of ingredient stocks held by manufacturers, thus requiring short-term call-off from their suppliers. Just-in-time delivery is becoming increasingly important in the European food market.

4 PRODUCTION

Preserved fruit and vegetables are part of the EU food and drink industry. In 2001 the total production value of the food and drink industry was € 600 billion. 26,000 companies are active in this sector employing 2.7 million employees. The top EU food processors ranked on turnover in 2002 and relevant to the preserved fruit and vegetable sector were:

Company	Country	Turnover in € billion	Product groups	Websites
Nestlé	Switzerland (no EU)	52.6	Cereals, dairy, beverages, confectionery	www.nestle.com
Unilever	The Netherlands/UK	32.1	Dairy, beverages, dressings, frozen food, cooking products	www.unilever.com
Danone	France	14.5	Dairy, beverages, biscuits, cereals	www.danonegroup.com
Cadbury Schweppes	United Kingdom	8.9	Beverages, confectionery	www.cadburyschweppes.com
Parmalat	Italy	4.4	Dairy, biscuits, beverages	www.parmalat.com
Ferrero	Italy	4.3	Confectionery, spreads	www.ferrero.com
Numico	The Netherlands	4.3	Dietetic food, baby and infant food	www.numico.com

France, Germany and the United Kingdom were the largest food processors in the EU, accounting for 60 percent of total food and drinks production. Apart from the above-mentioned multinational companies with strong pan-European brands, most of the food processing companies in the EU are small to medium sized (SME's), as the following figure shows:



Source: CIAA, 2002

The processed fruit and vegetable sector in the EU had a production turnover of € 36 billion in 2001.
This was an increase of 2.9 percent compared to 2000 and accounted for 5.8 percent of total production value of the food and drinks industry. This share is relatively low, because of the fact that the preserved fruit and vegetable sector is a mature industry with a low added value.
The sector employs 168,000 employees, representing 6 percent of total employees in the food and drinks industry (Source: CIAA).
Due to the high wage levels in the EU, coupled to a high degree of concentration in the retail sector and fierce competition, processing facilities are highly automated and efficient. Economies-of-scale, resulting in lower production costs and an efficient logistical system are necessary to be able to operate profitably.

The production figures for mushrooms refer only to fresh production. No production figures are available for provisionally preserved fruit and vegetables and for frozen fruit, though we can state that the main EU suppliers of frozen fruit are Spain and Italy. The production figures for fruit juice concentrate refer to industrial use only. The production figures for the other product groups refer to both industrial use and use for consumer and catering packs.

Fruit juice/concentrate
In the EU, only Spain and Italy produce notable amounts of orange juice concentrate. Compared to Brazil and the USA, which together account for 90 percent of global production, the production in Europe is small. Moreover, the fruit juice concentrate from Spain and Italy has a different kind of quality, which makes it more suitable for the soft beverages industry and less for the processing of fruit juice and nectar.
Germany and Italy are the major EU producers of apple juice concentrate, producing some 70 thousand and 50 thousand tonnes respectively. The production of apple juice concentrate depends to a large extent on the apple harvest, which fluctuates considerably.

Canned vegetables
France is by far the largest producer of canned vegetables, accounting for more than 50 percent of total EU production. The Netherlands, Italy and Spain are other important producers of canned vegetables.
The French company Bonduelle is a leading EU supplier of canned vegetables and has established a strong branded position on major EU markets.

Frozen vegetables
Frozen vegetables, with an estimated total EU production of 2 million tonnes, have become a fierce competitor of canned vegetables.
Production is rather stable, as the EU markets for frozen vegetables have reached a level of maturity for the single-variety frozen vegetables. Growth areas are mixed vegetables and ready-meals.
Nestlé and Unilever are major producers who have strong brands of frozen vegetables on EU markets.

Production technology and quality are constantly improving within the frozen food industry. Research by Unilever has shown that frozen vegetables are qualitatively comparable to fresh vegetables.
The improvements and research development contribute to a positive consumer attitude towards frozen food consumption.

Belgium is the largest EU producer of frozen vegetables, producing around 500,000 tonnes annually. The Belgian frozen food industry produces around 200 different frozen vegetable products. France and the United Kingdom have an estimated production of 300,000 tonnes per annum. In Spain, frozen vegetable production has increased considerably and amounted to some 380,000 tonnes in 2001. German production is estimated at 165,000 tonnes, followed by The Netherlands with an estimated volume of 115,000 tonnes. The remaining EU member countries produce only small amounts.

Canned fruit
Southern European countries are the leading producers of canned fruit in the EU. In descending order, Greece, Spain, France and Italy were the leading producers in 2001.

Dried fruit
There are only a few countries in the EU supplying significant amounts of dried fruit. Greece is a major producer of currants and raisins. The 2001/02-raisin crop is estimated at 30,000 tons. France is the second largest producer of dried prunes in the world, after the United States. French prune production in 2000/01 is estimated to have increased by 41 percent at 41,000 tons, compared to the abnormally small 1999/2000 crops. Although production is expected to have increased significantly in 2000/2001, it is still likely to be below the 52,000-55,000 ton potential. Spain is the only date producing EU member country, with an annual production fluctuating around 7,000 tonnes (FAO 2002).

Dried vegetables
It is not possible to give an overall view of EU production of dried vegetables as only a few countries publish production figures on this product group. This is because the quantities are fairly small compared to those of other processed vegetables. However, a large share of dried vegetables originates outside the EU, accounting for about half of the imports by EU member countries (in terms of volume) of dried vegetables in 2001.

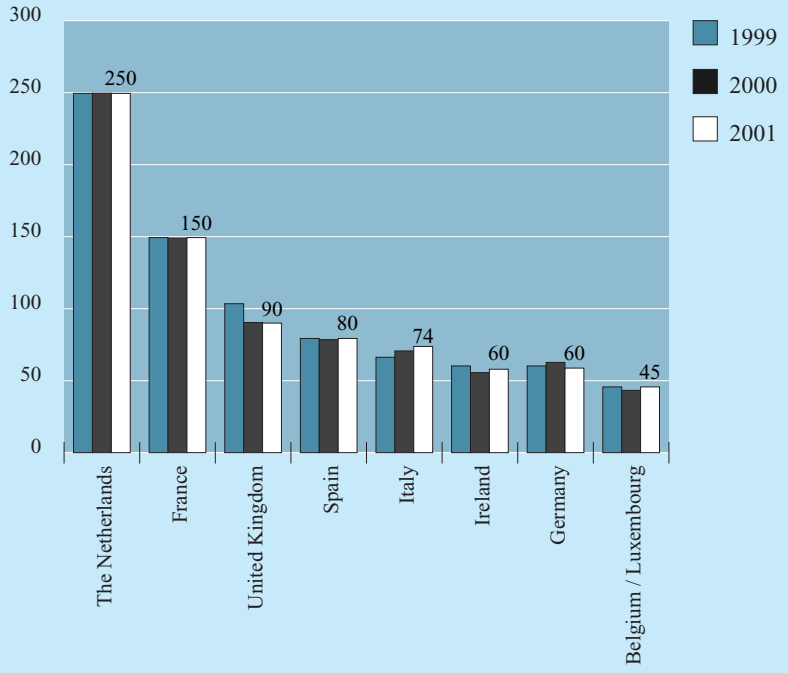
Jam

In 2001, the production of jam, marmalade and jelly in the EU was estimated at 650,000 tonnes. The jam production has been more or less stable for the past ten years. Germany is the leading producer. The three leading producers, Germany, the United Kingdom and France, accounted for about two thirds of total EU jam production in 2001.

Preserved mushrooms

No figures are available for the production of preserved mushrooms. In 2001, total EU production of fresh mushrooms amounted to 821,000 tonnes. The Netherlands and France are the main producers of fresh mushrooms in the EU, producing 250 thousand tonnes 150 thousand tonnes respectively. The United Kingdom, Spain and Italy also produce considerable amounts. As can be seen from the figure below, production of fresh mushrooms in the EU, apart from Italy, is stable to declining.

Figure 4.1 Production of fresh mushrooms in the EU, 1999-2001, thousands tonnes



Source: FAO, 2002

5 IMPORTS

As was already mentioned in Section 1.2, Chapters 7, 8 and 20 of the Harmonised System, cover the preserved fruit and vegetables discussed in this survey. Not all of the product groups covered by these chapters deals with preserved fruit and vegetables. Product groups covering fresh fruit and vegetables are left out.

For information on organic food, please refer to CBI's separate EU Market Survey 'Organic Food Products'.

5.1 Total imports

In 2001, imports by EU member countries of preserved fruit and vegetables amounted to US$ 12 billion or 13.4 million tonnes, representing a decrease by 3 percent in value but an increase by more than 7 percent in volume, compared to the preceding year.

Developing countries supplied 25 percent of the total import value in 2001. This was 7 percent less compared to 2000; however, volume increased by almost 5 percent in 2001.

Germany was the leading EU importer, accounting for 26 percent of total imports by EU member countries (in terms of value) in 2001, followed by France (15%), the United Kingdom (14%) and The Netherlands (12%). Together, these countries imported 67 percent of the total imported value in 2001.

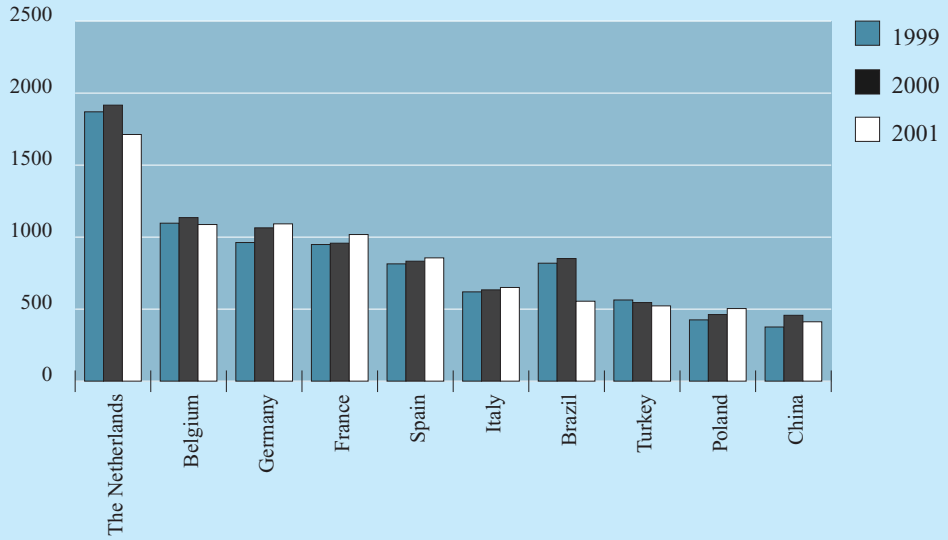
Table 5.1 Imports of preserved fruit and vegetables by EU member countries, 1999-2001
€ 1,000 / tonnes

	1999		2000		2001	
	value €	volume	value €	volume	value €	volume
Total	**11,842,433**	**11,857,998**	**12,486,480**	**12,414,900**	**12,060,082**	**13,364,566**
Extra-EU	**4,516,104**	**4,272,655**	**4,807,633**	**4,582,415**	**4,545,980**	**4,754,146**
Developing countries	**3,086,297**	**2,780,584**	**3,277,953**	**2,965,508**	**3,049,290**	**3,108,171**
Germany	2,963,096	3,086,514	3,138,941	3,302,196	3,093,240	3,509,038
France	1,787,607	1,922,800	1,902,978	2,026,012	1,820,277	1,932,303
United Kingdom	1,770,969	1,712,845	1,715,380	1,516,243	1,707,146	2,203,981
The Netherlands	1,490,159	1,534,018	1,612,828	1,622,994	1,471,268	1,650,850
Belgium	1,052,538	1,147,962	1,153,759	1,257,244	964,662	1,150,665
Italy	803,325	691,556	864,048	745,727	903,269	770,383
Spain	473,529	451,131	555,742	553,353	528,880	528,535
Austria	327,091	308,589	328,413	339,502	357,236	390,888
Sweden	321,310	262,173	319,546	260,192	324,466	286,344
Denmark	227,558	213,989	240,253	233,633	234,347	221,236
Ireland	157,832	117,275	182,326	129,938	208,677	161,858
Portugal	169,446	159,947	165,310	160,946	142,220	252,312
Finland	143,408	111,873	141,592	112,563	138,728	123,291
Greece	116,671	108,611	114,073	124,117	122,005	153,443
Luxembourg	37,955	28,715	42,328	30,240	43,662	29,439

Source: Eurostat, 2001

The Netherlands was by far the major supplier of preserved fruit and vegetables to the EU, accounting for 14 percent of the total supplied value in 2001, followed by Belgium (9%), Germany (9%) and France (8%). Of the total imported value by EU member countries, 38 percent was supplied extra-EU.

Figure 5.1 Leading suppliers of preserved fruit and vegetables to the EU, 1999-2001
€ 1,000



Source: Eurostat, 2001

Germany

Germany was the leading EU importer of preserved fruit and vegetables, with imports amounting to € 3 billion or 3.5 million tonnes in 2001. Compared to 2000, this represented a decrease by 1 percent in value, while imports in terms of volume increased by a sizeable 6 percent.

The major products in 2001 were:

Product	Import value in € 1,000	Import share in %
Fruit juice/concentrate	823	27
Canned vegetables	563	18
Canned fruit	546	18
Frozen vegetables	387	13

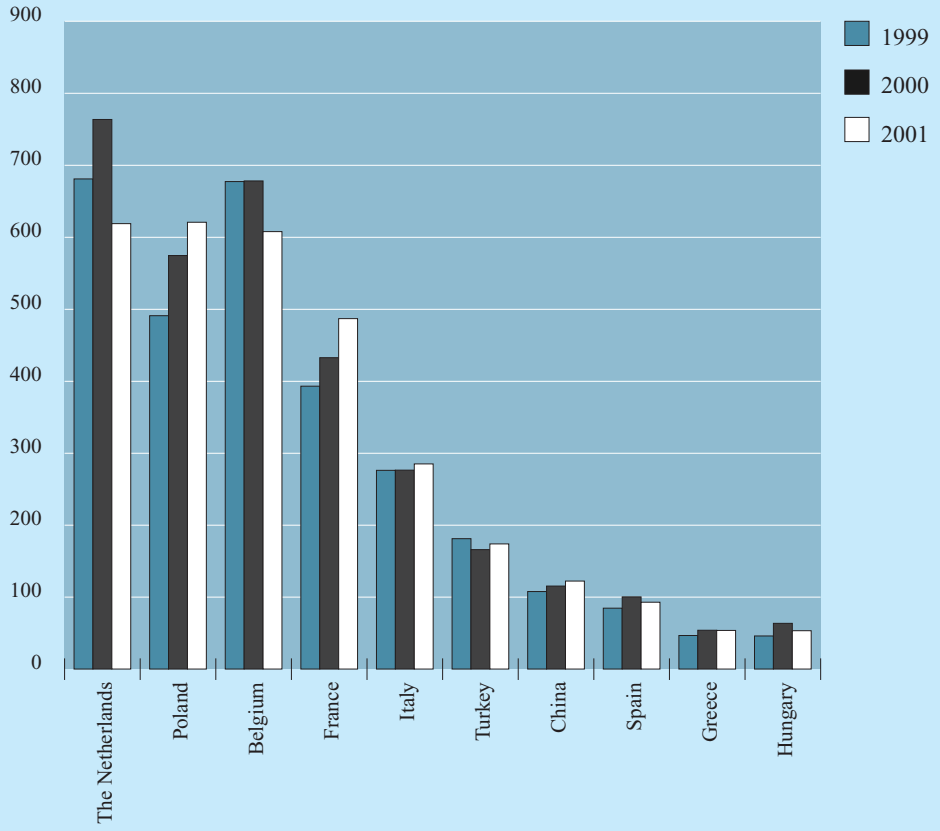
The above-mentioned products accounted for 76 percent of the total import value of preserved fruit and vegetables in 2001.

The Netherlands supplied a relatively large share of German imports (21%), mainly by transit through the port of Rotterdam. Poland was also an important trading partner of Germany and accounted for 11 percent of import value in 2001. 21 percent of the imports of preserved fruit and vegetables was supplied by developing countries in 2001, compared to 19 percent in 2000.

The leading suppliers of preserved fruit and vegetables to Germany (share of total year 2001 imports in terms of value)

The Netherlands (21%), Poland (11%), Belgium (10%), France (8%), Italy (8%), Turkey (6%), China (5%), Spain (4%), Greece (3%), Hungary (3%).

Figure 5.2 Leading suppliers of preserved fruit and vegetables to Germany, 1999-2001
€ 1,000



Source: Eurostat, 2001

France

France was the second leading EU importer of preserved fruit and vegetables, accounting for over € 1.8 billion or 1.9 million tonnes in 2001. Between 2000 and 2001, French imports decreased in 2001 by 4 percent in terms of value and by 5 percent in terms of volume.

The major products in 2001 were:

Product	Import value in € 1,000	Import share in %
Fruit juice/concentrate	523	29
Canned vegetables	358	20
Canned fruit	248	14
Frozen vegetables	236	13

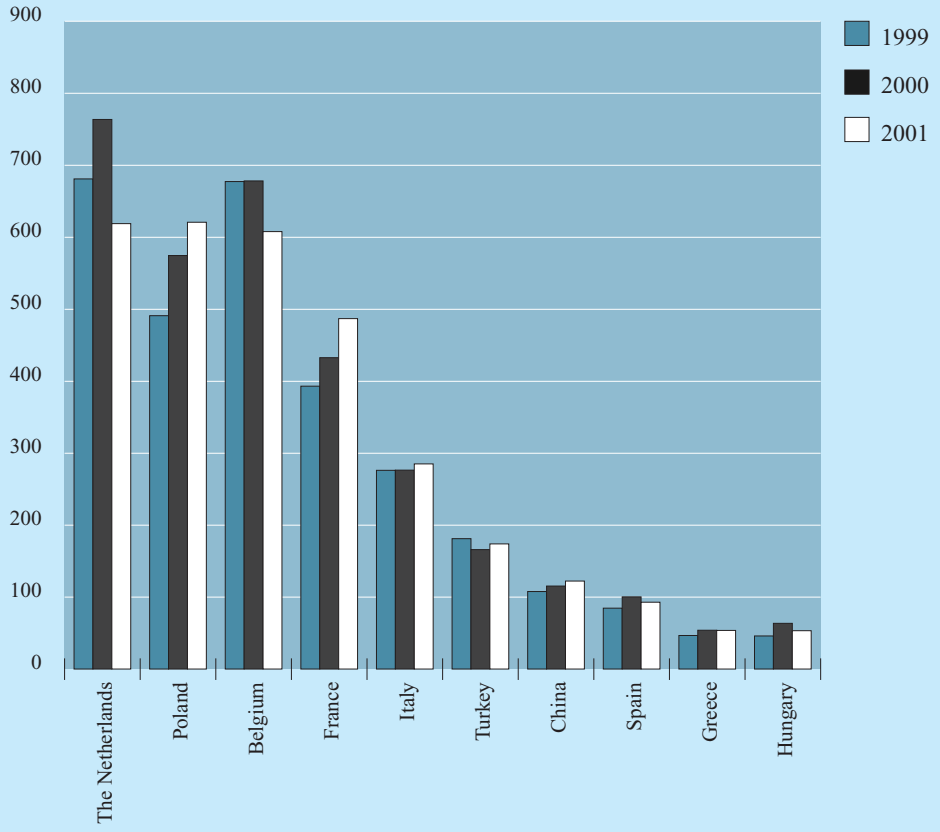
These products accounted for 76 percent of total import value of preserved fruit and vegetables in 2001.

Belgium, Spain and The Netherlands were the leading suppliers of preserved fruit and vegetables to France accounting for respectively 17 percent, 17 percent and 17 percent of total value imports. Developing countries supplied 21 percent of the total imports to France in 2001.

The leading suppliers of preserved fruit and vegetables to France (share of total year 2001 imports in terms of value)

Belgium (17%), Spain (17%), The Netherlands (17%), Germany (13%), Italy (8%), Morocco (4%), Turkey (3%), China (3%), Greece (1%), Tunisia (1%)

Figure 5.3 Leading suppliers of preserved fruit and vegetables to France, 1999-2001
€ 1,000



Source: Eurostat, 2001

United Kingdom

The United Kingdom was the third leading EU importer of preserved fruit and vegetables, accounting for € 1.7 billion or 2.2 million tonnes in 2001. Between 2000 and 2001, the imported value remained stable, while the imported volume increased by an incredible 45 percent.

The major products in 2001 were:

Product	Import value in € 1,000	Import share in %
Fruit juice/concentrate	408	24
Canned vegetables	315	18
Frozen vegetables	269	16
Canned fruit	258	15
Dried fruit	236	14

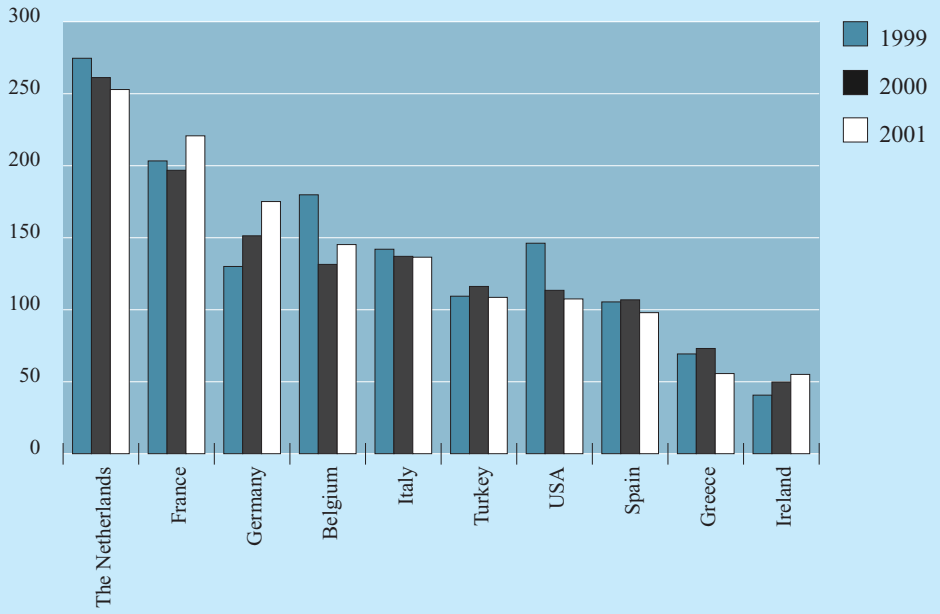
These products accounted for 87 percent of the total import value of preserved fruit and vegetables in 2001.

The leading supplier to the United Kingdom in 2001 was The Netherlands, followed by France and Germany. In 2001, developing countries supplied the United Kingdom with 19 percent of the total imported value of preserved fruit and vegetables.

The leading suppliers of preserved fruit and vegetables to the United Kingdom (share of total year 2001 imports in terms of value)

The Netherlands (15%), France (13%), Germany (10%), Belgium (8%), Italy (8%), Turkey 69%), USA (6%), Spain (6%), Greece (3%), Ireland (3%).

Figure 5.4 Leading suppliers of preserved fruit and vegetables to the United Kingdom, 1999-2001, € 1,000



Source: Eurostat, 2001

The Netherlands

The Netherlands was the fourth largest importer of preserved fruit and vegetables, accounting for € 1.4 billion or 1.6 million tonnes in 2001. Between 2000 and 2001, imports decreased by 9 percent in value, but increased 2 percent in volume.

The major products in 2001 were:

Product	Import value in € 1,000	Import share in %
Fruit juice/concentrate	777	53
Canned fruit	219	15
Canned vegetables	171	12

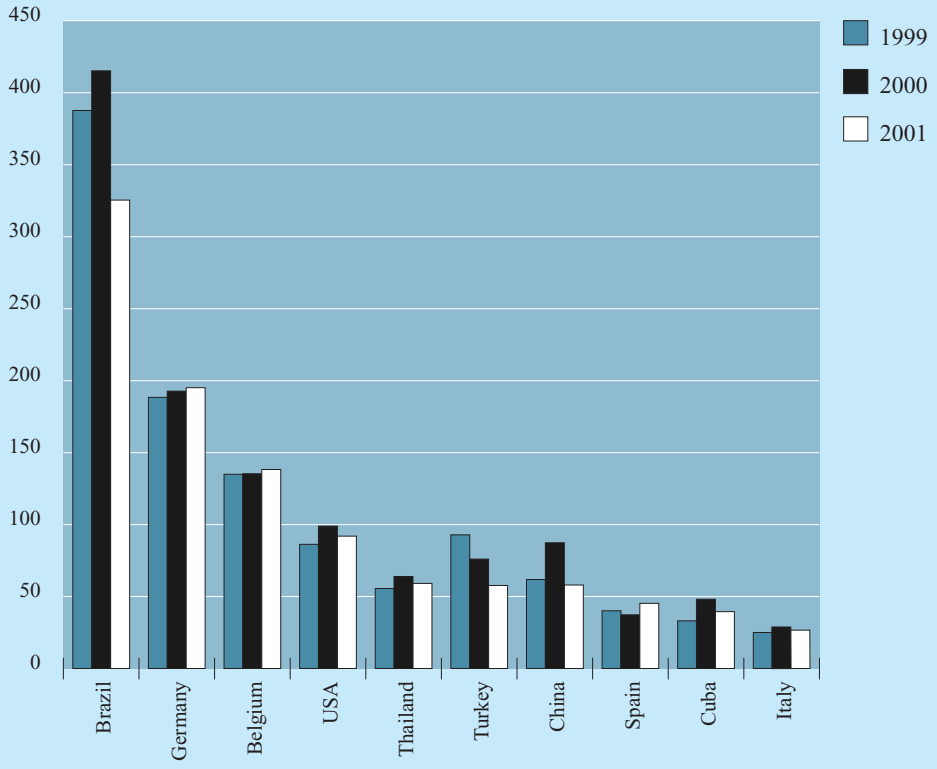
These products accounted for 80 percent of the total import value of preserved fruit and vegetables in 2001.

Brazil was by far the leading supplier of preserved fruit and vegetables to The Netherlands, where it had a far more dominant position than in the other major EU markets. This was mainly caused by the high fruit juice/concentrate imports (orange juice concentrate in bulk vessels to tank farms in the Amsterdam and Rotterdam harbour), a large share of which is further re-exported to the other EU member countries. Thailand, China and Cuba were also among The Netherlands' leading suppliers from developing countries and took a relatively more important position in Netherlands imports than in EU overall imports. Developing countries supplied 54 percent of total imported value during 2001.

The leading suppliers of preserved fruit and vegetables to The Netherlands (share of total year 2001 imports in terms of value)

Brazil (22%), Germany (13%), Belgium (9%), USA (6%), Thailand (4%), Turkey (4%), China (4%), Spain (3%), Cuba (3%), Italy (2%).

Figure 5.5 Leading suppliers of preserved fruit and vegetables to The Netherlands, 1999-2001, € 1,000



Source: Eurostat, 2001

Belgium

In 2001, imports of preserved fruit and vegetables into Belgium amounted to € 965 million or 1.1 million tonnes. Compared to 2000, this represented a decrease by 16 percent in value and by 8 percent in volume.

The major products in 2001 were:

Product	Import value in € 1,000	Import share in %
Fruit juice/concentrate	381	39
Frozen vegetables	177	18
Canned vegetables	162	17

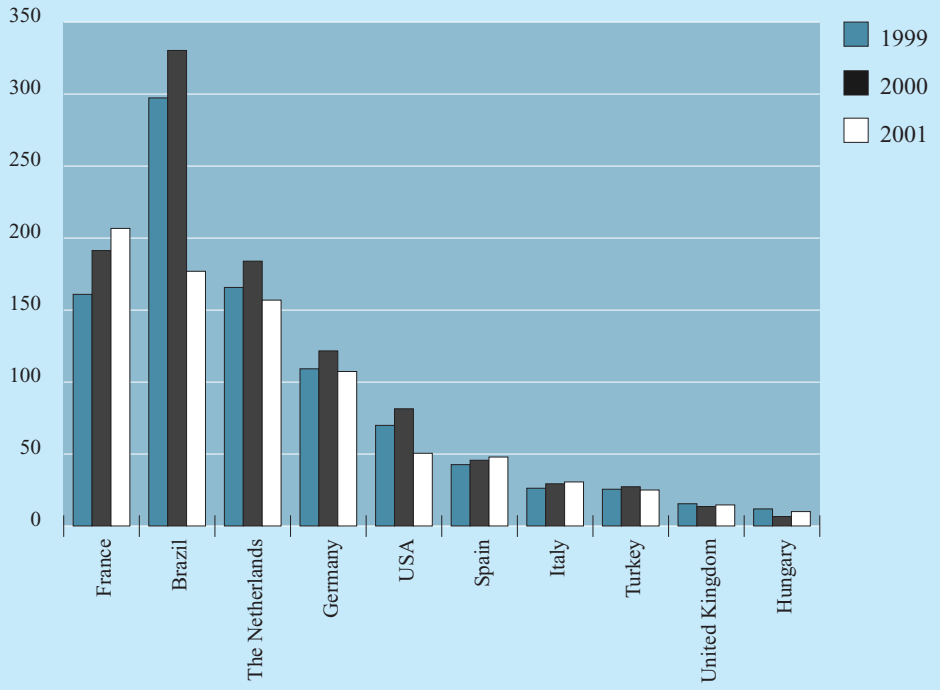
These products accounted for 74 percent of the total import value of preserved fruit and vegetables in 2001. Belgium has a large bulk terminal for citrus concentrates in the port of Gent, hence the large share of fruit concentrate.

In 2001, France was the leading supplier to Belgium of preserved fruit and vegetables, followed by Brazil. The import share of Brazil in 2000 (value) was 29 percent, but dropped during 2001 to 18 percent.

The leading suppliers of preserved fruit and vegetables to Belgium (share of total year 2001 imports in terms of value)

France (22%), Brazil (18%), The Netherlands (17%), Germany (11%), USA (5%), Spain (5%), Italy (3%), Turkey (2%), United Kingdom (2%), Hungary (1%).

Figure 5.6 Leading suppliers of preserved fruit and vegetables to Belgium, 1999-2001, € 1,000



Source: Eurostat, 2001

Italy

In 2001, imports of preserved fruit and vegetables into Italy amounted to € 903 million or 770 thousand tonnes. Compared to 2000, this represented an increase by 5 percent in value and by 3 percent in volume.

The major products in 2001 were:

Product	Import value in € 1,000	Import share in %
Canned vegetables	186	21
Fruit juice/concentrate	176	19
Frozen vegetables	144	16
Canned fruit	103	11
Dried fruit	69	8

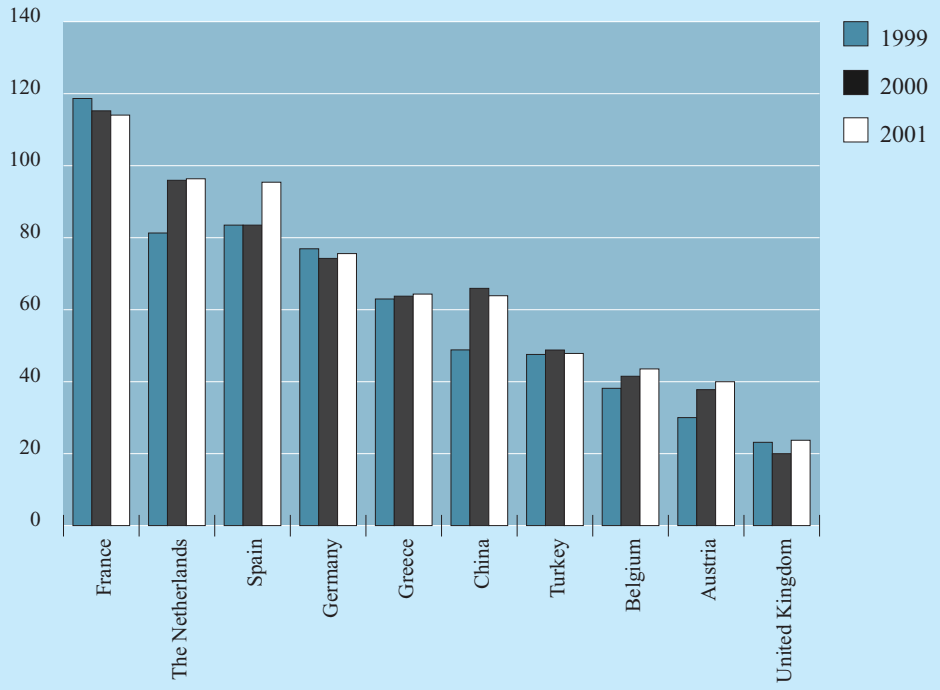
These products accounted for 75 percent of the total import value of preserved fruit and vegetables in 2001.

The leading suppliers of preserved fruit and vegetables to Italy (share of total year 2001 imports in terms of value)

France (13%), The Netherlands (11%), Spain (10%), Germany (8%), Greece (7%), China (7%), Turkey (5%), Belgium (5%), Austria (4%), United Kingdom (3%).

France remained the leading supplier of preserved fruit and vegetables to Italy during 2001, followed by The Netherlands and Spain. Developing countries supplied 25 percent of total value imports to Italy during 2001.

Figure 5.7 Leading suppliers of preserved fruit and vegetables to Italy, 1999-2001, € 1,000



Source: Eurostat, 2001

5.2 Imports by product group

Figure 5.7 presents an overview of imports by EU member countries of preserved fruit and vegetables by product group. Fruit juice and concentrate was, by far, the leading imported product group, accounting for about half of the imports by EU member countries. Other leading product groups were frozen vegetables (17%), dried fruit (11%), frozen fruit (10%). Less important groups were dried vegetables (5%), preserved mushrooms (4%), provisionally preserved fruit & vegetables (3%) and candied fruit (1%).

Table 5.2 Imports of preserved fruit and vegetables per product group into the EU, 1999 - 2001
€ 1,000 / tonnes

	1999		2000		2001	
	value €	volume	value €	volume	value €	volume
Fruit juice/concentrate						
Total	3,908,162	4,157,275	4,274,658	4,627,485	3,683,095	4,592,922
Extra-EU	1,528,381	1,576,191	1,688,211	1,818,316	1,393,725	1,839,765
Developing countries	1,108,856	1,013,901	1,207,449	1,139,836	922,670	1,138,945
Canned vegetables						
Total	2,123,656	2,200,807	2,117,837	2,087,349	2,214,609	2,273,522
Extra-EU	584,829	566,982	579,401	532,153	595,032	551,457
Developing countries	466,214	440,120	465,145	420,300	476,729	437,303
Canned fruit						
Total	1,531,463	1,594,521	1,569,853	1,697,696	1,558,704	1,691,735
Extra-EU	601,005	671,566	606,986	725,999	612,581	719,024
Developing countries	475,338	543,930	474,397	582,466	522,171	642,393
Frozen vegetables						
Total	1,359,053	1,832,160	1,420,103	1,833,681	1,606,464	2,599,504
Extra-EU	282,447	364,713	295,888	356,698	368,711	446,354
Developing countries	147,156	122,970	160,870	132,449	191,193	163,490
Dried fruit						
Total	830,189	551,058	869,426	547,475	821,111	554,127
Extra-EU	612,434	410,634	650,013	416,951	589,649	427,353
Developing countries	435,385	323,362	461,768	326,562	404,448	335,140
Frozen fruit						
Total	825,532	681,107	859,206	712,624	790,843	741,063
Extra-EU	518,107	438,917	539,550	462,094	508,774	490,516
Developing countries	189,699	166,026	191,303	166,260	207,557	186,094
vegetables						
Total	373,302	139,841	404,708	169,405	426,796	180,661
Extra-EU	200,567	72,990	214,303	81,794	221,848	74,185
Developing countries	129,767	47,936	148,101	58,385	140,312	49,980
Jam						
Total	350,380	248,592	379,961	263,587	390,846	286,286
Extra-EU	16,422	13,905	17,718	12,672	24,011	16,825
Developing countries	9,687	8,000	10,812	6,797	17,198	11,630
Preserved mushrooms						
Total	345,723	255,897	342,865	249,606	308,278	225,349
Extra-EU	64,154	53,110	76,126	64,641	79,799	70,091
Developing countries	46,763	41,034	54,363	49,999	53,213	53,852

Provisionally preserved fruit and vegetables						
Total	194,973	196,740	247,863	225,992	259,336	219,397
Extra-EU	107,758	103,647	139,437	111,097	151,850	118,576
Developing countries	77,432	73,305	103,745	82,454	113,799	89,344

Source: Eurostat 2001

5.2.1 Fruit juice/concentrate

Fruit juice/concentrate was the largest product group (of preserved fruit and vegetables) imported into the EU, both in value (31%) and in volume (34%) in 2001. Imports peaked in 2000, both in value and in volume, and decrease in 2001 by 14 percent in value, while the volume remained stable at 4.6 billion tonnes.
The import share of fruit juice/concentrate from developing countries shows the following picture:

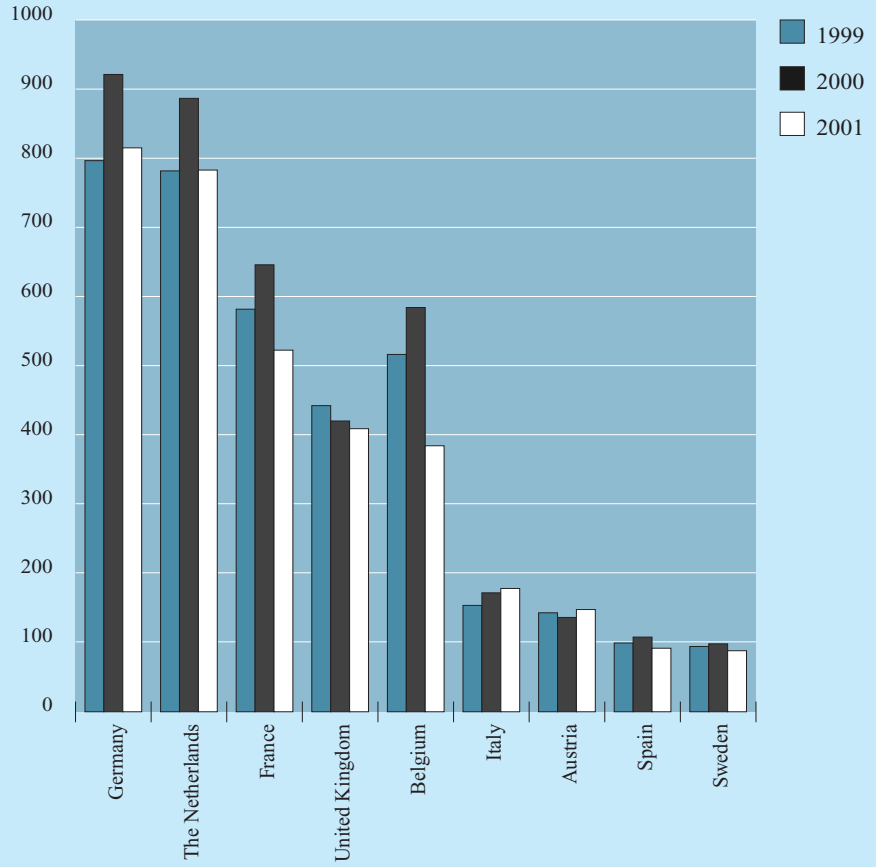
	1999	2000	2001
Import share in value	28%	28%	25%
Import share in volume	24%	25%	25%

In 2001, Germany was the leading importer of this product group, accounting for 22 percent of value imports by EU member countries. The Netherlands port of Rotterdam is an important turnover point for fruit juice concentrate, explaining the country's high share in total imports by EU member states (21% in value)

The leading suppliers of fruit juice/concentrate to the EU from developing countries (share of total 2001 imports in terms of value)

Brazil (15%), Thailand (1%), Cuba (1%), Turkey (1%)

Figure 5.8 Imports of fruit juice/concentrate into the main EU countries, 1999 – 2001
€ 1,000



Source: Eurostat 2001

Table 5.3 Imports of fruit juice/concentrate by EU member countries, 1999-2001
€ 1,000 / tonnes

	1999		2000		2001	
	value €	volume	value €	volume	value €	volume
Total	**3,908,162**	**4,157,275**	**4,274,658**	**4,627,485**	**3,683,095**	**4,592,922**
Extra-EU	**1,528,381**	**1,576,191**	**1,688,211**	**1,818,316**	**1,393,725**	**1,839,765**
Developing countries	**1,108,856**	**1,013,901**	**1,207,449**	**1,139,836**	**922,670**	**1,138,945**
Germany	795,719	842,322	925,099	985,015	823,801	1,069,118
The Netherlands	777,449	796,162	881,173	871,420	777,224	937,845
France	579,963	785,499	648,098	861,575	523,606	730,142
United Kingdom	442,237	389,065	418,718	377,105	407,859	432,308
Belgium	518,985	579,670	575,499	656,349	381,369	543,614
Italy	157,347	172,301	173,725	196,919	176,138	198,072
Austria	141,566	139,242	136,703	166,815	147,155	205,307
Spain	100,391	116,009	116,533	154,508	91,388	113,416
Sweden	97,426	85,871	98,098	87,588	86,654	94,656
Denmark	70,979	73,135	75,298	79,212	67,706	64,584
Ireland	49,065	33,478	62,424	44,483	65,777	57,046
Finland	49,073	35,303	48,346	35,535	43,51`3	38,964
Greece	44,061	40,898	42,103	46,817	39,271	39,913
Portugal	72,300	55,584	60,263	50,540	38,749	54,315
Luxembourg	11,613	12,736	12,586	13,604	12,884	13,622

Source: Eurostat, 2001

Frozen orange juice was the largest product within this product group in 2001, accounting for 26 percent of total imports, followed by unfrozen orange juice (23%), apple juice (16%) and grapefruit juice (6%).

The leading suppliers (share of total year 2001 imports in terms of value) of:

frozen orange juice
Brazil (35%), The Netherlands (33%), Belgium (15%)

unfrozen orange juice
Brazil (23%), Germany (19%), France (12%), Spain (10%), The Netherlands (10%),

apple juice
Germany (17%), Poland (16%), Italy (10%), Austria (10%), China (7%), Turkey (6%)

grapefruit juice
The Netherlands (29%), USA (17%), Israel (14%), Cuba (13%), France (5%)

Although The Netherlands and Belgium are leading suppliers of frozen orange juice, this product originates mainly in Brazil from where it is shipped to The Netherlands and Belgium and often re-exported to other EU destinations.

5.2.2 Canned vegetables

Canned vegetables were the second largest product imported into the EU, both in value (18%) and in volume (17%) in 2001. Total imports increased in value by 5 percent and in volume by 9 percent in 2001 compared to 2000.

The import share of canned vegetables from developing countries shows the following picture:

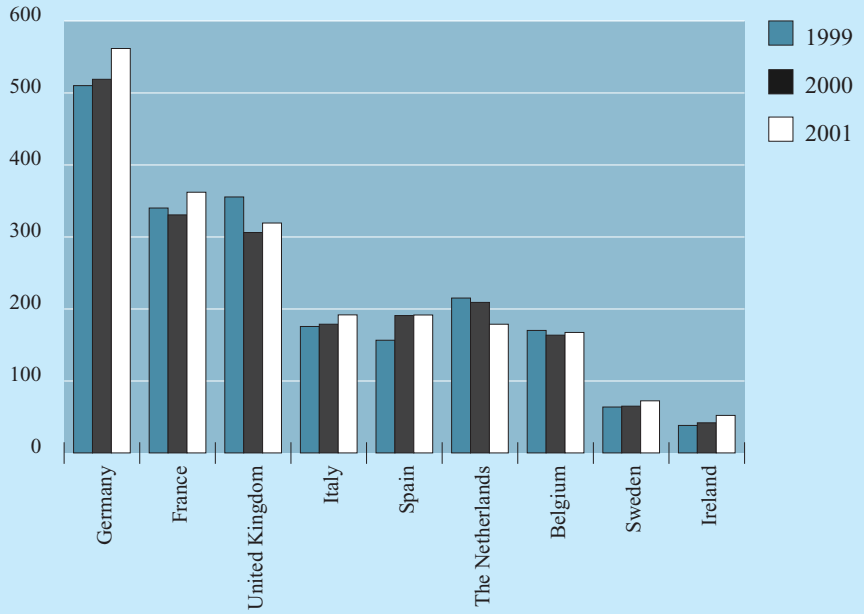
	1999	2000	2001
Import share in value	22%	22%	21%
Import share in volume	20%	20%	19%

In 2001, Germany was the leading importer of canned vegetables, accounting for 25 percent of the imported value by EU member countries, followed by France (16%), the United Kingdom (14%) and Italy (8%) and Spain (8%). These countries accounted for 71 percent of imports into the EU during 2001.

The leading suppliers of canned vegetables to the EU from developing countries (share of total 2001 imports in terms of value)

China (5%), Turkey (5%), Peru (4%), Morocco (3%), Thailand (2%), India (1%)

Figure 5.9 Imports of canned vegetables into the main EU countries, 1999 – 2001
€ 1,000



Source: Eurostat 2001

Table 5.4 Imports by EU member countries of canned vegetables, 1999-2001
€ 1,000 / tonnes

	1999		2000		2001	
	value €	volume	value €	volume	value €	volume
Total	**2,123,656**	**2,200,807**	**2,117,837**	**2,087,349**	**2,214,609**	**2,273,522**
Extra-EU	**584,829**	**566,982**	**579,401**	**532,153**	**595,032**	**551,457**
Developing countries	**466,214**	**440,120**	**465,145**	**420,300**	**476,729**	**437,303**
Germany	511,058	631,461	517,849	629,773	563,339	667,732
France	338,823	306,937	324,606	309,336	358,176	328,452
United Kingdom	355,783	399,904	308,535	283,110	315,329	399,143
Italy	169,526	148,105	172,064	158,202	186,447	170,341
Spain	148,486	107,503	185,605	130,686	185,874	134,947
The Netherlands	215,324	228,271	210,673	203,368	171,743	165,691
Belgium	161,835	171,380	155,325	160,817	162,499	164,121
Sweden	60,942	50,973	63,981	53,925	71,329	60,697
Ireland	29,260	20,329	37,739	22,631	50,601	28,693
Denmark	48,865	48,217	49,462	51,488	47,055	48,745
Austria	38,493	41,478	37,475	36,760	45,642	41,850
Portugal	16,036	21,939	18,470	21,630	17,894	19,979
Greece	11,634	9,223	13,023	10,770	14,627	27,022
Finland	11,347	8,022	11,721	7,970	12,497	9,227
Luxembourg	11,254	7,065	11,314	6,883	11,553	6,882

Source: Eurostat, 2001

In 2001, canned olives accounted for 13 percent of total canned vegetable imports (in value), followed by asparagus (10%), sweet corn (10%), beans (9%) and cucumbers & gherkins (6%). The Netherlands and France were the leading suppliers of canned vegetables, together supplying 17 and 15 percent respectively of total canned vegetable imports (in value) by EU member countries.

The leading suppliers (share of total year 2001 imports in terms of value) of:

asparagus
Peru (36%), China (36%), The Netherlands (14%), Germany (7%)

olives
Spain (41%), Greece (24%), Morocco (19%), Turkey (8%)

sweet corn
France (48%), Hungary (10%), Thailand (9%), Italy (6%), The Netherlands (6%)

beans
Italy (21%), France (21%), The Netherlands (15%), Belgium (10%), Kenya (7%)

cucumbers & gherkins
Turkey (23%), Germany (21%), The Netherlands (20%), Belgium (10%), Hungary (7%)

5.2.3 Canned fruit

Canned fruit was the third largest product imported into the EU in 2001, both in value (14%) and in volume (12%). During 2001, imports in value increased by 6 percent compared to 2000, while the volume remained stable.

The import share of canned fruit from developing countries showed the following figures:

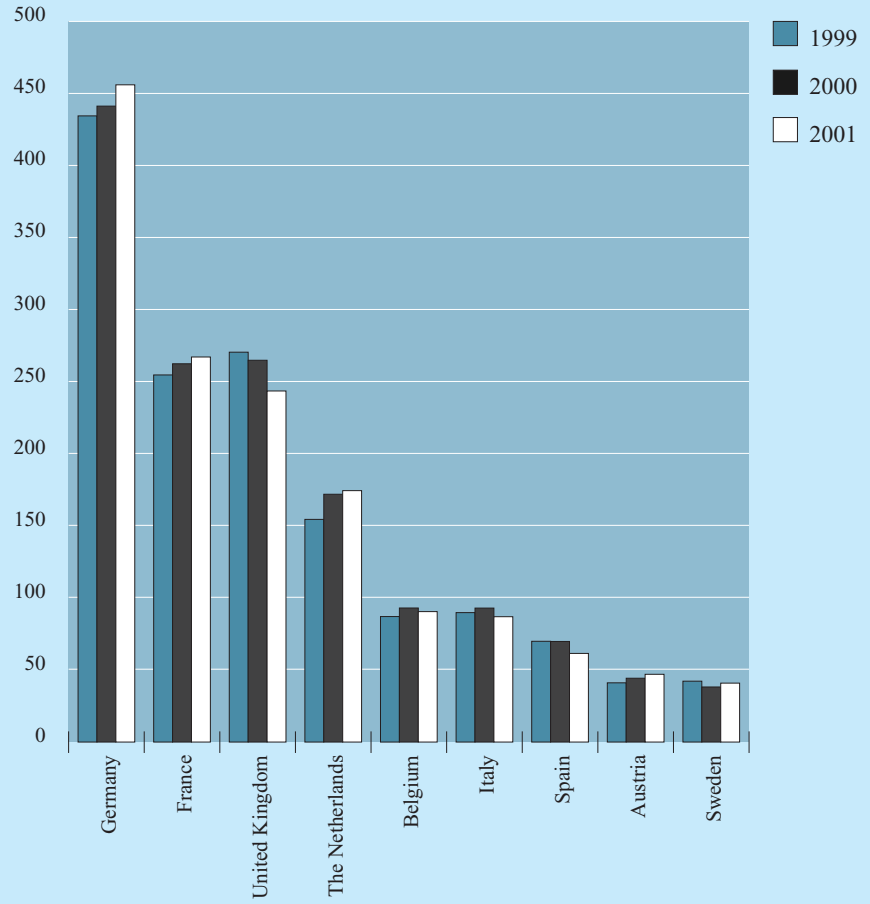
	1999	2000	2001
Import share in value	31%	30%	33%
Import share in volume	34%	34%	38%

Germany was the largest importer of canned fruit in 2001, accounting for 29 percent of the total imports in value. France was the second country with 17 percent of import value, followed by the United Kingdom (15%) and The Netherlands (11%).
Together these countries accounted for 72 percent of the total import in value of canned fruit into the EU in 2001.

The leading suppliers of canned fruit to the EU from developing countries (share of total 2001 imports in terms of value)

Thailand (8%), South Africa (5%), Kenya (3%), Costa Rica (3%), China (2%), Indonesia (2%), Philippines (2%)

Figure 5.10 Imports of canned fruit into the main EU countries, 1999 -2001
€ 1,000



Source: Eurostat 2001

Table 5.5 Imports by EU member countries of canned fruit, 1999-2001
€ 1,000 / tonnes

	1999		2000		2001	
	value €	volume	value €	volume	value €	volume
Total	**1,531,463**	**1,594,521**	**1,569,853**	**1,697,696**	**1,558,704**	**1,691,735**
Extra-EU	**601,005**	**671,566**	**606,986**	**725,999**	**612,581**	**719,024**
Developing countries	**475,338**	**543,930**	**474,397**	**582,466**	**522,171**	**642,393**
Germany	431,964	505,987	440,951	546,631	455,912	562,880
France	253,846	239,256	264,469	248,117	269,570	252,413
United Kingdom	273,387	262,030	266,422	257,617	239,716	241,641
The Netherlands	154,302	187,255	171,865	218,570	173,676	209,404
Belgium	81,647	78,117	89,596	85,422	86,078	84,761
Italy	83,252	89,754	89,681	102,711	78,283	86,379
Spain	70,588	60,678	70,568	66,638	61,579	60,533
Austria	39,911	41,503	40,633	43,087	44,825	45,889
Sweden	40,068	33,696	37,078	30,523	37,997	33,422
Finland	27,859	25,508	23,375	23,867	26,211	27,811
Denmark	19,425	18,382	20,447	20,647	22,360	21,907
Greece	13,741	10,191	16,627	14,023	21,500	21,638
Portugal	22,558	26,672	19,218	24,485	19,810	25,470
Ireland	16,036	13,840	15,915	13,608	17,867	15,848
Luxembourg	2,899	1,652	3,019	1,750	3,327	1,739

Source: Eurostat, 2001

Canned pineapple accounted for 17 percent of total value imports in 2001, followed by fruit mixtures (13%), peaches (12%) and citrus fruit (8%).

The leading suppliers (share of total year 2001 imports in terms of value) of:

pineapples
Thailand (33%), Kenya (16%), Indonesia (13%), The Netherlands (10%), Philippines (8%)

fruit mixtures
Italy (30%), Germany (22%), Belgium (7%), The Netherlands (6%), South Africa (6%)

peaches
Greece (50%), Spain (13%), Germany (10%), Italy (9%), South Africa (6%)

citrus fruit
Spain (32%), China (15%), Turkey (12%), Israel (12%)

5.2.4 Frozen vegetables

Frozen vegetables were the fourth largest product imported into the EU, accounting for 13 percent in value and 19 percent in volume. Both value and volume increased in 2001, compared to 2000, by 13 and 42 percent respectively.

The import share of frozen vegetables from developing countries showed the following figures:

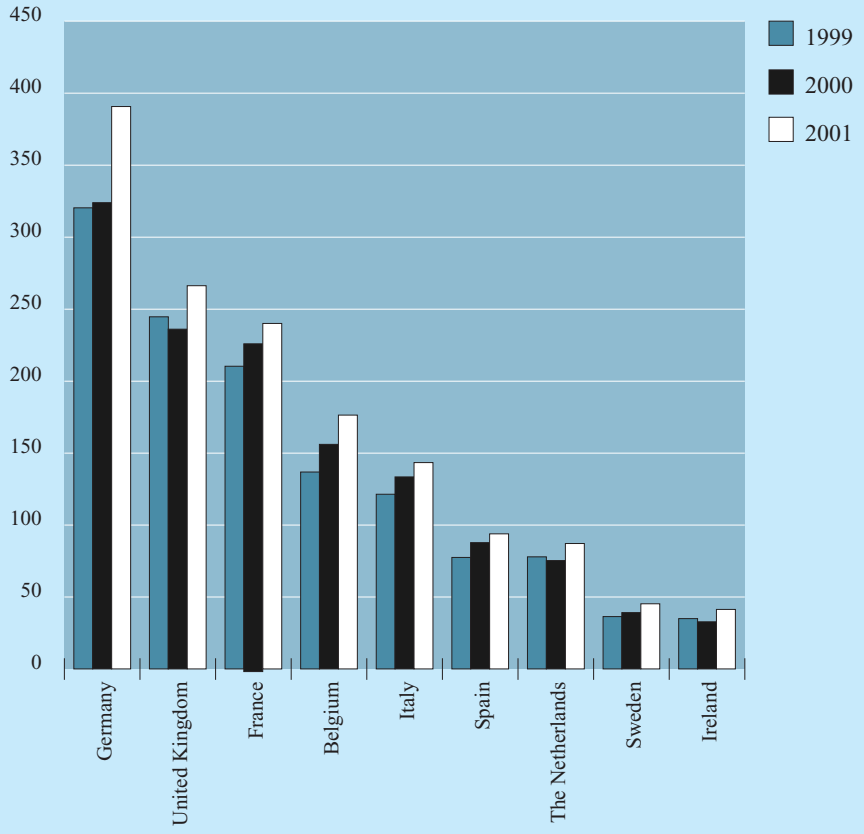
	1999	2000	2001
Import share in value	11%	11%	12%
Import share in volume	7%	7%	6%

The leading importer of frozen vegetables in 2001was Germany, accounting for 24 percent of imports by EU member countries, followed by the United Kingdom (17%), France (15%) and Belgium (11%). Together, these countries accounted for 67 percent of total value imports into the EU in 2001.

The leading suppliers of frozen vegetables to the EU from developing countries (share of total 2001 imports in terms of value)

China (4%), Turkey (2%), Ecuador (1%).

Figure 5.11 Imports of frozen vegetables into the main EU countries, 1999 -2001
€ 1,000



Source: Eurostat 2001

Table 5.6 Imports of frozen vegetables by EU member countries, 1999-2001
€ 1,000 / tonnes

	1999		2000		2001	
	value €	volume	value €	volume	value €	volume
Total	**1,359,053**	**1,832,160**	**1,420,103**	**1,833,681**	**1,606,464**	**2,599,504**
Extra-EU	**282,447**	**363,713**	**295,713**	**295,888**	**356,698**	**368,711**
Developing countries	**147,156**	**122,970**	**160,870**	**132,449**	**191,193**	**163,490**
Germany	318,486	428,649	324,046	445,292	387,344	523,781
United Kingdom	243,675	339,783	233,319	271,532	269,193	812,112
France	212,398	314,420	222,695	319,077	236,983	317,329
Belgium	134,242	203,487	155,193	222,916	177,394	237,250
Italy	118,840	122,792	132,591	124,982	143,648	129,748
Spain	75,096	109,209	85,687	128,771	92,393	137,615
The Netherlands	76,763	108,343	75,678	100,793	86,255	119,242
Sweden	32,983	36,668	34,940	37,551	42,669	42,844
Ireland	32,941	31,959	31,444	30,500	38,483	39,919
Denmark	26,843	27,125	28,175	29,298	31,339	32,167
Austria	24,376	30,313	29,311	37,080	28,222	35,746
Portugal	23,281	29,931	25,564	32,692	26,078	106,361
Greece	21,244	28,048	21,298	30,695	22,030	40,603
Finland	13,505	17,450	15,605	19,613	18,827	21,952
Luxembourg	4,392	3,983	4,564	2,889	5,597	2,835

Source: Eurostat, 2001

5.2.5 Dried fruit

Dried fruit was the fifth largest product imported into the EU in 2001, both in value (5%) and in volume (4%). Although the value of imports decreased by 6 percent, the volume increased by 1 percent in 2001 compared to 2000.

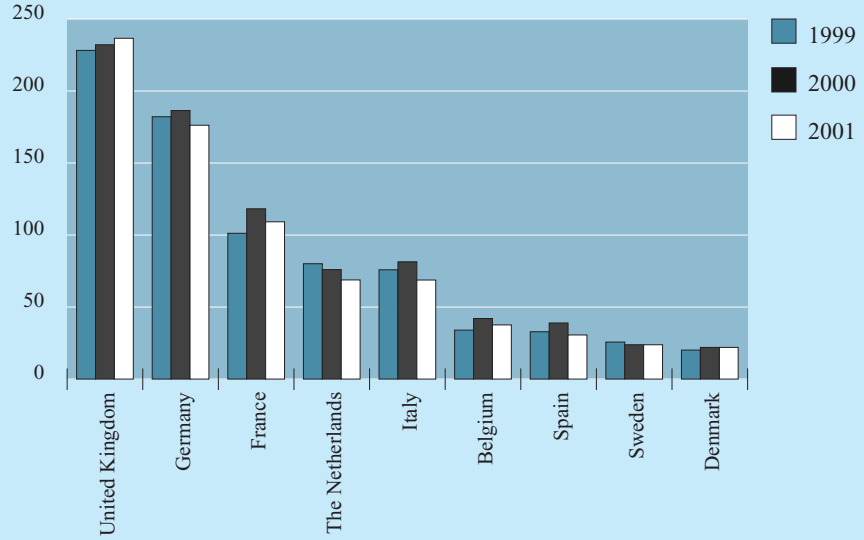
The import share of dried fruit from developing countries showed the following figures:

	1999	2000	2001
Import share in value	52%	53%	49%
Import share in volume	59%	60%	60%

The leading suppliers of dried fruit to the EU from developing countries (share of total 2001 imports in terms of value)

Turkey (30%), Tunisia (6%), Chile (4%), South Africa (2%), Iran (2%), China (1%).

Figure 5.12 Imports of dried fruit into the main EU countries, 1999 -2001
€ 1,000



Source: Eurostat 2001

Table 5.7 Imports of dried fruit by EU member countries, 1999-2001
€ 1,000 / tonnes

	1999		2000		2001	
	value €	volume	value €	volume	value €	volume
Total	830,189	551,058	869,426	547,475	821,111	554,127
Extra-EU	612,434	410,634	650,013	416,951	589,649	427,353
Developing countries	435,385	323,362	461,768	326,562	404,448	335,140
United Kingdom	230,131	158,911	234,630	152,910	236,725	159,195
Germany	181,437	125,360	184,017	122,625	175,371	123,026
France	101,087	62,257	115,399	65,926	106,393	66,087
The Netherlands	79,823	59,107	77,446	54,411	69,389	58,287
Italy	74,411	45,895	79,673	45,302	68,785	44,382
Belgium	31,128	22,176	39,653	26,361	34,771	24,429
Spain	31,995	20,697	38,046	22,609	30,244	20,363
Sweden	24,237	11,548	22,606	10,474	22,495	10,953
Denmark	20,196	11,363	21,961	12,163	21,533	12,501
Austria	18,672	11,534	17,618	10,118	19,205	11,429
Finland	12,703	6,612	11,252	5,356	11,264	5,793
Ireland	8,784	6,602	11,033	8,401	9,071	6,750
Greece	6,681	3,114	6,024	4,209	7,457	4,889
Portugal	7,171	5,200	8,229	6,093	6,693	5,556
Luxembourg	1,736	682	1,848	517	1,717	487

Source: Eurostat, 2001

Sultanas accounted for 24 percent of total value imports in 2001, followed by dried prunes (15%), dates (13%), other dried grapes (12%), dried figs (8%) and dried apricots (7%). Together these products accounted for nearly 8o percent of total value imports in 2001.

The leading suppliers (share of total year 2001 imports in terms of value) of:

sultanas
Turkey (71%), USA (5%), Greece (4%), South Africa (4%), Iran (3%)

dried prunes
USA (60%), France (15%), Chile (7%)

dates
Tunisia (44%), Israel (16%), France (10%), Algeria (9%), Iran (6%)

other dried grapes
USA (58%), Turkey (12%), Chile (6%), South Africa (6%)

apricots
Turkey (79%), France (9%)

figs
Turkey (75%), Greece (6%)

5.2.6 Frozen fruit

Frozen fruit is the sixth largest product imported into the EU, accounting for 7 percent in value and 6 percent in volume in 2001. Value imports decreased by 8 percent in 2001, while volume imports increased by 4 percent.

The import share of frozen fruit from developing countries showed the following picture:

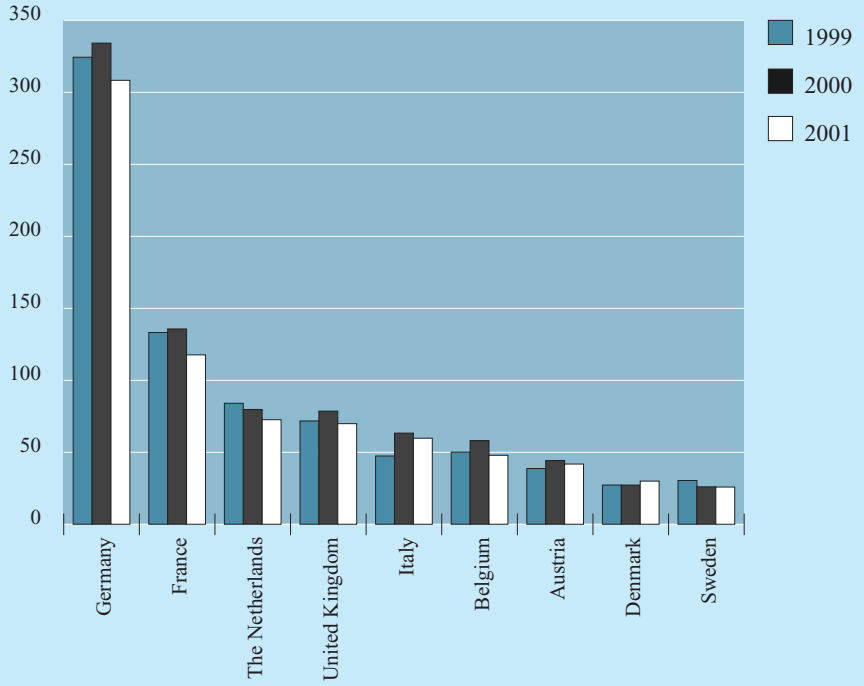
	1999	2000	2001
Import share in value	23%	22%	26%
Import share in volume	24%	23%	25%

Germany remained by far the largest importer of frozen fruit into the EU with 39 percent of total value imports, followed by France (15%), The Netherlands (9%) and United Kingdom (8%). Together these countries accounted for 71 percent of total value imports into the EU.

The leading suppliers of frozen fruit to the EU from developing countries (share of total 2001 imports in terms of value)

Serbia Montenegro (10%), Chile (3%), Morocco (3%), Turkey (2%).

Figure 5.13 Imports of frozen fruit into the main EU countries, 1999 -2001
€ 1,000



Source: Eurostat 2001

Table 5.8 Imports of frozen fruit by EU member countries, 1999-2001
€ 1,000 / tonnes

	1999		2000		2001	
	value €	volume	value €	volume	value €	volume
Total	**825,532**	**681,107**	**859,206**	**712,624**	**790,843**	**741,063**
Extra-EU	**518,107**	**438,917**	**539,550**	**462,094**	**508,774**	**490,516**
Developing countries	**189,699**	**166,026**	**191.303**	**166,260**	**207,557**	**186,094**
Germany	322,976	282,334	329,871	300,179	308,394	314,068
France	133,552	100,656	135,795	100,692	116,351	97,660
The Netherlands	83,904	74,533	78,880	70,457	69,786	67,582
United Kingdom	68,423	47,586	76,575	50,991	66,121	47,505
Italy	49,155	37,676	57,635	38,852	56,532	44,143
Belgium	49,739	42,929	58,013	49,294	48,118	42,533
Austria	36,113	31,301	41,517	36,757	40,614	37,945
Denmark	23,357	20,696	23,185	20,568	26,979	25,748
Sweden	28,248	20,568	25,761	17,955	26,036	20,107
Finland	15,334	10,892	15,715	11,494	13,685	11,909
Spain	10,582	9,150	11,545	12,038	12,116	11,785
Ireland	1,440	818	1,212	683	2,470	1,576
Greece	976	822	1,361	1,274	1,727	1,760
Portugal	1,273	985	1,782	1,267	1,393	16,581
Luxembourg	458	161	360	123	524	161

Source: Eurostat, 2001

In 2001, Poland was the leading supplier of frozen fruit, accounting for 24 percent of value imports by EU member countries, followed by Serbia Montenegro (11%) and The Netherlands (7%).

5.2.7 Dried vegetables

Dried vegetables were the seventh largest product imported into the EU in 2001. They accounted for 4 percent of total import value and 1 percent of total import volume into the EU. Both import value and volume increased in 2001, compared to 2000, by 5 and 7 percent respectively.

The import share of dried vegetables from developing countries showed the following figures:

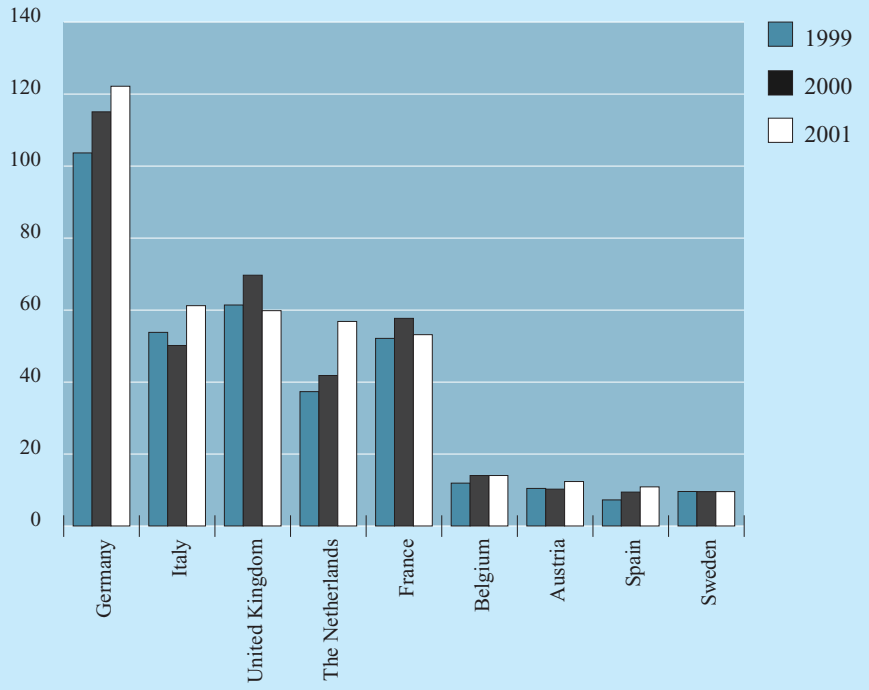
	1999	2000	2001
Import share in value	35%	37%	33%
Import share in volume	34%	34%	28%

Germany was the leading importer of dried vegetables, accounting for 29 percent of value imports by EU member countries in 2001. Other leading EU importers were Italy (14%), the United Kingdom (14%) and The Netherlands (13%).

The leading suppliers of dried vegetables to the EU from developing countries (share of total 2001 imports in terms of value)

China (14%), Turkey (4%), Egypt (4%), Serbia Montenegro (3%), India (3%).

Figure 5.14 Imports of dried vegetables into the main EU countries, 1999 -2001
€ 1,000



Source: Eurostat 2001

Table 5.9 Imports of dried vegetables by EU member countries, 1998-2000
€ 1,000 / tonnes

	1999		2000		2001	
	value €	volume	value €	volume	value €	volume
Total	**373,302**	**139,841**	**404,708**	**169,405**	**426,796**	**180,661**
Extra-EU	**200,567**	**72,990**	**214,303**	**81,794**	**221,848**	**74,185**
Developing countries	**129,767**	**47,936**	**148,101**	**58,385**	**140,312**	**49,980**
Germany	103,920	40,400	114,307	42,513	123,159	44,301
Italy	52,700	9,665	49,437	8,850	60,917	11,299
United Kingdom	62,172	27,412	70,158	39,015	59,985	29,334
The Netherlands	36,568	19,434	43,358	27,721	55,615	38,067
France	50,955	13,313	57,013	15,286	52,467	14,526
Belgium	12,224	6,355	13,508	7,401	13,718	8,281
Austria	12,306	4,743	12,263	5,018	12,812	4,183
Spain	7,823	3,905	9,549	5,943	11,712	12,415
Sweden	10,649	3,362	10,144	3,063	10,049	3,023
Denmark	7,775	2,245	7,730	2,358	8,517	2,658
Ireland	7,583	2,266	7,751	2,062	8,399	2,287
Finland	3,599	1,264	3,824	1,283	3,901	1,311
Greece	2,725	4,182	2,908	7.304	3,059	7,948
Portugal	1,825	1,136	2,167	1,434	1,832	890
Luxembourg	478	159	594	154	661	138

Source: Eurostat, 2001

The leading suppliers of dried onions & tomatoes to the EU (share of total year 2001 imports in terms of value):

onions
USA (27%), France (21%), Egypt (12%), India (8%), Germany (7%)

tomatoes
Spain (22%), Turkey (18%), Italy (12%), Portugal (13%), Portugal (10%), Greece (10%)

	1999	2000	2001
Import share in value	3%	3%	4%
Import share in volume	3%	3%	4%

The leading suppliers of jam to the EU from developing countries (share of total 2001 imports in terms of value)

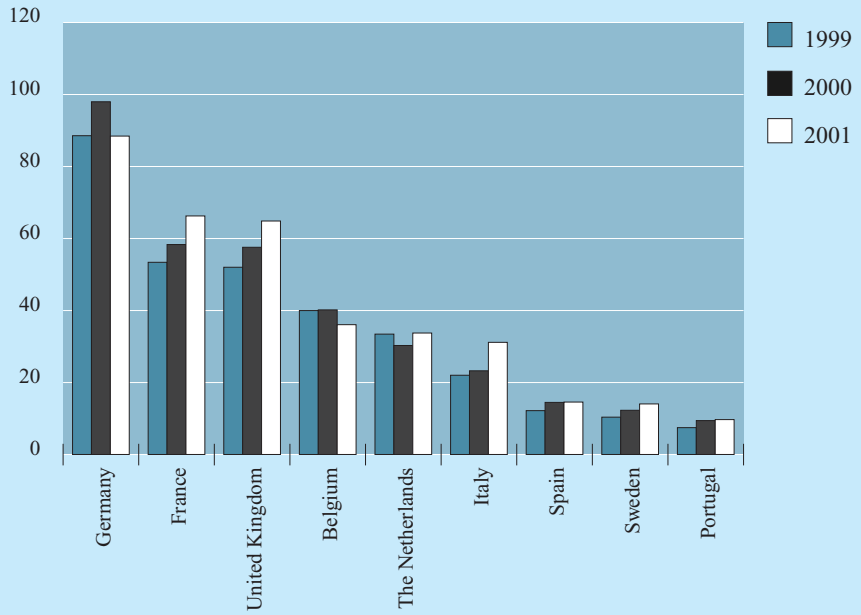
Turkey (3%), South Africa (1%).

5.2.8 Jam

Jam is the eighth largest product imported into the EU in 2001 accounting for 3 percent of total import value and 2 percent of total import value. Compared to 2000, imports increased in 2001 by 3 percent in value and 8 percent in volume.
Import is mainly intra-EU trading. As can be seen from the following figures, imports of jam from developing countries are very small.

The import share of jam from developing countries showed the following figures:

Figure 5.15 Imports of jam into the main EU countries, 1999 -2001, € 1,000



Source: Eurostat 2001

Table 5.10 Imports by EU member countries of jam, 1999-2001 € 1,000 / tonnes

	1999		2000		2001	
	value €	volume	value €	volume	value €	volume
Total	**350,380**	**248,592**	**379,961**	**263,587**	**390,846**	**286,286**
Extra-EU	**16,422**	**13,905**	**17,718**	**12,672**	**24,011**	**16,825**
Developing countries	**9,687**	**8,000**	**10,812**	**6,797**	**17,198**	**11,630**
Germany	87,506	73,572	97,647	74,390	87,792	71,139
France	53,204	48,025	58,570	51,428	66,860	64,427
United Kingdom	52,347	28,380	58,192	32,854	66,586	34,832
Belgium	40,248	23,247	40,397	24,119	34,733	21,020
The Netherlands	30,738	23,248	29,178	21,031	31,742	24,191
Italy	21,598	11,784	22,643	14,099	29,385	21,139
Spain	12,250	7,507	14,078	9,575	14,442	12,322
Sweden	11,271	7,221	12,176	8,047	14,185	9,756
Portugal	7,824	5,042	9,876	6,546	9,994	6,257
Austria	7,653	5,939	7,546	5,610	8,684	5,821
Ireland	7,477	4,707	8,126	3,775	8,472	4,551
Luxembourg	3,938	1,691	6,345	3,493	5,917	2,828
Greece	4,957	2,337	4,387	2,086	5,117	3,242
Denmark	3,745	2,770	3,987	3,099	3,570	2,580
Finland	5,626	3,122	6,811	3,435	3,367	2,181

Source: Eurostat, 2001

5.2.9 Preserved mushrooms

Preserved mushrooms were the ninth largest product imported into the EU in 2001, accounting for 3 percent of the total value imports and 2 percent of the total volume imports. Both import value and volume decreased in 2001, compared to 2000, by 10 percent and 10 percent respectively.

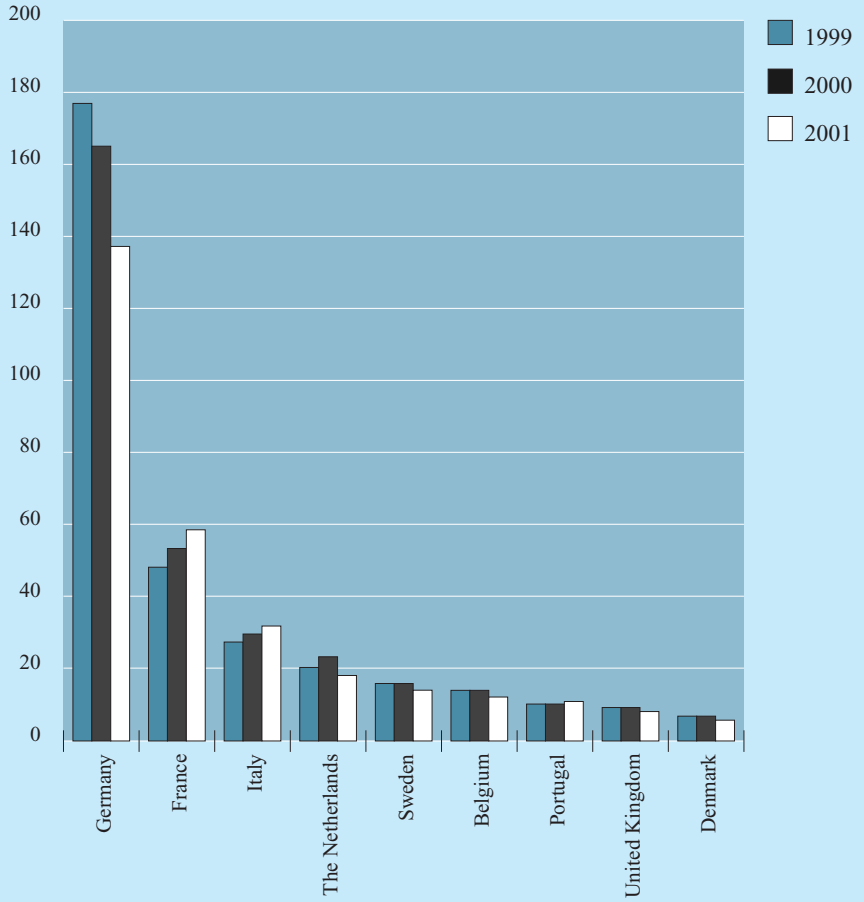
The import share of preserved mushrooms from developing countries showed the following figures:

	1999	2000	2001
Import share in value	14%	16%	17%
Import share in volume	16%	20%	24%

The leading suppliers of preserved mushrooms to the EU from developing countries (share of total 2001 imports in terms of value)

China (16%), Indonesia (1%), Turkey (1%), Morocco (1%).

Figure 5.16 Imports of preserved mushrooms into the main EU countries, 1999 -2001
€ 1,000



Source: Eurostat 2001

Table 5.11 Imports of preserved mushrooms by EU member countries, 1999-2001
€ 1,000 / tonnes

	1999		2000		2001	
	value €	volume	value €	volume	value €	volume
Total	**345,723**	**255,897**	**342,865**	**249,606**	**308,278**	**225,349**
Extra-EU	**64,154**	**53,110**	**76,126**	**64,641**	**79,799**	**70,091**
Developing countries	**46,763**	**41,034**	**54,363**	**49,999**	**53,213**	**53,852**
Germany	177,249	127,200	167,278	126,532	137,518	108,057
France	50,452	34,272	53,792	35,349	59,181	35,786
Italy	27,046	20,728	28,759	23,946	31,125	24,407
The Netherlands	20,414	15,033	23,754	17,573	17,559	12,057
Sweden	13,859	11,059	13,541	10,563	12,092	10,515
Belgium	13,294	8,974	12,935	8,535	10,970	7,043
Portugal	10,278	7,164	10,396	7,117	10,753	7,669
United Kingdom	9,551	14,806	10,382	5,148	7,567	4,917
Denmark	7,080	5,075	7,014	4,741	6,337	4,642
Greece	7,633	6,004	4,258	3,298	4,702	3,844
Finland	3,507	2,744	4,245	3,298	4,491	3,317
Austria	3,199	1,867	3,378	1,878	3,537	1,909
Spain	891	367	1,793	981	1,288	651
Luxembourg	923	482	1,114	579	958	465
Ireland	346	122	227	68	203	70

Source: Eurostat, 2001

The leading supplier of preserved mushrooms for industrial use was, by far, The Netherlands which accounted for 42 percent of imports by EU member countries, followed by China (17%), Spain (14%) and France (11%).

5.2.10 Provisionally preserved fruit and vegetables

Provisionally preserved fruit and vegetables were the tenth largest product imported into the EU in 2001, accounting for 2 percent of value imports and 2 percent in volume imports. Although the import value increased in 2001 by 4 percent compared to 2000, the import volume decreased by 3 percent.

The import share of provisionally preserved fruit and vegetables from developing countries showed the following figures:

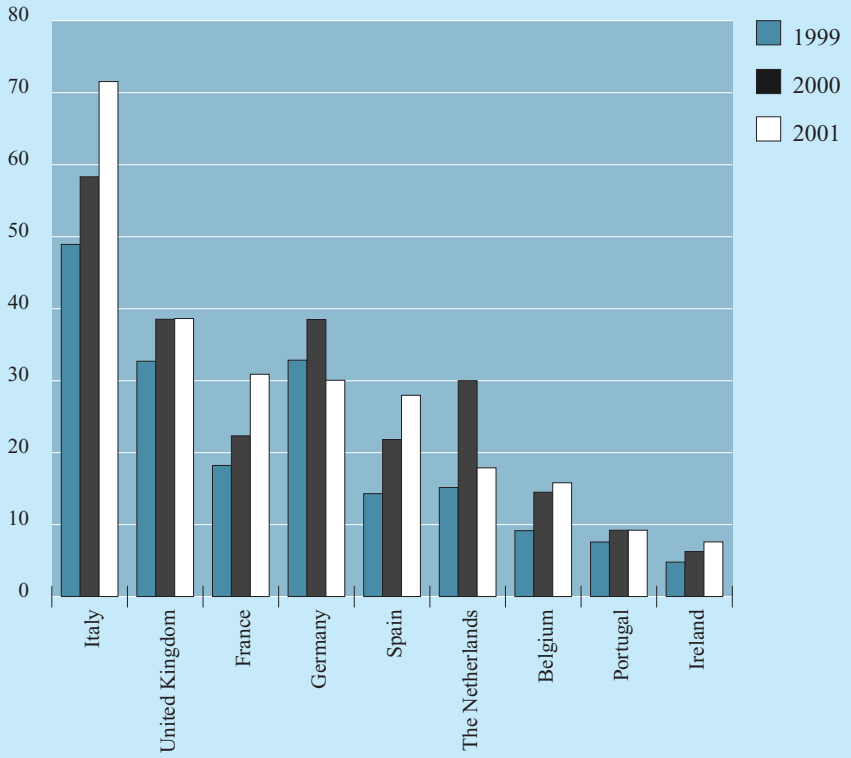
	1999	2000	2001
Import share in value	39%	42%	44%
Import share in volume	37%	36%	41%

The leading EU importer of provisionally preserved fruit and vegetables in 2001 was Italy, accounting for 28 percent of imports by EU member countries, followed by the United Kingdom (15%) and France (12%).

The leading suppliers of provisionally preserved fruit and vegetables to the EU from developing countries (share of total 2001 imports in terms of value)

China (14%), India (9%), Morocco (7%), Turkey (5%), Serbia Montenegro (3%).

Figure 5.17 Imports of provisionally preserved fruit and vegetables into the main EU countries, 1999 -2001, € 1,000



Source: Eurostat 2001

Table 5.12 Imports of provisionally preserved fruit and vegetables by EU member countries, 1999-2001
€ 1,000 / tonnes

	1999		2000		2001	
	value US$	volume	value €	volume	value €	volume
Total	**194,973**	**196,740**	**247,863**	**225,992**	**259,336**	**219,397**
Extra-EU	**107,758**	**103,647**	**139,437**	**111,097**	**151,850**	**118,576**
Developing countries	**77,432**	**73,305**	**103,745**	**82,454**	**113,799**	**89,344**
Italy	49,450	32,856	57,840	31,864	72,009	40,473
United Kingdom	33,263	44,968	38,449	45,961	38,065	42,994
France	18,327	18,165	22,541	19,226	30,690	25,481
Germany	32,781	29,229	37,876	29,246	30,610	24,936
Spain	15,427	16,106	22,338	21,604	27,844	24,488
The Netherlands	14,874	22,632	29,823	37,650	18,279	18,484
Belgium	9,196	11,627	13,640	16,030	15,012	17,613
Portugal	6,900	6,294	9,345	9,142	9,024	9,234
Ireland	4,900	3,154	6,455	3,727	7,334	5,118
Austria	2,335	3,857	3,105	4,161	3,423	4,388
Greece	3,019	3,792	2,084	3,641	2,515	2,584
Denmark	1,760	1,793	1,858	2,277	2,068	2,125
Finland	855	956	698	712	972	826
Sweden	1,627	1,207	1,221	503	960	371
Luxembourg	264	104	584	248	524	282

Source: Eurostat, 2001

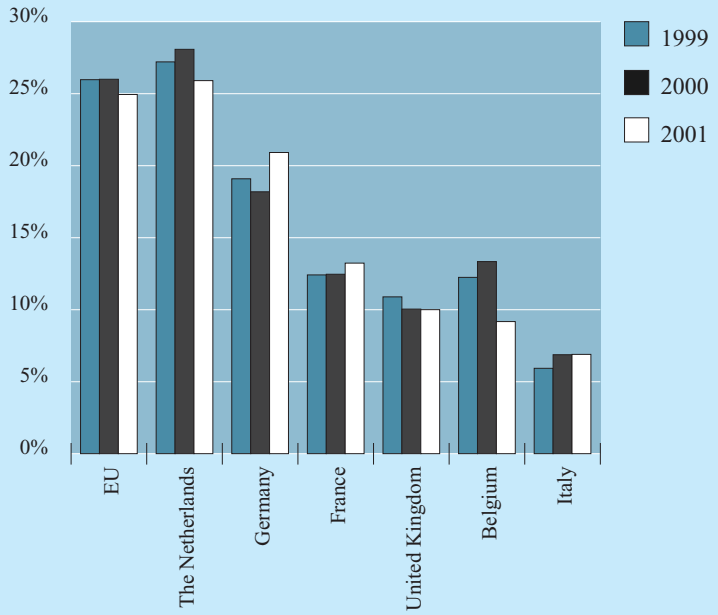
In 2001, the leading supplier of provisionally preserved fruit and vegetables was China, accounting for 14 percent of imports by EU member countries, followed by Spain (14%), The Netherlands (10%), India (9%) and Morocco (7%).

5.3 The role of the developing countries

Between 1999 and 2001, imports of preserved fruit and vegetables from developing countries decreased on a value basis from € 3.2 billion in 2000 to € 3 billion in 2001.
Volume, however, increased from 2.9 million tonnes in 2000 to 3.1 million tonnes in 2001.
The import share of developing countries in total EU imports remained rather stable as the following picture shows:

	1999	2000	2001
Import share in value	26%	26%	25%
Import share in volume	23%	24%	23%

Figure 5.18 Share of developing countries in preserved fruit and vegetables imported into selected EU countries, 1999-2001, % of import value



Source: Eurostat 2001

The Netherlands remained the leading importer of preserved fruit and vegetables from developing countries with an import value share of 26 percent, followed by Germany (21%), France (13%), the United Kingdom (10%), Belgium (9%) and Italy (7%).

Product groups	Main developing country suppliers (share in % of import value supplied by developing countries, 2001)	Share DCs of total import value, 2001
Fruit juice/concentrate	Brazil (15%), Thailand (1%), Cuba (1%), Turkey (1%)	25%
Canned vegetables	China (5%), Turkey (5%), Peru (4%), Morocco (3%), Thailand (2%), India (1%)	19%
Canned fruit	Thailand (8%), South Africa (5%), Kenya (3%), Costa Rica (3%), China (2%), Indonesia (2%), Philippines (2%)	33%
Frozen vegetables	China (4%), Turkey (2%), Ecuador (1%).	6%
Dried fruit	Turkey (30%), Tunisia (6%), Chile (4%), South Africa (2%), Iran (2%), China (1%).	60%
Frozen fruit	Serbia Montenegro (10%), Chile (3%), Morocco (3%), Turkey (2%).	26%
Dried vegetables	China (14%), Turkey (4%), Egypt (4%), Serbia Montenegro (3%), India (3%).	28%
Jam	Turkey (3%), South Africa (1%).	4%
Preserved mushrooms	China (16%), Indonesia (1%), Turkey (1%), Morocco (1%).	24%
Provisionally preserved fruit and vegetables	China (14%), India (9%), Morocco (7%), Turkey (5%), Serbia Montenegro (3%).	41%

Source: Eurostat, 2001
DCs = Developing countries

6 EXPORTS

In 2001, value exports by EU member countries of preserved fruit and vegetables amounted to € 9.7 billion, about the same level as 2000. In terms of volume, exports increased by 4 percent compared to 2000, amounting to 10 million tonnes.

The Netherlands and Belgium were the leading EU exporters, both accounting for 17 percent of total value exports, followed by Spain (14%), Germany (13%) and France (12%). These countries together accounted for 73 percent of total EU exports. The values exported by EU countries increased steadily between 1999 and 2001.

Table 6.1 Exports by EU member countries of preserved fruit and vegetables, 1999-2001
€ 1,000 / tonnes

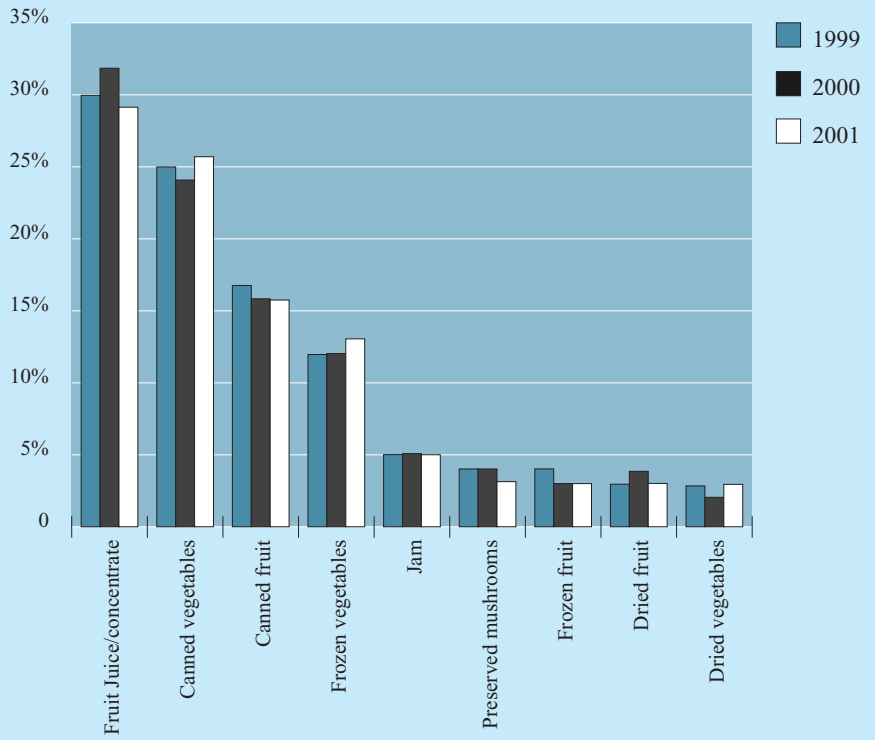
	1999		2000		2001	
	value €	volume	value €	volume	value €	volume
Total	**8,945,895**	**9,075,715**	**9,590,841**	**9,645,255**	**9,683,255**	**10,073,523**
Extra-EU	**1,526,622**	**1,182,423**	**1,803,895**	**1,468,376**	**1,895,580**	**1,506,529**
The Netherlands	1,607,517	1,578,496	1,632,223	1,582,792	1,675,399	1,737,989
Belgium	1,570,848	1,767,554	1,611,630	1,858,921	1,640,107	1,957,146
Spain	1,206,776	1,223,322	1,402,607	1,382,407	1,392,654	1,430,837
Germany	1,142,265	1,319,761	1,294,634	1,476,869	1,283,868	1,442,571
France	1,098,456	951,607	1,144,997	979,290	1,193,284	976,966
Italy	859,608	969,108	922,564	994,891	952,303	1,044,444
Greece	477,457	514,809	582,755	637,293	511,866	681,030
United Kingdom	299,927	249,962	305,518	222,111	303,436	214,346
Austria	246,776	209,167	292,418	224,139	300,034	259,535
Denmark	171,892	118,112	173,051	113,273	182,113	113,049
Sweden	69,092	53,982	79,332	52,984	76,230	57,936
Portugal	64,280	68,823	68,691	75,287	75,513	106,685
Ireland	57,905	36,905	56,056	29,682	72,931	35,860
Finland	17,621	13,062	20.822	13,741	20,348	13,462
Luxembourg	1,531	1,045	3,646	2,145	3,232	1,667

Source: Eurostat, 2001

In 2001, the leading destinations for preserved fruit and vegetables were Germany, France, the United Kingdom, and The Netherlands, receiving 55 percent of total exports by EU member countries. 80 percent of the export value was intra-EU oriented. Leading extra-EU destinations were the USA (6%), Switzerland (1%), Japan and Russia.

Fruit juice/concentrate was the leading exported product group (29% in value), followed by canned vegetables (26% in value), canned fruit (16% in value) and frozen vegetables (13%)in 2001. These three product groups accounted for 84 percent of total export value. The trade in these products, however, mainly consisted of re-exports to the other EU member states. The EU member countries exported relatively small amounts of dried fruit and vegetables.

Figure 6.1 Exports by EU member countries of preserved fruit and vegetables per product group, 2001
% of total export value



Source: Eurostat, 2001

Exports of the leading product groups in 2001 were as follows:

Fruit juice/concentrate
In 2001, total exports of fruit juice/concentrate amounted to € 2.8 billion or 3.4 million tonnes. This was a decrease in value by 9 percent but a stable volume compared to 2000. The Netherlands was the largest exporter of fruit juice/concentrate with a value share of 24 percent, followed by Germany (20%) and Belgium (18%).
The leading export destinations in 2001 were Germany (22% in value), France (21% in value) and the United Kingdom (13% in value).
87 percent of exports was intra-EU oriented. USA and Switzerland were the leading destinations outside the EU.

Canned vegetables
In 2001, total exports of canned vegetables amounted to € 2.5 billion or 2.4 million tonnes. These represented an increase both in value and volume of 9 and 6 percent respectively compared to 2000.
Spain was the largest exporter of canned vegetables with a value share of 23 percent, followed by France (18%), The Netherlands (16%) and Belgium (12%).
The leading export destinations in 2001 were Germany (19 % in value), USA (13% in value), the United Kingdom (11% in value) and France (9% in value).
70 percent of exports was intra-EU oriented. USA, Russia, Switzerland and Canada were the leading destination outside the EU.

Canned fruit
Total exports of canned fruit in 2001 amounted to € 1.6 billion or 1.7 million tonnes. Both value and volume exports remained stable compared to 2000.
Germany was the largest exporter of canned fruit with a value share of 29 percent in 2001, followed by France (17%), the United Kingdom (15%) and The Netherlands (11%).
The leading export destinations in 2001 were Italy (12% in value), Germany (12% in value), Spain (9% in value) and Greece (8% in value).
61 percent of exports was intra-EU oriented. Thailand, South Africa, Turkey and Kenya were the leading export destinations outside the EU.

Frozen vegetables
Total exports of frozen vegetables in 2001am ounted to € 1.3 billion or 1.7 million tonnes. Compared to 2000, this represented an increase of 8 percent in value and 10 percent in volume.
Belgium was the largest exporter in 2001 with a value

share of 46 percent, followed by France (14%), Spain (12%) and The Netherlands (10%).
The leading export destinations in 2001 were Germany (24% in value), France (16 % in value) and the United Kingdom (13% in value).
Intra-EU exports represented 92 percent of total exports. Leading destinations outside the EU were Switzerland and USA.

Jam
Total exports of jam in 2001 represented only 5 percent of the total export value of preserved fruit and vegetables (€ 522 million). This was an increase of 4 percent compared to 2000. The volume increased by 5 percent to 365 thousand tonnes in 2001.
France was by far the leading exporter with a value share of 25 percent, followed by Italy (13%), Belgium (13%) and Germany (12%).
Intra-EU exports represented 75 percent of total exports. Leading export destinations outside the EU were USA, Japan, Russia and Canada.

Preserved mushrooms
Total exports of preserved mushrooms amounted to € 314 million or 212 thousand tonnes in 2001.
Exports decreased in value by 8 percent, but increased in volume by 7 percent in 2001 compared to 2000.
The Netherlands was the leading exporter with a value share of 55 percent, followed by Spain (18%) and France (17%).
Intra-EU exports represented 85 percent of total exports. Leading export destinations in the EU were Germany and France, while USA and Switzerland were the leading destinations outside the EU.

Frozen fruit
Total exports of frozen fruit amounted to € 307 million or 245 thousand tonnes in 2001. Compared to 2000, both value and volume increased by 2 and 5 percent respectively.
Belgium was the leading exporter with a value share of 19 percent in 2001, followed by The Netherlands (15%) and Germany (14%).
Intra-EU exports accounted for 84 percent of total exports. Leading destinations in the EU were Germany and France. Japan, Switzerland and Poland were the leading destinations outside the EU.

7 TRADE STRUCTURE

7.1 EU trade channels

A large part of the preserved fruit and vegetables used in the EU food industry is imported, often as ingredient from other EU countries and from outside the EU. These products are then repacked or processed for re-export.

Preserved fruit and vegetables can reach their final destination by passing through different trade channels. The selection of the trade channel and the trade partner depends on the requirements of the final customer, usually the food processing industry. By selecting one specific channel and trade partner, other trade partners are often automatically included. It is important that the exporter is aware of the different channels in the market. Most exporters will sell by means of independent traders (importers) or sales agents based in EU countries.

The following major business partners can be distinguished for exporters of most preserved fruit and vegetables.

Agents
Agents are intermediaries executing the buying and selling orders of a customer against a commission (between 2 and 5 percent of the purchasing price). The agents never actually possess a shipment. Moreover, the products do not pass physically through the agents' hands and often not even through their countries of operation.
Two types of agents can be distinguished: buying agents and selling agents. The former represents the buyers, such as the food processing industry, compound houses or re-exporters. The latter represent the sellers, mainly exporters. Agents are usually well informed about the current market trends, prices and users.

Importers
Importers buy and sell preserved fruit and vegetables on their own account, mainly to the food processing industry and for re-export. Importers take 'long' or 'short' positions in the market depending on their expectations of future price trends. If an importer sells 'short', he is contracting to sell products, which he does not yet possess, while taking a 'long' position means that he has unsold products in his trading account.

Processing industry (processing importer)
Processing manufacturers/processing importers buy raw materials and semi-finished products to process them further, with the goal of selling these to the end-product manufacturers. For example, in the case of dried vegetables the processing importers clean, grade, reduce the humidity content and bacteria count before selling to the food industry. The processing manufacturers purchase preserved fruit and vegetables either directly or from importers or through the services of an agent. Specialised fruit processing industries supply semi-manufactured products to the bakery, dairy and ice cream industry. Cargill and the compound houses (see below) are examples of leading processing importers in The Netherlands. The compound houses supply their compounds in the first place to the beverage industry, the dairy industry and the ice cream industry.

End-product manufacturers
Some end-product manufacturers who need large quantities (on a regular basis) of ingredients purchase their ingredients directly from producers abroad, such as the beverage industry in the case of fruit juice and fruit juice concentrate. Another example is the jam industry, which buys substantial amounts of fruit pulp and frozen fruit directly from producers abroad. Leading importing manufacturers in EU countries are Unilever, Cadbury Schweppes, Parmalat and Danone. Many end-product manufacturers use processing importers or agents, as these offer a reference point situated within their own country.

Retail and food service organisations
Retailers carry out the final stage of selling preserved fruit and vegetables to consumers, accounting for a very large share of the total sales. The retail sectors hardly import directly, but buy from wholesalers or importers. In the case of jam and canned vegetables, retailers have a strong negotiating position due to the many substitution possibilities between products and suppliers, as well as the practice of private labelling. In the EU, large supermarket buying groups are Ahold (The Netherlands), Carrefour (France), Metro (Germany), Tesco (United Kingdom) and Aldi (Germany). Because of their much smaller size, the food service sectors do not usually import directly from source.

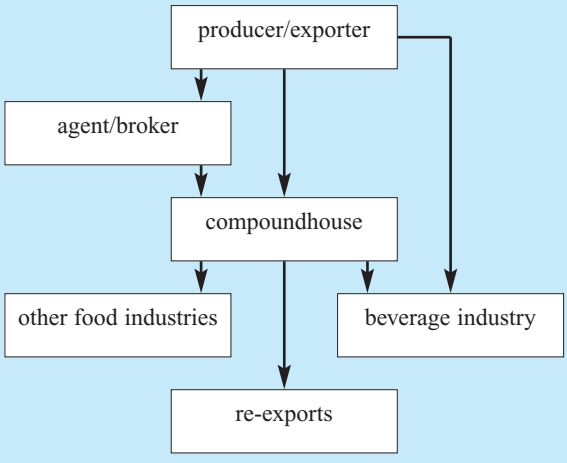
Packers
These organisations pack goods in standard packs for the European market. The (re) packers keep the goods on stock in their warehouse, at their own risk, and sometimes under their own brand or the private label of a customer. These packers sometimes function as importers as well.
More or less the same trade structure applies to all the products discussed in this survey. Many importers, agents, or repackers are specialised in more than one product group. For example, Catz Int. is specialised in dried fruit and frozen fruit and vegetables. Some importers also act as an agent.

Moreover, most importers trade in preserved fruit and vegetables in consumer packs and catering packs, but also in preserved fruit and vegetables for industrial use.

Potential exporters in developing countries should contact importers, agents and packers in the EU. These intermediaries have long established links with their customers and are in a better position (than foreign processors) to know the requirements of the local market and of individual end users. They supply the food processing industry and supermarkets chains and are financially able to support exclusive contracts and advertising campaigns, as well as to service special requirements.

There are few agents for juice, although they are involved in the juice trade throughout Europe (Amsterdam and Rotterdam serve as the gateways to Europe for Brazilian orange juice concentrate). Before a large share of the imports is re-exported, the concentrate is often processed by compound houses, which mix, pack and/or standardize the product into the basis for the manufacturing of a wide range of products. The four biggest compound houses or importers (Dˆhler-Eurocitrus, SVZ, Cargill and Hiwa) and the beverage industry are mostly supplied directly from the source or from tank farms. The activities of agents/importers are generally limited to responding to spot purchases from stock and searching for products of a different nature or of a special quality.

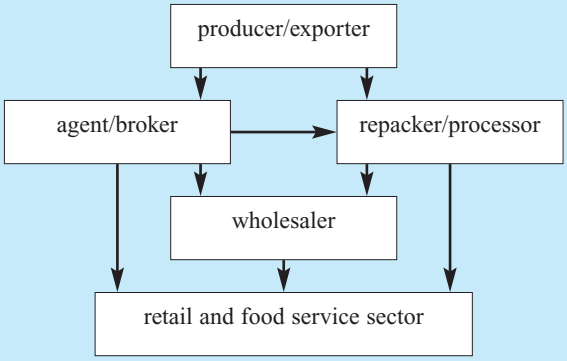
Figure 7.1 Distribution channels for fruit juice concentrate



More or less the same trade structure applies to the other product groups discussed in this survey. The type of food industry and the importance of the different channels, however, can differ. Many importers, agents, or repackers trade in more than one product group. Some importers also act as an agent.

The soup industry (dried vegetables), the sauce industry (sterilised vegetables), the pickles industry (semi-worked pickles), the frozen food industry and other large food manufacturers mostly import directly from source. Some, mostly smaller food manufacturers, are served by intermediaries, who may or may not repack or reprocess (cleaning, grading, and reducing the humidity content and bacteria count for dried products) the products. Often they pack the fruit and vegetables under their manufacturer's brand or a private label. Mostly, they function as importer, wholesaler and exporter at the same time.

Figure 7.2 Distribution channels for other preserved fruit and vegetables



7.2 Distribution channels for developing country exporters

Importers represent an interesting distribution channel for developing country exporters of preserved fruit and vegetables. Importers not only have experience and knowledge of the international market, they also have strong relationships with suppliers and buyers all over the world. Some of the importers have an Internet site, where interested parties can find more information on the field in which these importers are active.

Trade fairs are also important meeting points for developing countries' exporters and EU importers. A trade fair is a good opportunity for making personal contact between business partners. Please refer to Appendix 3.5 for contact details of trade fairs.

8 OPPORTUNITIES FOR EXPORTERS

Due to the characteristics of the preserved fruit and vegetable sector, the opportunities for exporters in developing countries lie in the following positions in the supply chain:

- Suppliers of ingredients to the food processing industry in the EU
- Suppliers of preserved fruit and vegetables in bulk to packers in the EU, who pack in consumer and food service units
- Subcontractors for the food processing industry and retail organisations. These subcontractors process fruit and vegetables and pack in consumer and food service units according to strict specifications and under their customers' labels in the EU. For example, beans and peas are harvested in African countries, sorted and washed immediately after harvest, processed and packed in consumer packing under the label of a UK retailer, then shipped to the distribution centre of the retailer in the United Kingdom and from there directly to the retail outlets.

The following developing countries have successfully developed the above-mentioned positions and now belong to the top source of EU food and drinks imports in 2001:

Brazil:	€ 4,038 million
Argentina:	€ 2,936 million
China:	€ 1,501 million
Thailand:	€ 1,284 million
Turkey:	€ 1,010 million
Chile:	€ 847 million

Competition in the food sector is strong and quality requirements are high. Most of the preserved fruit and vegetables are imported for industrial use and will be further processed and packaged in consumer or food service packing by the European food processing industry.

The leading product category of preserved fruit and vegetables for industrial use from developing countries is fruit juice concentrate, in particular orange juice concentrate, the main supplier of which is Brazil.

The production of some product categories, for example orange juice concentrate and bananas, is overwhelmingly in the hands of (large) multinational companies. This means that developing country exporters should seek markets segments in which small amounts of the product can be exported and in which developing country exporters are more easily able to compete. In this sense, market opportunities in the EU for developing country exporters lie in the production of tropical and subtropical products (exotics) which are hardly grown in Europe and in the production of organically grown products (see below).

Opportunities for exporters in developing countries are the following:

Extensive product documentation
A general trend in the food ingredients sector is that importers and food processors in the EU require extensive product documentation in order to guarantee food safety. This means that a product should include complete product specifications, instructions on how to store and to process, documentation on tracking and tracing, information on quality assurance (e.g. HACCP), or even ISO certification. An exporter capable of meeting these requirements will have an improved competitive position in the EU market for preserved fruit and vegetables.

Organic products
Healthy, natural and organic products are occupying an increasingly stronger position in the EU. Organic production is particularly attractive for growers in developing countries, since much of their food production is already organic or can easily be changed to organic (see Part B).

Adopt HACCP
Although exporters to the EU are not obliged to apply an HACCP system and their system will not be subject to control by the food inspection service in the importing country, adopting an approved HACCP system, or working following a similar principle of quality control, will be a very positive argument in export business. More information on HACCP and its adoption is provided in Part B of this survey.

PART B:
EU market access requirements

9 REQUIREMENTS FOR ACCESS

9.1 Non-tariff trade barriers

DOING BUSINESS IN THE EU: REQUIREMENTS FOR ACCESS
CBI's database on European non-tariff barriers is called AccessGuide. Exporters in developing countries can check relevant non-tariff barriers for preserved fruit and vegetables by going to www.cbi.nl/accessguide.
First you can register, then go to 'quick search' and select what you need under 'product group': prepared foodstuffs, beverages, spirits, tobacco...
You will find information on EU requirements for product safety, consumer health, etc. and requirements dealing with environmental issues and social standards.

In recent years, regulation on food products has become more complex and stringent. In 2002, the regulation EC 178/2002 was adopted, laying down the general principles and requirements of food legislation, establishing the European Food Safety Authority and stipulating procedures in matters of food safety. The regulation is commonly known as the General Food Law, although it is in principle not a law, but a regulation.
General rules for food hygiene have been laid down in the Directive 93/43/EEC. Hygiene is defined as all measures to ensure safety and wholesomeness of foodstuffs. The new regulation states explicitly that foodstuffs cannot be placed on the EU market if they are unsafe. This was, at least implicitly, already regulated through national food laws, but now there is an EU-wide explicit regulation. Moreover, the regulation stipulates that it is necessary to establish a comprehensive system of traceability within food business. Due to increasing consumer attention for food safety, the industry had already started initiatives focusing on chain management and labelling systems with which products can be traced back to the original producer. Now, legal measures have also been taken by the European Commission to deal with this issue of food safety.
The core aspects of the General Food Law will take force January 2005. So despite harmonisation efforts, exporters should realize that differences will, until then, still exist between EU member states. Exporters' products should therefore continue to comply with the legislation of the separate EU member states.

The market access for preserved fruit and vegetables is regulated through the EU basic regulation EC 1035/72, which stems from the Common Agricultural Policy to protect EU agricultural produce, producers and consumers. The regulation covers:
- quality standards;
- phytosanitary regulations;
- the entry-price system;
- duties;
- licences.

Moreover, there are regulations concerning packaging and labelling, food safety, food additives, contaminants and the environment. Please refer to www.europa.eu.int/eur-lex/en/search.html for the integral text of the directives and regulations mentioned in the sections below.

9.1.1 Quality and grading standards

Quality is the sum of all aspects of your product indicating that it is 'fit for use', meeting all legal and consumer requirements: product safety, taste, colour, structure, etc. The quality of your product has to be warranted by means of a quality control system: the complete set of measures, methods of sampling, control and analysis, necessary for monitoring the product quality. A quality control system is primarily the responsibility of the producer himself, but also has to comply with legal requirements and with product specifications required by buyers.
Two systems to demonstrate reliability of your quality control system are ISO 9000 and HACCP. Other regulations on food products are the product regulations, labelling regulations, the approved additives regulation and the regulations concerning pesticide residues.

HACCP
The need for good quality management takes on increasing importance. The HACCP (Hazard Analysis and Critical Control Points) procedure typically applies to the food-processing industry. The EU Directive on Hygiene for Foodstuffs (93/43/EC) which became effective in January 1996, stipulates that: 'foodstuff companies shall identify each aspect of their activities which has a bearing on the safety of foodstuffs and ensure that suitable safety procedures are established, applied, maintained and revised on the basis of the HACCP system'. All food processors in the EU member countries are legally bound to have an HACCP system or they must be working on implementing an HACCP system. The HACCP system is applicable to companies which process, treat, pack, transport, distribute or trade foodstuffs. These companies are forced to understand (and act against) the possible hazards associated with food production at all stages, from growth, processing, manufacture and distribution, until the point of consumption. This includes macro-biological (vermin), microbiological (viruses, bacteria, moulds), toxicological (chemical contamination by pesticides or environmental contaminants like heavy metals or dioxin), or physical (wood, metal, glass, plastic or fabric) risk. The HACCP regulation is also of

importance for exporters in developing countries, because responsibility is passed all along the production chain. Importers of food products in the EU will be legally held responsible for those products. Although exporters to the EU are not obliged to have an HACCP system and their system will not be subject to control by the food inspection service in the importing country, having an approved HACCP system, or working following a similar principle of quality control, will be a very positive argument in export business. Importers sometimes even require exporters work with HACCP.

It is important for exporters in developing countries it is important to know that, as a consequence of the EU General Food Law the EU is preparing legislation, which will require in the near future that countries who want to export food products to the EU should have their own national legislation, requiring that exporters have a quality control system similar to HACCP and can trace their products' origin.

ISO 9000

The ISO 9000 standards provide a framework for standardising procedures and working methods, not only with regard to quality control but to the entire organisation: from purchasing to processing, quality control, sales and administration. This means that quality, health, safety and environmental management programmes become strongly interwoven with the overall ISO management plan. ISO 9000 requires that you exactly describe your processes, and then follow these procedures exactly. It does not essentially address product safety and quality, but it is a guarantee that you always do things the same way. Your ISO 9000 system has to be certified and regularly audited by an authorised certifying body (like Lloyd's, Veritas, SGS; present in many countries). Also, one has to bear in mind that being certified is not a one-time exercise. A certificate is only valid for three years. In order to maintain the certificate, regular audits, both internal (1-2 per year) and external (2 times per year), are needed. Consequently, the company should have a quality manager in-house who is responsible for the quality management policy, procedures, implementation, monitoring and documentation thereof, and that quality management consultants need to be hired for external audits.

Therefore, a decision to become ISO 9000 certified means a firm commitment, which will draw on the company's human and financial resources and will add procedures and paper work. Nevertheless, manufacturers who have obtained an ISO 9000 series certificate possess an important asset. The certification may be a vital factor in the selection process applied by trade partners in Europe.

Benefits of ISO 9000 certification

- Improves image
- Inspires confidence
- Increases credibility
- Generates recognition
- Enhances acceptability
- Reduces liability disputes
- Creates transparency and awareness
- Enables identification of weaknesses
- Systematises efforts to increase quality
- Enables identification of opportunities to increase efficiency
- Provides an important source for reference and monitoring
- Enables identification of opportunities to increase customer satisfaction

For further information, please check the website of ISO: www.iso.ch

Product regulation

There are many product regulations on preserved fruit, vegetables and mushrooms. However, the regulations differ per species of fruit or vegetables. For detailed information, contact:

- Head Inspectorate for Health Protection in The Netherlands
- Your embassy in the EU member country
- The embassy of the EU member country in your country.

Organic food

The EU market for organic food products grew rapidly in the 1990s. The main principles for organic production at farm level and the rules that must be followed for the processing, sale and import of organic products were established by the passing of Council Regulation EEC 2092/91 and its supplement EC 1804/99. This regulation is very complicated and difficult, which makes it necessary for an exporter to the EU to consult experts on this matter. Use of the term 'organic' is now limited in the European Union to products derived according to the principles of production and the rules of processing defined in the regulation. Under EU Community rules, organic farming can be defined as: a system of managing agricultural holdings that uses a variety of more environmentally friendly crop farming practices and involves major restrictions on the use of fertilisers and pesticides.

IFOAM (International Federation of Organic Agriculture Movements) was a major contributor to the organic standards of the EU adopted in Regulation 2092/91. It is important, however, for exporters to be aware that agricultural units, processors as well as their

products, and also the exporting company itself must be certified by EU recognised control bodies to confirm that they meet the required EU or specific national standards before their products can be offered for sale in EU markets. However, a manufacturer should realise that certification is an expensive matter and that he or she will have to make considerable financial sacrifices when deciding to obtain a certification. For more information on certification, please contact SKAL, Ecocert, Soil Association or other EU inspection organisations. For further details, please refer to CBI's Market Survey 'Organic Food Products'.

Novel food

GMO-free food products are products that are produced without genetic engineering. Processors using GMO in Europe are still limited to only a few products The market for novel food products, in particular that of food products which are made with or are made of genetically modified organisms (GMO), is growing in the EU, mainly as a result of the production of a few multinational companies.

The most important products in this category are soya and maize. In fact, the market for soya consists almost fully of soya that is no longer GMO-free, with the exception of certified organic products. The EU has issued Recommendation 97/618/EC and Directive (EC) 258/97 concerning novel foods and novel food ingredients. Furthermore, the EU recently issued a separate labelling regulation for genetically modified foodstuffs, Regulation (EC) 1139/98. A growing share of food producers demand GMO-free raw materials, since an increasing number of consumers and chain stores do not choose to purchase food products that are genetically modified. The control of GMO-free product claims is expected to become stricter within the EU.

Fruit juice/concentrate

EU Directive 93/45/EC specifies a definition of fruit juice and nectar. Fruit juice is comprised of 100 percent juice i.e. no additions of water or other ingredients. Fruit nectar consists partly of fruit juice and partly of water and sugar. The proportion of fruit juice depends on the kind of fruit and varies between 25 percent and 50 percent. These definitions apply in all European countries. Fruit juice drinks are not covered in the EU fruit juice directive, and legislation may vary from country to country. Usually they are required to contain a minimum of approx. 10 percent of comminuted/crushed/squeezed fruit and they may contain sweeteners, flavourings, colouring and sometimes added vitamins. The addition of vitamins is still not harmonised within the EU member countries. The differences turn up in regulations about:

- Which vitamins are allowed or not
- In which products they are allowed or not
- In which quantity
- Under what conditions the addition of vitamins should be labelled

Due to the high content of water (90%) in fruit juice drinks, it is not an option for producers in developing countries to export this product to EU countries. In general, in The Netherlands, the UK and Belgium vitaminisation is allowed under certain conditions, in Germany the addition of vitamins is regulated more strictly while in France it is not allowed. However, it is always wise to consult experts about the precise conditions, before starting to export to these countries.

Jam

Depending on the total content of fruit, EU Directive 79/693/EEC and its amendment Directive 88/593/EEC regulate the use of the terms *jam, full fruit jam* and *marmalade*. The use of the term marmalade may and should be used when 200g per kg consists of citrus fruit, of which 75g consists of the inner pulp. It is important to know that no preserving agents, no colours and no flavours are allowed in jam and extra jam. If the amount of sugar in jam is lower than 60 percent, the term jam may only be used if the following labelling conditions are met:

- a statement concerning the lower sugar content, such as *halva, light, less sugar added* or *no sugar added*;
- the name of the ingredient which replaces the sugar (where applicable);
- mentioning of 'sweetened by sweetener' (or 'sweetened by [name of sweetener]').

More additives are allowed in jam than in extra jam. Additive regulations have been removed from the jam Directive and set in a separate additive Directive (95/2/EC). In most fruit jam, the minimum required fruit content is 35%, whereas the minimum required fruit content in extra jam usually amounts to 45%. In extra jam, only full fruit or fruit pulp (fruit after removing peel and stone, and cut into pieces) is allowed and no fruit puree, dried fruit or provisionally preserved fruit.

Table 9.1 Regulations concerning the use of the term jam (fruit pulp and purée in gr. per kg)

	Jam	Extra Jam (full fruit)
rose hip, blackberry, quinces	>250	>350
ginger	>150	>250
cashew	>160	>230
passion fruit	> 60	> 80
other fruit	>350	>450

Source: Directive 79/693/EEC

The Approved Additives regulation

The Approved Additives regulation governs the application of non-nutritive substances, which are allowed to be added to some or to all food products, to produce a certain effect. Only specific additives with a maximum concentration may be applied to certain groups of preserved fruit and vegetables. These additives are specified in Table 9.2. The regulations are based on Directive 95/2/EC on food additives other than colours and sweeteners, which is incorporated by the EU member states into their national legislation. Regarding the product groups not quoted in the list below, a more general list of additives applies, which is too extensive to list here. Refer to the national Food Inspection Service or to the relevant EU Directives for details.

Table 9.2 Permitted additives and the maximum concentration thereof

Preserved fruit and vegetables	Additives	Maximum concentration
Fruit juice and nectar		
Fruit juice	E300 ascorbic acid	quantum satis[1]
	E330 citric acid	3 g/l
Grapefruit juice	E296 malic acid	3 g/l
Grape juice	E170 calcium carbonate	quantum satis[1]
	E336 potassium tartrate	quantum satis[1]
Pineapple juice and passionfruit juice	E440 pectin	3 g/l
Fruit nectar	E270 lactic acid	5 g/l
	E300 ascorbic acid	quantum satis[1]
	E330 citric acid	5 g/l
Frozen or deep-frozen raw fruit and vegetables	E300 ascorbic acid	quantum satis[1]
	E301 sodium ascorbate	quantum satis[1]
	E302 calcium ascorbate	quantum satis[1]
	E330 citric acid	quantum satis[1]
	E331 sodium citrate	quantum satis[1]
	E332 potassium citrate	quantum satis[1]
	E333 calcium citrate	quantum satis[1]
Dried fruit		
Apricots, peaches, grapes, plums, figs	Sulphur dioxide	2000 mg/kg
Bananas	Sulphur dioxide	1000 mg/kg
Apples, pears	Sulphur dioxide	600 mg/kg
Others	Sulphur dioxide	500 mg/kg
White dried vegetables	Sulphur dioxide	400 mg/kg
Dried potatoes, incl. flakes, powder	Sulphur dioxide	400 mg/kg
Jam, jelly and marmalade	E440 pectin	quantum satis[1]
	E270 lactic acid	quantum satis[1]
	E296 malic acid	quantum satis[1]
	E300 ascorbic acid	quantum satis[1]
	E327 calcium lactate	quantum satis[1]
	E330 citric acid	quantum satis[1]
	E331 sodium citrate	quantum satis[1]
	E333 calcium citrates	quantum satis[1]
	E334 tartaric acid	quantum satis[1]
	E335 sodium tartrate	quantum satis[1]
	E350 sodium malate	quantum satis[1]
	E471 monoglyceride and diglyceride of fatty acid	quantum satis[1]
	E400 alginic acid	quantum satis[1]

	E401 sodium alginate	quantum satis[1]
	E402 potassium alginate	quantum satis[1]
	E403 ammonia alginate	quantum satis[1]
	E404 calcium alginate	quantum satis[1]
	E406 agar-agar	10g/kg (separate or in combination)
	E407 carragenan	10g/kg (separate or in combination)
	E410 locust bean gum	10g/kg (separate or in combination)
	E412 guar gum	10g/kg (separate or in combination)
	E415 xanthane gum	10g/kg (separate or in combination)
	E418 gellan gum	10g/kg (separate or in combination)
	E509 calcium chloride	quantum satis[1]
Canned fruit and vegetables	E260 acetic acid	quantum satis[1]
	E261 potassium acetate	quantum satis[1]
	E262 sodium acetate	quantum satis[1]
	E263 calcium acetate	quantum satis[1]
	E270 lactic acid	quantum satis[1]
	E296 malic acid	quantum satis[1]
	E300 ascorbic acid	quantum satis[1]
	E301 sodium ascorbate	quantum satis[1]
	E302 calcium ascorbate	quantum satis[1]
	E325 sodium lactate	quantum satis[1]
	E326 potassium lactate	quantum satis[1]
	E327 calcium lactate	quantum satis[1]
	E330 citric acid	quantum satis[1]
	E331 sodium citrate	quantum satis[1]
	E332 potassium citrates	quantum satis[1]
	E333 calcium citrates	quantum satis[1]
	E334 tartaric acid	quantum satis[1]
	E335 sodium tartrate	quantum satis[1]
	E336 potassium tartrate	quantum satis[1]
	E337 sodium potassium tartrate	quantum satis[1]
	E509 calcium chloride	quantum satis[1]
	E575 glucono-delta-lactone	quantum satis[1]

[1] The quantity of an additive, added to food and drink wares consistent with good production methods, which is not larger than necessary for the goal aimed at, under the condition that the consumer is not deceived.

The food additives should be mentioned in the list of ingredients on the label of food products in consumer packs either by their full name or by their E-number. There are E-numbers for different kinds of food additives, such as bleaching agents, preservatives, colouring agents, brighteners, anti-oxidants, jellifying agents, etc. Even when food additives are allowed, they can be unhealthy for people who suffer from certain diseases or allergies, and therefore can be used only in limited concentrations. This especially concerns preservatives and colouring agents.

Bear in mind that legislation concerning food is continuously changing. You are, therefore, recommended to check the up-to-date situation with importers or the relevant national Food Inspection Service.

Besides these health standards, which are initiated by the government, the end-users have their own specifications, which should be met by the suppliers. These specifications vary from demands concerning colour, correct and constant quality, to labelling, packaging, etc. Most of these specifications are the result of the stringent (health) regulations in European countries, but in some cases, the result of higher quality demands set by the end-product processors rather than the government. Compliance with the quality standards demanded by the importer is essential, and failure to do so results in goods being refused or only accepted at considerably lower prices for further processing.

9.1.2 Packaging, marking and labelling

The general trend in Europe is towards facilitating re-use and recycling of packaging through incentives and disincentives, such as levies and taxes, and through mandatory or voluntary restraints. In order to harmonise the different forms of legislation, the EU has issued a directive for packaging and packaging materials (Directive 94/62/EC) in which minimum standards are regulated. Among other measures, the directive sets maximum levels of concentration of heavy metals in packaging and describes requirements specific to manufacturing and composition of packaging. The maximum concentration of lead, cadmium, mercury and chromium (VI) in packaging is 100 ppm. This directive has been transposed into the national legislation of the member states. However, the implementation may take differing forms. Various programmes are in operation in the different member states.

Many EU countries (but not all) now have legislation requiring that packaging for consumer products (as cans, glass jars, cartons and plastic bottles) is taken back and collected by retailers and producers. If that is not possible (i.e. for one-way packaging) a contribution has to be paid for each package to a central co-ordinating organisation that has taken over the responsibility of collecting and re-processing.

Exporters in developing countries targeting the European market have to be aware of these regulations and take appropriate measures, in order to become or remain well-matched trade partners for European businesses. Most of the time, packaging policy does not affect 'foreign' manufacturers because importers will be held responsible for the packaging. However, sensible marketing requires taking the obligations of the importer into consideration. That means that packaging (transport packaging, surrounding packaging and sales packaging) materials should be limited and re-usable or recyclable. Otherwise, the importer will be confronted with additional costs, thus reducing the competitiveness of the exporter.

There are more demands concerning packaging depending on the product group, see below.

Fruit juice/concentrate

Orange juice concentrate, which is by far the leading import product, is almost exclusively imported from Brazil, shipped in bulk vessels at – 200 C under nitrogen (to exclude it from oxygen so as to avoid oxidation). Other concentrates are mainly packed in double polyethylene bags in 200 litre (or 266 kg) drums. Some of the larger firms, which used to accept simple capping of drums, nowadays require approved security seals. Aseptic drums of 200 litre are also used for fruit juice concentrate. Other forms of aseptic pack are used for certain tropical products, such as banana purée and mango pulp. Aseptic packed products are sterile items, packed and sealed into sterile packaging under sterile conditions, so that no subsequent heat treatment or refrigeration is needed to preserve them until the pack is opened.

Tropical fruit pulp and purée is still in many cases hot-packed in metal cans of 3-5 kg, but most buyers prefer aseptic bulk packaging. New bulk-packaging technologies are being developed for liquid foodstuffs that are appropriate for the distribution of these product groups. The objective of the new technologies is to achieve economic handling, while maintaining product sterility. Examples are pallet-size, bag-in-box systems and flexi tanks. Products can also be packed deep-frozen in cartons of 20-25 kg or in drums of up to 200 litres.

Canned fruit and vegetables

Canned fruit and vegetables for catering use are often hot-packed in metal cans of 3-5 kg. In the catering sector, two thirds of the sterilised vegetables purchases consist of cans, while one third is packed in glass. Importers generally expect the following features of cans:

- well-coated inside (especially the seam);
- electronically controlled capping and seaming;
- the can structure and seaming should enable a two-year shelf life, without causing positive pressure due to hydrogen production.

Canned fruit and vegetables for the retail market are mainly sold in cans of 225 g, 425 g and 825 g net weight (product weight, including brine). The packaging in glass jars instead of metal cans is still gaining popularity in the EU, partly because fruit and vegetables in glass stands for a quality product. The share of glass as a packaging material is particularly high in The Netherlands (60 percent in 1999), however in Germany and Belgium the use of glass jars is gaining popularity. The can and glass jar industries have reduced the weight of the packaging (both glass and metal) considerably. Still, the metal cans are lighter and stronger than glass jars.

Dried fruit and vegetables

Bulk-packaged, dried tropical fruit is usually packaged in export carton boxes lined with polyethylene, containing two or four 5 kg boxes.
Dried vegetables are nowadays mostly packed in polyethylene. It is generally used in the form of a closed bag inside paperboard cartons, fibreboard corrugated boxes (bag-in-box system) or multi-wall sacks. Polyethylene liners may be heat-sealed to give an air-tight closure, although some air permeates gradually through the polyethylene itself. Vacuum packaging is also used but on a small scale.

Packages suitable for palletisation are gaining in popularity, since they reduce handling costs and

damage to the product. Rectangular boxes are more suitable for palletisation than paper sacks or drums. Packages normally vary between 5 kg and 25 kg.

Jam
Jam and marmalade on the retail market are sold in glass jars, generally containing between 300 g and 450 g.

Frozen fruit and vegetables
Frozen fruit and vegetables are mostly packed in paperboard-corrugated cartons of 10, 15, 20 and 25 kg, although packaging in polyethylene also takes place. In the case of frozen vegetables, packaging in octobins, which are large paperboard corrugated cartons, is gaining popularity. However, not all manufacturers possess the equipment to handle this kind of packaging.

The Netherlands Food and Drug Act contains special regulations concerning the labelling of food products, which are in line with the EU Directive 79/112/EC which harmonised labelling requirements throughout the Community. The labelling requirements listed below generally apply to all preserved fruit and vegetables specified in this guide. Nevertheless, there are some exceptions, depending on the kind of product or type of fruit or vegetable. For specified information, contact The Netherlands Horticulture Commodity Board or relevant trade associations.

The labels on food products for *industrial use* in the EU should include the following information (in English or in the language of the importing country):
- Product name
- Batch code/lot identification
- Name address of manufacturer/exporter
- Net weight
- Recommended storage conditions.

The labels on food products in *consumer and food service packing* in the EU should be in the language(s) of the country where the product is put on the market and should include the following information:
- Product name, variety and type;
- 'Best before' date and storage conditions where necessary;
- A list of ingredients, including food additives; quantitative labelling (in %) is required for those ingredients mentioned in the name of the product or pictured on the label;
- Net weight (and leak weight when applicable);
- Usage instructions, in the case the products cannot be consumed or prepared properly without these instructions;
- Name, address of the packer/exporter/importer located in the EU;
- An indication of the batch of production, which may be specified in code;
- Country of origin.

Moreover, the EU has legislation, which forbids health claims that cannot be upheld scientifically. Medical claims are forbidden altogether. Manufacturers should take into account that consumer protection is a vital issue in this field and that illegal claims will be heavily penalised. Under a proposed plan propagated mainly in the UK, The Netherlands and Belgium, companies would have to ensure that products conform to acceptable safety standards, with assessment being executed by qualified experts. Because consumers would need to make informed choices about which products to buy, a list of permitted health claims (backed by scientific evidence) should be drawn up. The information would then be collected and managed centrally so that it could be accessed easily (for example, in case of product recall). A similar system is already in operation in The Netherlands and Belgium.

Regarding the exports of preserved fruit and vegetables in consumer and catering packs, all details of labelling should be agreed and specified in consultation with the importer or end-product supplier (supermarket, wholesaler, etc.), who has the correct information regarding the legal requirements.

For more information about environmental regulations concerning packaging methods, please refer to CBI's AccessGuide at www.cbi.nl/accessguide.

Furthermore, the accompanying documentation must provide details of any treatment the product has undergone and any further information specified in the contract with the importer.

9.1.3 Trade-related environmental measures
Environmental aspects of products have become a major issue in Europe in recent periods. Depending on the product group in question, environmental aspects may play a vital role in preparing for exports to the European market. Besides governmental actions (legislation and regulation), a strong consumer movement is noticeable especially in the northern parts of the EU (Scandinavia, Germany, The Netherlands and the United Kingdom). 'The environment' is more than a trend. It is a lasting issue seen for all products and even services. Therefore, manufacturers have to view their products and production processes not just by looking at traditional aspects like price, quality, customer demands and standards, but also at the environmental aspects. It is the objective of this section to briefly highlight several aspects that currently play a major role in the EU.
Exporters of preserved fruit and vegetables for industrial use must be aware of the health and environmental considerations of European customers and try to satisfy these customer needs by offering products which comply with both legislative and market requirements.

Financial instruments in the EU
Besides legislation, one of the instruments of the EU to promote environmentally sound products is the awarding of (tariff) preferences or the levying of so-called 'environmental taxes' on products. An example of preferential systems is the General System of Preferences (GSP) encouragement regime. Under the GSP, developing countries are exempted from the main WTO principles of reciprocity and non-discrimination (see Section 1.4). Since May 1998 the current GSP, which covers the period 1999-2001, includes an encouragement regime to stimulate developing countries to establish and implement trade related social and environmental policies (Regulation EC 1154/98). Import tariffs for countries, producing in an environmentally friendly and humane way, may be reduced by 15-35 percent for a selection of products. For countries that already receive maximum preference, the encouragement regime may not prove to be a direct incentive. For more details on GSP, please refer to CBI's Guide 'Exporting to the European Union'.

It is clear that the EU is trying to promote cleaner production through the awarding of financial incentives. On the other hand, in the EU, and in some member states in particular, various financial instruments are being used to discourage the entrance of polluting products in the market. This takes place through the establishment of specific taxes. A very specific tax is the so-called 'ecotax', which is placed on energy consumption. These taxes can apply to both private households and to companies. A complete list of environmental taxes in the European Union Member States, plus Norway and Switzerland can be found at www.europe.eu.int/comm/environment.

Sustainable development for businesses
The concept of sustainable development, adopted by nearly all the countries in the world which participated in the 1992 Rio de Janeiro Conference, represents the philosophy that economic development should automatically take into account the issue of the environment, recognising the fact that polluting activities now will have great (negative) impacts on the way future generations can live. In this respect all parties, including the general public but also manufacturers, are asked to accept their social responsibility and minimise the environmental impact of their activities. In recent years, issues such as (environmental) Life Cycle Assessment (LCA) of products, Cleaner Production (CP) and Ecodesign have all become important tools for companies to improve on the environmental performance of their products and production processes. These tools enable companies to analyse where the environmental impacts are the largest and how they could improve on these points. This can lead to both internal (improved efficiency) and external (perceived image) advantages.

The results of applying the above tools can be company-internal improvements in environmental performance. However, in order to be able to use the environmentally sound approach of a company towards its products and production processes, 'green' marketing tools such as Ecolabels (for products) and environmental management standards (for the whole organisation) have been created both by governments and private parties.

Environmental labels
The hallmarks for environmentally sound products are normally referred to as Ecolabels. Such a hallmark indicates that the product (including its full manufacturing process) has a reduced impact on the environment when compared to similar products. Ecolabels have been developed at various levels, applicable throughout Europe, and national labels such as the Netherlands Milieukeur, the German Blue Angel and the Scandinavian White Swan. Participation in such an Ecolabel scheme is on a voluntary basis. In the case of preserved fruit and vegetables, organic labelling indicates that the product has been certified as being organic.

Organic production and labelling
Organic agriculture is the strictest of the environmentally sound agricultural practices. Its main focus is on minimising environmental damage and on sustaining or building soil fertility. Organic agriculture is commonly perceived as refraining from the use of chemical inputs, such as synthetic fertilisers, pesticides and herbicides or defoliants. More environmentally sound alternatives are suggested to replace chemicals, such as crop rotation, particularly incorporating legumes, the careful management and use of manure and crops wastes, the use of appropriate cultivation techniques, natural and biological pest and disease control measures and mechanical and other non-chemical weed control techniques. In many regions of the world, agricultural systems equivalent to what is now defined as 'organic' farming have existed for centuries.
In order to make agricultural products from organic sources easily recognisable to consumers, EU "organic" labels have been introduced. Organic production and labelling is covered by Council Regulation (EEC) No 2092/91 as a means of providing consumers with a guarantee of origin, preparation, processing, and packaging of products.
The processing of organic crops is also subject to strong requirements of the said regulation.

Under the EU regulation, the marketing of organic produce from third countries is only permitted where the Commission is satisfied that the imported goods have been produced according to rules equivalent to those of the European Union and where the producer has obtained a certificate of inspection from a

competent authority in the third country. Exporters from non-EU member states can indicate their interest in obtaining certification for organic production by contacting either an international inspection organisation, or a national organisation from an EU member state, designated as competent authority under Regulation No 2092/91.

The EKO quality label is the label in The Netherlands that guarantees the organic origin and quality of agricultural products. The organisation SKAL is the holder of the officially registered EKO quality symbol. Internationally, SKAL is a member of IFOAM (International Federation of Organic Agriculture Movements). It provides services in the field of inspection and certification, both nationally and internationally, acting as an independent third party. Other important EU certifying organisations operating internationally include BCS and Naturland (Germany), Ecocert (Germany, France, Belgium, and Italy) and the Soil Association (United Kingdom) and KRAV (Sweden). For more information, please refer to CBI's Market Survey 'Organic Food products'.

Fair trade labels
Fair trade organisations are trading organisations that promote the development of self-reliance and empowerment, through establishing fair trade relations. Examples of fair trade organisations are Max Havelaar Foundation and TransFair International. The objective of Fair trade organisations is to guard the interests of small farmers in developing countries by promoting the sale of their (agricultural) products. In order to guarantee that the product the consumer buys is grown under fair conditions, a label can be awarded which indicates that the grower has received a fair return. Although this label is mostly intended to promote fair trade, there is a (small) environmental aspect in it, to the extent that farmers are stimulated to apply sustainable agriculture. For more information, interested parties can contact Fairtrade Labelling Organizations International at www.fairtrade.net.

Environmental standards
The Ecolabelling procedures are purely aimed at the products and indicate that the product with a label has a reduced impact on the environment. If a manufacturer wants to indicate to external parties that he is manufacturing in an environmentally sound way, then he can comply voluntarily with the following standard:
- ISO 14001

Both standards are based on the ISO 9000 series of standards for quality management. The relevance of the ISO 14001 standard for the future can be clearly seen by following the development and adoption of the ISO 9001 and ISO 9002 quality standard. Although voluntary, customer pressure is resulting in the ISO 9001 and IS0 9002 quality standard becoming increasingly necessary for doing business around the world. Similarly, the ISO 14001 environmental management standard may become a *de facto* requirement for being able to compete in many regions of the global marketplace.

Biotechnology
Presently, there is much opposition in Europe against genetically manipulated foodstuffs; maize and soya are two of the most prominent examples of these so-called novel foods. Although increasingly practised, biotechnology can bring risks for the environment. In 1997, the EU issued Recommendation 97/618/EC and Directive 258/97/EC concerning novel foods and novel food ingredients. Cloned varieties could diminish the genetic diversity. Genes originating from transgene crops could transfer to 'wild family members'. Until now there are no satisfactory international standards for biological safety or for the patenting of living organisms and genetic material. However, there are plans to add a biotechnological protocol to the United Nations' 'Agreement on Biological Diversity', which was concluded after the 'Earth Summit' in 1992 in Rio de Janeiro. Public opinion will be vital in determining market opportunities for genetically modified food products.

Product-related issues
When *canning food*, it is important to completely control the elimination of bacteria, which can cause diseases or produce poisonous toxins or deteriorate the product. The most virulent species is the botulinum bacteria. Even a taste of food containing this toxin can

Useful Internet sites

EUR-LEX (official documents and legislation)	www.europa.int/eur-lex
Environment Directorate General	www.europe.eu.int/comm/environment
SKAL	www.skal.com
Max Havelaar Foundation	www.maxhavelaar.nl
Fairtrade Labelling Organisation	www.fairtrade.net
CBI	www.cbi.nl
AccessGuide	www.cbi.nl/accessguide

be fatal. Whether food should be processed in a pressure canner or autoclave (i.e. sterilisation > 1230 C) or boiling water canner (i.e. pasteurisation at approximately 950 C) depends on the acidity of the food. Acidity can be natural, as in most fruit, or added. Low-acid (pH>4.6) canned food contains too little acidity to prevent the growth of the botulinum bacteria, while acid food (pH<4.6) contains enough acid to block their growth or destroy them more rapidly when heated.

Contrary to fruit, vegetables are not acid, and therefore should be acidified by using lemon juice, citric acid or vinegar, or fully sterilised. Processing in boiling water is not recommended as an alternative to acidification of low-acid food.

Information
For detailed information about environmental aspects relevant to trade, please refer to CBI's AccessGuide.

9.2 Tariffs and quota

In general, all goods entering the EU are subject to import duties. The level of tariffs depends on:
- country of origin;
- product.

The trading environment for preserved fruit and vegetables for some products is liberal, but the more highly processed the product, the higher the tariff. Imports of preserved fruit and vegetables from a number of developing countries (see Annex 4 of Regulation 2820/98/EC) are subject to reductions on import duties under the GSP scheme. In order to benefit from GSP treatment, exporters have to provide a 'Form A' certificate, which is issued by the appropriate authorities in the respective country. For up-to-date information on import tariffs, please contact Customs in the country of destination.

In June 2001, the European Commission adopted a proposal for revision of the Generalised Scheme of Tariff Preferences (GSP) for the period till the 31st December 2004. The regulation is designed to simplify the GSP regime for sensitive products (products grown and processed within the EU). It also intends to improve the effectiveness of special incentives to promote labour and environmental standards.
The new Regulation complements and fully incorporates the recent "Everything But Arms" (EBA) initiative in favour of the Least Developed Countries. Under the EBA initiative, quota and import tariffs have been abolished for all product groups, except arms and ammunition, for the Least Developed Countries. Restrictions still apply to sugar, rice and bananas; however these will be lifted during the period leading up to 2007.
Exporters in Least Developed Countries wishing to benefit from the 'EBA' agreement should take the following 5 steps:
- Establish product classification (CN)
- Establish product eligibility
- Check the origin criteria applicable to the product. These criteria are product dependant (Form A or EUR 1).
- Check the transport conditions from the exporters' country to the port in the EU, as direct shipment is a prerequisite for qualification.
- Prepare documentary evidence for proof of origin.

Fruit juices and concentrates
The common tariffs for the product groups falling under this heading are as high as 30-40 % while on top of this tariff there is a fixed amount in euro per 100 kg.

Canned fruit
The products falling under this group are subject to high import tariffs, which in some cases consist of two components, a percentage part and a fixed amount in euro per 100 kg. Canned pineapples are, for example, subject to a common import tariff of 25.6 percent plus 2.5 euro/100 kg. For canned citrus fruit, the common tariff currently amounts to 25.6%. For products, which are subject to a 'two-component' tariff, least developed countries only pay the fixed amount per 100 kg and not the percentage. For products subject to a tariff in percentage only, least developed countries do not pay any import tariffs.

Canned vegetables
The common import tariffs for almost all products in this group range between 5 and 19.2 percent. Only mango chutney is subject to a common tariff of 0 percent.

Dried fruit
The common import tariffs for most of the products in this group range between 0 and 8 percent. Only prunes (9.6%) and dried bananas (16%) are subject to higher tariffs.

Dried vegetables
Common import tariffs for products falling under this heading are around 10-13%.

Frozen fruit and vegetables
The common tariffs for most products falling under this group range between 14.4 and 20.8 percent. Some products are subject to a 'two-component' tariff, e.g. sweet corn is subject to an import tariff of 5.1% plus 9.4 euro per 100 kg.

Provisionally preserved fruit and vegetables
The common tariffs for products falling under this group range between 0.8 and 12.8 percent.

Preserved mushrooms
The common tariffs for products falling under this group range between 9.6 and 14.4 percent. An additional fixed amount in euro per 100 kg is charged for some products.

Jam
The products falling under this heading are subject to high tariffs between 20 and 24 percent.

Value Added Tax (VAT)
Although fiscal borders between EU countries were, in theory, eliminated as from 1 January 1993 onwards, in practice, harmonisation of VAT (tax levied at consumer sales' level) rates has not yet been achieved. Table 1.2 summarises the VAT rates applied in the different EU member states for foodstuffs in general and for fruit juices. Please refer to the Ministry of Finance of the respective country for specific information on the relevant rate applied to preserved fruit and vegetables

Table 9.3 VAT rates (in %) applied to foodstuffs and fruit juices in the EU, May 2003

	Reduced Rate	Standard Rate	Fruit Juices
Austria	10	20	21
Belgium	6	21	25
Denmark	-	25	16
Finland	8/17	22	8
France	5.5	19.6	7
Germany	7	16	5.5
Greece	8	18	21
Ireland	13.5	21	20
Italy	10	20	3
Luxembourg	6	15	6
Portugal	5/12	19	20
Spain	7	16	5
Sweden	6/12	25	17
The Netherlands	6	19	12
United Kingdom	5	17.5	17.5

Source: DGXXI, European Commission (2003)

Useful Internet sites

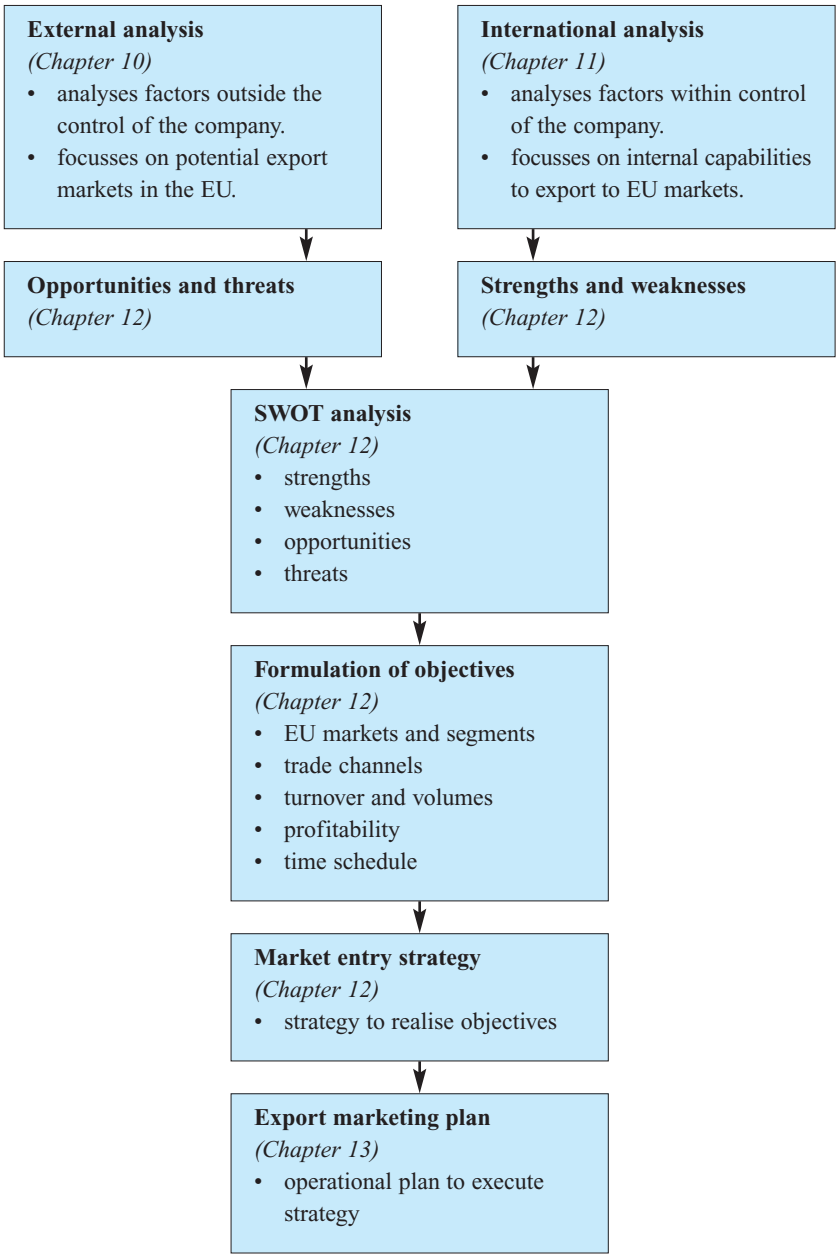
Current information on VAT rates in EU countries	www.europa.int/comm/taxation_customs/publications/info_doc/taxation/tva/taux_tva-2003-5-1
EU rules of origin for the GSP	www.europe.eu.int/comm/taxation_customs/customs/origin/gsp/index_en.htm
Market access database	http://mkaccdb.eu.int/

Part C
Export marketing guidelines: analysis and strategy

PART C: EXPORT MARKETING GUIDELINES: ANALYSIS AND STRATEGY

The Export Marketing Guidelines form a roadmap to conduct market research, to formulate your Market Entry Strategy (MES) and finally to prepare an operational Export Marketing Plan (EMP) for the introduction of your products on EU markets. The MES spells out your strategy for a period of 3 – 5 years on how you intend to build up a successful export position on EU markets. The EMP shows how this strategy will be executed and the actions you should take.

In Part C, you will be guided through the different steps to prepare your Market Entry Strategy and the Export Marketing Plan.
Schematically, the following steps should be taken:



10 EXTERNAL ANALYSIS

Market research
In order to prepare an external analysis, extensive market research is necessary. Please check CBI's 'Your guide to market research' for information on this subject. For non-tariff trade barriers (an important part of the external analysis), please check CBI's AccessGuide. To obtain relevant information about preserved fruit and vegetables in EU markets, the following fields should be explored:

- ***Country information***
  General data about EU countries like population, gross national product (GNP), main economic activities, distribution facilities, etc. This information is abundantly and freely available. Please check with embassies and consulates of EU countries in your country.

- ***Information on the market for preserved fruit and vegetables***
  Market studies are available; however, these studies often refer to preserved fruit and vegetables in general and less to product groups, like fruit purées, and individual products, like pineapple purée.

- ***Tariff and non-tariff barriers at EU and national level***
  This information is widely available in a large variety of public documents. Further, much information can be found on the website of the EU and on CBI's AccessGuide (www.cbi.nl/accessguide).

- ***Trading conditions***
  General information on trading with EU countries is widely available. However, it is much harder to obtain sector-specific information, as trade partners in the EU do not usually publicise information about their conditions. In some cases, websites of importers of preserved fruit and vegetables give information about product specifications, packing and processing.

Market research consists of two parts:
Desk research
Desk research is the gathering of secondary information; others have already assembled and compiled the information.
The following sources are available to conduct desk research for preserved fruit and vegetables:

- ***Internet***
  By far the most important source of information. Much information is freely obtainable; for more detailed and specific information fees must often be paid. For Internet sites relevant to preserved fruit and vegetables, please check 'The practical guide to conduct market research on Internet' in the appendix of this survey.

- ***Market studies***
  Organisations like CBI and ITC have market studies for preserved fruit and vegetables available, both for organic and traditional products. The practical guide in the appendix of this survey gives information on these studies.

- ***Trade magazines***
  Trade magazines are valuable sources of current information, trends and developments in the preserved fruit and vegetable sector. Please check appendix 3.6 for contact details of trade magazines.

- ***Trade fair catalogues***
  Trade fair catalogues of for example Biofach, Food Ingredients Europe and Anuga provide a wealth of information about competitors, importers and products. Moreover, websites are mentioned, so you can easily check the sites of exhibitors.

Field research
Field research is the gathering of primary information; you can look for information specifically tailored to your requirements. Field research is more expensive than desk research, as travelling to EU countries is involved.

Desk research can be complemented by field research. During field research, the following tools are available to the potential exporter:
- Trade fairs
- Seminars
- Visits to importers and agents
- Visits to branch organisations
- Visits to commercial sections of embassies

10.1 Market development and opportunities

The market developments described in chapters 3, 4, 5 and 6, together with the opportunities as described in chapter 8, form the main source in this survey for obtaining a clear picture of the market for preserved fruit and vegetables in six EU countries.
Together with information assembled from sources as mentioned in market research, you should be able to get a picture of how the market develops and which opportunities might be available.
The EU Market Access Requirements, as described in Part B of this survey, indicates the product and packaging requirements with which you should comply in order to enter EU markets successfully.

For example, your products might have certain properties relevant to health aspects in food or you might be a supplier of year-round products. Healthy food is on the rise in the EU, while retailers look increasingly for year-round instead of seasonal products. In both examples, your products might be well positioned to capture these trends.

10.2 Competitive analysis

The food ingredients sector is increasingly becoming a global business. Not only is food retailing characterised by concentration and consolidation, this trend also applies to the food processors. In the EU, companies like Unilever, Nestlé, Danone have strong positions and brands in the EU markets, complemented by national brands. Please refer to Chapter 4 on 'production'.
Their buying power is huge, enabling them to choose from a wide variety of ingredient suppliers worldwide. Analysing the import statistics, as given in chapter 5 and in appendix 1, gives a good indication of the major supplying countries for a product group or individual products. It is important for the potential exporter to evaluate why these countries are major suppliers to the EU and, more important, whether or not you, as a potential exporter, can match or even surpass product quality, logistics and service.
Factors enabling countries to be successful exporters to the EU can be a high productivity, a favourable exchange rate, the right growing conditions, proximity to EU markets, frequent shipping departures to EU ports, opposite seasons or combinations of these factors. In terms of quality, it would be a challenge to surpass the requirements customers in the EU require as minimum standards.

Although price will always remain a major competitive tool, it is certainly not the only instrument for outranking competitors. The following instruments, as mentioned by leading importers of preserved fruit and vegetables in The Netherlands, are equally important:

- Consistent and high product quality according to specifications of importers and food processors
- Steady supply of products
- HACCP certified
- Reliability in supply and honouring agreements with EU trade partners
- Complete product specifications
- Good packaging
- Open communication
- Certification in the case of organic preserved fruit and vegetables

The major problems faced by importers in The Netherlands in importing preserved fruit and vegetables from developing countries are the following:

- Quality of shipment is not in line with samples sent
- Delayed delivery
- Exporters want to change agreed payment and delivery terms
- Pesticide residues exceed permissible limits
- Paperwork and bad communication

Exporters who are able to offer their products at a competitive price and who can successfully apply competitive tools as described above are in a good position to outrank competitors. This should be coupled to a good understanding of the above-mentioned problems with which importers are confronted.
By providing solutions to these problems, exporters have another tool to outrank competitors.

10.3 Sales channel assessment

Based on the trade structure for preserved fruit and vegetables as described in chapter 7, the exporter should evaluate the different trade channels for his products and his company. Based on the characteristics of different types of trading partners, as mentioned below, and the capabilities of your company the best option should be considered. The first step is to determine your mode of market entry into the EU:

- ***Direct exports to the EU***
  This way the exporter chooses to export directly to an EU trade partner or partners. The advantages of this approach are:
  - Direct contact with EU trade partners, resulting in better information about market requirements and trends, price levels, supply and demand situations, etc.
  - Shortening of the supply chain and better able to be part of an integrated chain
  - Better control over the products to final destinations

  The disadvantage is that the company has to invest in an export organisation and reserve budgets for travelling to trade partners in the EU and to promote its products.
  This option is suitable for larger size companies which can supply full container loads (FCL) and which have the resources to set up an export department.

- ***Indirect exports to the EU***
  In this way, the company sells its products to a locally based export house or trading company, which takes care of all the export documentation and formalities. The advantages, especially for small companies, are:
  - No need to invest in an export organisation
  - Possibilities to supply less container loads (LCL) to local export intermediaries, who usually consolidate smaller shipments from several exporters in order to fill a full container load (FCL). This way, shipment costs can be reduced.

The disadvantage is that the company has no direct contact with trade partners in the EU and is therefore less informed about market developments.
This option is suitable for small companies which cannot fill a full container load and which do not have the financial resources to set up an export department and to invest in EU market visits, participation in trade fairs, samples and brochures.

When a company has decided that direct exports are the best option, it then should decide on the type of trade partner in the EU.
In evaluating the different options, the following should be considered:

- ***Directly to food processing companies***
  Although exporting directly to food processing companies in the EU might seem a cost effective option, because middlemen are bypassed, the following pitfalls should be taken into account:
  - Food processors often require DDP (Delivered, Duty Paid) delivery terms (Please refer to 10.4, delivery terms). For exporters in developing countries this is almost impossible to organise, as they have no EU distribution structure to handle imports, pay clearing and transportation charges and pay VAT duties.
  - Quality complaints are difficult to deal with, as the exporter usually does not have the means to check the shipment on the spot and to evaluate the complaints. The hiring of an independent quality surveyor is necessary to evaluate the damage.
  - Food processors increasingly focus on their core task to produce and market food products. This means they do not concern themselves with import procedures, but require from suppliers that they deliver the goods anywhere in the EU at their warehouses.
  - In case of payment problems, a partner in the EU country who speaks the language and understands the business culture is necessary to communicate with the right persons within the food processing organisations, in order to settle the problem

- ***Through importers***
  As importers buy the products, usually on FOB or CIF terms, their handling stretches from unloading and clearing in the port to final delivery to their customers. As food-processing companies increasingly work with Just-In-Time (JIT) deliveries, they leave the stock holding to their suppliers. The importer's role expands from purely importing and delivery to a logistic service provider, who can cater to the requirements of food processors in EU countries.
  He will adjust his assortment to the requirements of his customers and provides services like cleaning, packing, stock keeping and order picking.
  In this respect, the importer performs a vital role in matching the requirements of food processors (a wide variety of ingredients in smaller quantities) to those of exporters (a limited range of ingredients in larger quantities).

- ***Through agents***
  The use of agents can provide a good alternative for supplying directly to the food processing industry. The advantage of working with agents is that they know their market well, are familiar with business practices, know the buyers of food processing companies and generally have easy access to them to settle problems and promote the exporter's products. Exporters in developing countries can still export directly to end customers, but are represented by knowledgeable partners in EU countries.
  As the exporter ships and invoices directly to EU customers, he can easily follow the performances of his products and obtains first-hand information about possible improvements.

In assessing the use of trade partners in the EU, the exporter should consider his internal capabilities to handle exports to EU countries. Direct exports to food-processing companies require a rather sophisticated export department, a minimum volume to ship and a strong financial position. On the other end of the spectrum, a locally based export house will be a good option for small companies with limited finances and only one or two products to sell.

10.4 Prices & margins

Although price is not the only marketing tool for exporting preserved fruit and vegetables to EU markets, it is certainly a very important one. Concentration of buying power, increasing supply and global sourcing of preserved fruit and vegetables all place pressure on process and margins throughout the value chain.
Due to the diversity in products and packaging in the preserved fruit and vegetables sector, it is not possible to focus on prices for individual products. Weather conditions, harvests, supply and demand and speculation determine prices on a daily basis. However, the following trends are visible in prices and margins of preserved fruit and vegetables:

- Cost prices for growers, exporters, importers and the processing industry are constantly rising. The main reasons are the increasing rules and regulations both at EU and national level. Food safety is one of the prime concerns for consumers. Retailers and governments alike respond to these concerns by demanding HACCP certification from importers, tracking and tracing systems from growers and exporters, pesticide reduction (Minimum Residue Levels) from growers and strict product specifications from exporters and importers alike.

- Oversupply situation for some product groups as the markets in the EU are stabilizing. This puts pressure on price levels.

Faced with increasing costs and, at best, stabilizing selling prices causes margins to decrease, exporters should:

- Have a clear insight into their cost prices for exports to EU markets in order to set a minimum selling price. At least all variable costs and part of the fixed costs should be covered by the selling price. When the market price is lower than the minimum selling price, a loss situation can easily occur. Although this could be acceptable for individual orders in order to prevent larger losses (stock losses), in the longer term this situation will undermine the financial stability of the company.
- Try to obtain efficiencies in operations in order to decrease cost prices, for example reduction of stocks, more efficient production runs; negotiate lower purchase prices for raw materials and packing materials, etc.

Prices are determined by market conditions; individual exporters cannot influence the price levels. Margins for the exporter depend on his price setting at one side and his cost price on the other side.
Part of his costs depends on the payment and delivery conditions, which the exporter agrees with his trading partner in the EU.
Sources to check for price information (dried fruit) are:

- The Public Ledger (www.public-ledger.com)
- Foodnews (www.foodnews.co.uk/commodity)
- Market News Service (www.intracen.org)

Export calculation structure
In order to prepare an export calculation for a shipment to an importer in The Netherlands, the following structure is given, based on a Cost, Insurance and Freight (CIF) delivery, according to the Incoterms 2000 (see alongside):

Selling price CIF Rotterdam	€
Less:	
• insurance	€
• shipping costs	€
FOB Port of loading	€
Less:	
• handling and loading charges	local currency
• inland transport	local currency
Ex works	local currency
Less:	
• variable costs	local currency
• interest charges	local currency.
Gross contribution	local currency
Less:	
• fixed cost allocation	local currency
Net contribution	local currency

Usually prices quoted to EU trade partners are in euros (€). Shipping costs are usually quoted in US$. Both currencies should be converted into local currency at the rate of exchange applicable at the time of quoting.

Payment terms
Payment terms form an important negotiation tool for the exporter. By granting credit terms to his trade partner in the EU and by accepting less secure forms of payment, he can try to induce trade partners to accept his offer.
The different payment methods and risks attached to them are extensively described in CBI's Export Planner.
Although payment by letter of credit (L/C) could be negotiated for first-time shipments, trade partners in the EU usually pay by 'open account'. The exporter sends his invoice to the importer, who will (or will not) pay the invoice by bank transfer.
Open account payments provide the following advantages for both parties:

- No documents are required; only an invoice is sufficient. This means less paperwork.
- Low cost
- Quick execution
- Simple

However, the exporter has no guarantee that his invoice will be settled. Although he can claim retention of title of the goods as long as the shipment has not been paid, in practice he has very little control over his products when they are in the warehouse of his trade partner.
It is therefore strongly advised to take out credit

insurance for commercial risks. The local bank of the exporter can advise the possibilities and the premiums.

Exporters who aim to supply EU markets will invariably be faced with longer payment terms. Usually, trade partners will wait with payment until they have inspected the goods upon arrival in their warehouse against the (approved) samples they received. Depending on the shipping period, the exporter can easily face a period of 6-12 weeks after production of the goods before he receives payment of the invoice. The interest he loses should be calculated into his cost price. This is especially important for countries which charge high interest rates.

Delivery terms
Delivery terms should be based on the INCOTERMS 2000 issued by the International Chamber of Commerce (ICC). For full details on the Incoterms, please check CBI's Export Planner or visit the ICC's website: www.iccwbo.org/index_incoterms.asp.

Delivery terms in preserved fruit and vegetables depend largely on the type of trade partners in the EU: food-processing companies often demand Delivered Duty paid (DDP) delivery, while importers usually require Free on Board (FOB) or Cost, Insurance, Freight (CIF) deliveries.

There is a large difference in DDP on one hand and FOB and CIF deliveries on the other.
DDP deliveries are arrival contracts: the exporter is fully responsible for the goods until they arrive at the warehouse of the trade partner anywhere in the EU.
FOB and CIF are departure contracts: responsibility for the goods transfers from exporter to importer at the moment the goods cross over the ship's rail at the port of departure.

10.5 Product profiles

Product profile dried apricots

1. Product name:
apricot *(Prunus armaniaca L.)*, dried, bulk pack

Main varieties: Bebekou, Hamidi
Other varieties: Peeka, Royal

2. Market requirements:

Quality standards:
Apricots are distinguished as being sweet/sour and whole/diced. Whole apricots are usually graded in large (or jumbo), medium, small.
No EU quality standards exist, but some member states have limited national quality standards for preserved fruit. The product should be prepared from cleaned, stalked, destoned apricots of commercial varieties, dried by appropriate methods (sun drying or air drying) to the required dry solids content.

Permitted food additives:
- Potassium sorbate (as sorbic acid) max .1000 mg/kg
- Sulphite (as sulphur dioxide) max. 2000 mg/kg
- Ascorbic acid QS

Toxic substances originating from mould growth (e.g. aflatoxin) should be absent.

Sensory characteristics:
Colour: dark-yellow to deep-orange, without brown discoloration
Flavour/taste: aromatic, characteristic apricot, no off-taste
Texture: smooth, soft, easy-bite, not leathery.

Chemical/physical characteristics:
No food additives exceeding permitted levels; texture as mentioned above.

Minimum labelling:
- product name
- identification (name and address) of supplier (producer, packer or vendor)
- net quantity kg

Packaging:
Cardboard boxes, preferable with polyethylene liner, usually 10-12.5 kg

3. Market structure:
Harvest and processing according to growing area, demand throughout the year.

Average prices:
US$ 1,500 tonne (FOB)

Market trends:
Dried apricots are mostly consumed by direct eating (often in mixtures with other dried fruits and nuts).
Consumer demand is stable.
Application in jam industry has turned negligible, but there is a growing demand in bakery industry.

4. Main suppliers:
Main supplying country for dried apricots: Turkey (80% of supply to EU).
Other supply: France, Germany, Iran, The Netherlands, Italy, UK, and South Africa.
Local EU production in Mediterranean area (Italy, Spain, France, Greece) exclusively for fresh consumption.

continued

Product profile dried apricots *continue*

(no wooden crates because of splinters in product)		

5. How to improve the quality:
Harvesting: careful picking without damaging the fruits, because damage will rapidly cause enzymatic browning.
Post-harvest treatment: sulphur dioxide treatment in closed room (to maintain the bright orange-yellow colour and protect against insects), keeping the final sulphur dioxide content within permitted levels. Apricots that have not had sulphur dioxide treatment will turn dark. These dark coloured apricots are not very popular in the EU, except in the health food sector.

PRODUCT PROFILE MANGO PURE

1 Product name:
mango (Mangifera indica L.), puree, preserved by heat

Main varieties: Alphonso, Totapuri
Other varieties: Haden, Benett, Tommy Atkins, Carabao

2. Market requirements:
Quality standards:
No EU quality standards exist. Product should be prepared from sound ripe fruits, only mechanical and physical processes are permitted during production. Product should be preserved by appropriate heat treatment.

Sensory characteristics:
Colour: golden-yellow to orange-yellow, even and homogeneous; no signs of enzymatic or non-enzymatic browning or oxidation
Taste/flavour: pleasant, pure mango, typical for the fresh fruit (sweet, slightly spicy, slightly reminiscent of peach), no oxidation, caramellisation or other off-taste
Consistency: thick-fluid at ambient temperature
Appearance: homogeneous puree with small pulp particles, completely free from contamination (including so-called black specks).

Chemical/physical characteristics:
- Total sugar content (refractometer) min. 16 Bx
- PH 3.7 +/- 0.3
- Total acidity (as citric acid anhydrous) min. 5.5g/kg
- Ratio citric/iso-citric

3. Market structure:
Growing and production throughout the year, depending on growing area.
Demand throughout the year.

Average prices:
US$ 700.- to US$ 800.- per tonne (CIF NL)
(fluctuating according to harvest situation).

Market trends:
As the EU consumer is becoming more familiar with the fresh mango, interest for mango processed in food products is also growing: primary application in dairy, ice-cream and soft-drinks industry. Application in jam industry still negligible.
The main EU market is still the UK, having traditionally a substantial population of East-Asian origin.

4. Main suppliers:
No local EU production.
Leading supplying country is India; other suppliers are Pakistan, The Philippines, Brazil; new producing countries: Mali, Kenya.

continued

PRODUCT PROFILE MANGO PURE *continue*

approx. 50:1
- Vitamin C (ascorbic acid)
  min. 25 ppm
- Beta-carotene
  min. 50 ppm
- Ash
  0.4 +/- 0.07 %
- Potassium
  1800 +/- 200 ppm
- Phosphorus (as P2O5)
  130 +/- 20 ppm
- Formol number
  15 +/- 5
- Cadmium
  max. 0.03 ppm
- Lead
  max. 0.3 ppm
- Mercury
  max. 0.01 ppm

Pulp passed through 1/32" mesh sieve.
Without added sugar; presence of added citric acid is only allowed when declared quantitatively on the label.
No colouring and preserving agents, and no flavouring substances, neither artificial nor natural, may have been added.
Any substances in quantities that could be harmful to health should be absent.

Microbiological quality:
- General aerobic count
  max. 1000/g
- Yeast and mould count
  max. 100/g
- Coliform count
  max. 10/g
- Salmonella
  absent/25 g

Any components and substances originating from micro-organisms in quantities that could be harmful to health must be absent.
[Product must have been subject during processing to heat treatment of min. 110 0 C during 15 seconds, to eliminate heat resistant spore forming micro-organisms].

Minimum labelling (on smallest unit of packaging):
- product name, incl. variety
- date of production
- identification (name and address) of

continued

PRODUCT PROFILE MANGO PURE *continue*

supplier (producer, packer or vendor) • net quantity kg • added citric acid *Packaging:* Either aseptically packed in bag-in-box or bag-in-drum (bags further to be specified), hermetically sealed, or hot-pack in hermetically sealed tinplate cans. Sufficiently strong packaging, inner material of food grade quality. *Transport and storage conditions:* Ambient, cool and dry conditions, without exposure to excessive sun and/or high temperature.		

5. How to improve the quality:

Primarily important in achieving a good product quality is to follow the above-mentioned requirements. Unnecessary high and prolonged heat treatment should be avoided.

Importers have strong preference for aseptic product rather than canned puree: because of its better quality (reduced heat damage) and because of trouble in opening cans involving considerable product loss and waste disposal costs.

11 INTERNAL ANALYSIS

After the external analysis, the exporter should have a clear insight into the opportunities and threats of exporting his products to selected EU markets. Based on this external analysis, the second step is to prepare an internal analysis. The internal analysis:

- Assesses the capabilities of your company in different fields (production, logistics, marketing and sales, finance and human resources) to:
  - Compete effectively with international competitors in supplying EU markets
  - Take advantage of the opportunities that are identified in EU markets
  - Deal with threats that are identified in EU markets
  - Comply with product, packaging and shipping requirements by the EU, national governments and trade partners
- Assesses the investments you should make relevant to the above-mentioned subjects

11.1 Product standards, quality, USP and production capacity

As already mentioned in the chapters 3 and 9, food safety requirements are the leading impetus behind a whole range of product and packaging requirements. In order to give a practical example of product and packaging specifications, we mention below the subjects specified by a German processor of organic baby and infant food for pear puree. Germany has the toughest food laws in the EU, while the market for baby and infant food is the most demanding in terms of food safety. The example covers the following items:

- Product description
- Process description
- Legal requirements (EU and German food laws)
- Chain control
- Packing
- Samples
- Transport and storage conditions
- Sensorial characteristics
- Micro biological characteristics
- Chemical characteristics
- Residues

The full specifications are mentioned in appendix 6. Based on these requirements, the exporter can determine the extent to which he has to adapt his products, packaging and processing and the amount of investments necessary to do so.

Unique Selling Points (USPs')

Although one of the most difficult subjects to achieve, the exporter should endeavour to look for ways that distinguishes him from his competitors, in other words to present these USPs' to potential trade partners in the EU.

Trade partners in EU countries generally have a wide choice of suppliers from all parts of the world: they receive up to twenty offers per day from new suppliers looking for their business!

In order to stand out from the crowd, the exporter should try to draw attention to his company and get noticed by the potential trade partner.

USPs' usually do not refer to one single subject, but are a mix of different subjects which set the exporter apart from his competitors.

Examples of USPs' for the preserved fruit and vegetables sector could be the following:

- Product specifications exceeding the requirements of trade partners
- Consistent and high quality of products guaranteed by the exporter
- Excellent service, for example
  - Replying within 24 hours to any question or request
  - Open communication
  - On-time delivery
  - Honouring agreements to the letter, even when they have financial implications

Production capacity

Trade partners in the EU require a continuous flow of products which meet their needs throughout the year. Exporters should therefore assess in advance the volumes they could sell to trade partners in the EU and the periods of requirements.

Working backwards from these requirements, the exporter should adjust his production capacity to the said requirements. Supplying the volumes required during the required periods can be an important competitive tool.

11.2 Logistics

Logistics deal with all matters to ensure a smooth flow of products from production to the final destination in the country of destination.

Based on the requirements of EU trade partners, assessment of the following subjects should be made:

- Planning of production
  Trade partners usually work with tight arrival schedules in order to deliver the products to their customers on an agreed date and time. It is therefore important to plan production well in advance to ensure the products are available in time for shipment.
- Purchasing of ingredients and packing material
  As part of the planning of production, EU trade partners might have special requirements for ingredients and packing material. For example, a certain type of export carton might be required. It is

important that the exporter ensures that this type is available from his supplier.
- Handling of export orders
  The handling of export orders entails the internal logistics, ranging from ordering ingredients and packing material, to production planning, inspection and obtaining of export documentation.
- Export documentation (certificates, packing lists, invoices, insurance certificates, etc.)
  Depending on the requirements of the EU trade partner, some export documentation like inspection and insurance certificates must be obtained from external organisations. Sufficient time should be allowed to procure the necessary documents, especially when dealing with government agencies.
- Availability of containers and shipping space
  During peak season, availability of containers and shipping space might be a problem. In order to meet the required shipping date, an exporter should assure himself that containers and shipping space are available on the required shipping date.
- Agreements with transport providers to the port of shipment, shipping and Customs agents
- Pre-shipment inspection (when required)
- Please refer to remarks under 'export documentation'.
- Communication with trade partner in the EU
  It is of the utmost importance that exporters communicate immediately with their EU trade partners when certain requirements cannot be met. This will give the trade partner the opportunity to make alternative arrangements. Open and accurate information from the exporter is an important tool in order to be a reliable trade partner for his EU counterpart.

11.3 Marketing and sales

Chapter 10.3 discusses the market entry modes, direct or indirect exports. When a company decides on direct exports, it will be necessary to set up a commercial department to handle export activities to EU countries. Marketing and sales form the commercial department responsible for all export activities to EU countries. Whether to employ different persons for marketing and sales depends entirely on the size of the company and the possibilities to invest in the commercial department. In order to assess marketing and sales functions as part of the internal analysis, the responsibilities of both functions are given below:

Marketing
- Familiarity with all non-tariff and tariff barriers relevant to the export of the company's products to the EU
- In cooperation with production and finance departments, adjust products and packaging to comply with EU requirements
- Preparation of promotion material, like brochures and product specifications
- Installation of communication tools like websites and e-mail
- Organisation of participating in EU trade fairs
- Carry out market research
- Preparation of Market Entry Strategy (MES) and Export Marketing Plan (EMP)
- In cooperation with sales and finance departments, prepare annual budgets

Sales
- Selection of potential trade partners in the EU
- Contacts with trade partners
- Familiarity with all export documentation to ship products to EU markets
- Familiarity with sales contracts, payment and delivery terms
- Negotiations with trade partners in the EU
- Responsibility for the margins made on exports to EU destinations
- Negotiations with logistic service suppliers (transporters, shipping agents, Customs agents, inspection bodies)

Although it appears from the above-mentioned description that different employees should occupy these functions, a combination of both functions in one position is quite possible. Much depends on the complexity of the work, the capabilities of the staff members concerned, the number of export destinations and the selected trade partners in the EU.

Please refer to section 10.3: sales channel assessment, where the different modes of market entry are described, together with the functions of different trade partners in the EU.

11.4 Financing

One of the most important subjects to assess in the internal analysis is the company's financial capability to commence exporting to EU countries. The company should not only have access to sufficient funds to invest in adaptation of products, packaging and possibly production equipment, but also its credit facilities should be large enough to cover extended payment terms. Moreover, the company should have sufficient financial funds to bear commercial risks (quality problems, non-payment, late delivery, etc.) that are often inherent when commencing exports to new destinations.
The following financial aspects should be assessed in the internal analysis:

Investments
- Product development (adjustment of products to EU standards)
- Packaging

    - Adjustment of content
    - Adjustment of packing material
    - Packaging for long-distance shipments
    - Labelling requirements (barcodes, information)
- Human resources (qualified export staff)
- Production equipment
- Certification (HACCP)
- Promotion (participation in EU trade fairs, travel to EU countries, brochures, etc.)

Payment terms
- Credit terms, for example payment 60 days after receipt of goods
- Local interest rates
- Bank charges, for example confirmation of Letter of Credit, handling of documents
- Non-payment risks, for example with 'open account' payment

Commercial risks
- Claims, for example because of late delivery, quality problems
- Consignment shipping, for example selling price is below cost price
- Insurance premiums, for example credit insurance

Miscellaneous costs
- Export documentation
- Inspection certificates
- Stationery for export purposes
- Communication expenses

Further reference is made to section 10.4, prices and margins, where the different payment and delivery terms are discussed.

11.5 Capabilities

Apart from the subjects mentioned above, the following capabilities should be assessed as part of the internal analysis:

Languages
Although English is widely used in EU countries as the official business language, it is far less widely spoken in France, Italy, Spain, Portugal and Greece. Exporters who target these countries are advised to communicate in the local language. Not only will this prevent miscommunication, but also show respect and commitment to local trade partners. This can be an important USP and competitive tool compared to competitors who are less conversant in local languages.

Business culture
Business culture can differ tremendously from one EU country to the other. You should familiarize yourself with the prevailing business culture in your targeted EU country. This culture refers to items like dress codes, making appointments, invitation to lunches or dinners, the use of business cards, addressing of your counterpart and business conversations.
Please check section 13.2 of this survey for further information on this subject

Human resources
Knowledge of exporting preserved fruit and vegetables to EU countries is a basic requirement for a company. This knowledge does not only apply to technical matters regarding exports (documentation, export calculations, shipping possibilities, etc.) but also to knowledge about EU requirements and market developments relevant to preserved fruit and vegetables in the EU.
The knowledge is necessary in order to be able to negotiate with your trade partners in the EU at the same level. Ignorance on the part of the exporter is often (mis)used by trade partners to extract more favourable trading conditions at the expense of the exporter.

12 DECISION MAKING

Based on the outcome of the external and internal analyses, the exporter can use the results to prepare a SWOT analysis. In this analysis he identifies Strengths and Weaknesses of his company compared to competitors and the Opportunities and Threats that he identifies in selected EU markets.
An example of a SWOT analysis is given below:

STRENGTHS	WEAKNESSES
• Consistent and high product quality • Strong financial position • Export experience to EU markets • Low interest rates • Excellent infrastructure for shipping • Short distance to EU markets	• Relatively high labour costs • Inefficient production • Substandard packing material • Weak language capabilities • No government assistance in promoting exports • Limited production capacity
OPPORTUNITIES	**THREATS**
• Growing demand in The Netherlands, France and Sweden • Year round shipments • Increasing consumption of exotic fruit	• Ever stricter EU rules and regulations • Concentration of buying power • Increasing costs of inspection at port of discharge

Based on the SWOT analysis, the exporter should evaluate the consequences of improving on his weaknesses and decide whether or not the threats pose manageable obstacles to start exports to the EU.
When his strengths and the opportunities which he sees in the market outweigh his weaknesses and the threats, he might consider a positive decision to continue preparations to commence exporting to EU markets.

Formulation of objectives
After a positive decision to prepare for exporting to the EU, the exporter should formulate the following objectives:

- ***Selected EU markets for exports***
  It is advisable to select only one or two EU markets. In this way, the exporter can focus his efforts and concentrate his (often limited) resources. After gaining experience and establishing regular exports, a solid base will have been formed to roll out to other EU countries. Selection of too many markets leads to diffusion of resources and often leaves only half-baked efforts to establish a durable position.

- ***Market segments (for example fruit puree for baby and infant food)***
  It is impossible to be everything to everybody. The market segments for preserved fruit and vegetables are very diverse: each segment requires different product standards and a different approach. To be successful, the exporter should carefully select the segment in which he can excel and outrank his competitors. In this way he can fully concentrate his resources to this particular segment: specialisation in niche markets is a far better strategy than going after bulk markets, where he will be one of the crowd of suppliers who usually compete on price.

- ***Type of trade partner to appoint***
  Depending on the countries selected and the market segments chosen, the exporter decides whether direct exports to food processors or working with importers and agents provide the best option.

- ***Annual turnover and volumes per market/per trade partner***
  It is important to set realistic targets for volume and turnover per market and per trade partner. Although the setting of these targets is a difficult exercise when the exporter does not have experience in the selected markets, they provide a basis for export budgets and for the level of investments needed to achieve these objectives.
  In this way, the company can determine the viability of exports to the EU and can compare the actual results per period compared to the budgeted results.
  It is extremely difficult to set objectives for annual turnover. A good way to solve this problem is to work with different scenarios:
  - an optimistic scenario, where you estimate turnover in the most favourable market conditions
  - a pessimistic scenario, where you estimate

turnover in poor market conditions

The optimistic and pessimistic scenarios give the lower and upper borders of your turnover objectives. A realistic objective will fall within this range. By working this way, it is possible to calculate your profitability in both scenarios. When in the optimistic scenario your profitability is still marginal, you should think twice before entering EU markets.

- ***Profitability***

Building up export positions in EU markets requires a long-term approach. In order to create a durable position, profitability is essential. As with volumes and turnover, actual profits realised can be compared to budgeted profits.

13 MARKETING TOOLS

13.1 Matching products and the product range

Based on the product specifications as required by his trade partner in the EU, the exporter is able to determine the extent to which the specifications of his products match the requirements.
In order to be attractive to potential trade partners in the EU, the exporter should consider not only to sell one product variety in one type of packing, but also to have a product range available matching the import requirements from EU partners.
An example of a product range can be seen in the following table:

Product range (width)

Strawberries		Mango		Apricots	
Varieties:	senga sengana gorella ostana	Varieties:	alphonso totapuri	Varieties:	bebekon hamidi
Product:	frozen (IQF)	Product:	purée	Product:	dried
Packing:	paper bag with p/e liner of 10 kg carboard box with coating of 15 kg	Packing:	aseptically filled bag - in box of 15 kg - in drum of 100 kg	Packing:	carboard box with p/e liner 10 – 12.5 kg

A company can export a wide product range. In the above-mentioned example, this is the case when the company exports different types of fruit; each fruit in different varieties and in different packing sizes. Different production processes (dried, purée, frozen) might also be possible.

When the company concentrates on one product (strawberries), but exports this product in many varieties, in different forms and in an extensive range of packaging, the product range in depth applies.

13.2 Building up a relationship with a suitable trading partner

A profound knowledge of the prevailing business culture in the country of the trading partner is one of the main keys to a durable relationship. In spite of all modern communication tools, the personal relationship with a trading partner often decides a durable cooperation.
The first meeting with a trading partner in the EU is the most crucial, as the initial impression a trading partners gets during this encounter is usually decisive for future cooperation.
In order to assist the exporter in the preparations for his first meeting with a EU trading partner, the business culture of the six EU countries mentioned in this survey is described below:

United Kingdom

- Polite, direct with an understated use of language
- Treats counterpart as equal but expects respect for achieved status/position. Wait till your counterpart assigns you a seat
- Extremely task-oriented – 'hello, nice to meet you' and then straight to the point – this may confuse exporters, who think the trading partner is relationship-building. However, questions are purely ritual and over very quickly
- A British trading partner will give the exporter the opportunity to sell himself, his company and his products
- He will be interested in the track record/achievements of your company and your products

- When convinced, he will be prepared to give it a try on the basis of a trial shipment
- They get slightly irritated by small talk and formalities and like to get down to business; do not talk about politics, religion and private/family matters
- They expect that their counterparts have their own opinion and voice it, even when they do not agree to it
- They expect counterparts to take initiative and expect assertive communication

The Netherlands

- They are rather informal and are quick to use first names
- They treat their counterparts as equal and are friendly in their communication
- Direct in their approach and they do not like to beat around the bush
- Often they do not have a secretary to bring coffee; instead they ask you to accompany them to the coffee machine somewhere in the corridor; coffee is offered throughout the day
- Dutch trading partners expect you to take the initiative in the conversation: what do you have to show or tell me? They like to ask questions and take a pro-active attitude
- Dutch counterparts are empowered by their organisation to make decisions there is no need to refer to their bosses; responsibilities are delegated to purchasers
- They are very task-oriented and do not like extensive social talk; they like to come straight to the point; being very price conscious, Dutch importers will be quick to ask the price
- Showing off is frowned upon; Dutch people do not like a display of wealth (Rolex watch, expensive car, tailor made Saville Row suits, etc.). 'Act normal' is their way of doing business. Therefore expensive and colourful brochures are often counterproductive: Dutch purchasers think that eventually they pay for all this
- Dutch purchasers like to work with strict deadlines: 'when can you get your proposal to me?' and they expect you to stick to the agreed date

France

- French are formal, polite and not very direct
- They like shaking hands, both at the beginning and the end of a meeting
- French companies are very hierarchical; your counterpart is probably not empowered to make any decisions
- Instead they want to gather as much information as possible about your company and your products, so they can report back to their superiors
- French are rather chauvinistic; they prefer you to conduct the conversation in French and that you are familiar with French culture
- French buyers can be rather arrogant and can treat you as though they regard you as having a much lower in status than themselves
- Do not expect to come to business during the first meeting; the building of a relationship between you and your French counterpart is essential before any business can be done
- Patience is an important virtue in dealing with the French; it takes a rather long time to commence business; however, when the relationship is established they are rather loyal customers
- Dress correctly and conservatively; no flashy and contrasting colours
- French remain formal to their business partners; first names are not used

Germany

- Germans are formal and never use first names
- They like to be addressed by Herr (Mr.), Frau (Mrs) or Fraulein (Ms) and their last names; it is also important to check beforehand whether your counterpart has a title: in this case titles should be used also: Herr Doktor Schmidt or Frau Ingenieurin Albrecht
- German purchasers like to come quickly to the point and are well prepared for the meeting; as they want to eliminate uncertainties as much as possible they will ask a lot of details
- Particularly offer your German counterpart 'certainties': assurances, guarantees, references to check you and your company out; company background, expertise and track record are very important elements for Germans in his search for certainties
- Dress correctly and formally; avoid flashy and contrasting colours and expensive watches, rings, bracelets, etc.
- Come strictly on time; German purchasers usually have very tight schedules and many meetings on one day; they usually inform you how long the meeting will last and the points they want to cover
- They require detailed planning and concrete arrangements and expect you to adhere to them; prepare yourself in detail for this meeting: mistakes or inability to reply to questions will not be tolerated and will mean the end of a possible business relationship
- Try to get friendly with the secretaries; they have a lot of influence in scheduling the appointments for their bosses; here again, never address them by their first names

Belgium

- Be aware of the bi-lingual and bi-cultural situation in Belgium. In the Flemish part of Belgium, Flemish (similar to the Dutch language) is spoken. In the Walloon part, French is spoken. Brussels is bi-lingual.

- The Flemish are polite and easy to communicate with. They are quite formal; first names are never used. English is widely spoken in the Flemish part of Belgium.
- Walloon trade partners are similar to the French in their business dealings. The use of the French language is very much appreciated and often necessary.

Although there are large cultural differences in dealing with trade partners in different EU countries, when building up a good relationship trade partners in all the EU countries place particular value on the following aspects:
- Open and prompt communication. When asked questions or in case of enquiries, an answer within 24 hours is highly appreciated
- Timely information in case of problems. For example, if shipments are going to be delayed, please inform your trade partner in time. He will be able to take the necessary measures on his side. Even when you only expect possible problems, advise your trade partner
- Reliability is a key issue for building up a durable relationship. As the supply chains are becoming more integrated and chain partners are becoming more interdependent, reliability forms an important pillar under the integrated chain.

13.3 Drawing up an offer

After establishing contacts with potential trade partners in the EU, the exporter might be requested to make an offer to an importer or directly to a food processor. The preparation of an offer should be carried out with caution. An offer which has been accepted by an EU trading partner and does not contain any escape clauses for the exporter is a legally binding document requiring the exporter to deliver, even when the trading conditions are unfavourable to him.

Before making an offer, the exporter should verify the following items:
- Reputation of trade partner
  Important to check whether the trade partner requesting an offer is well established and has a good reputation. Sources to check are:
  - Branch organisations in the EU (see appendix 3.4)
  - Trade registers in the country of the trade partner, for example the Chamber of Commerce
  - Commercial organisations, which can supply company profiles, like Dun & Bradstreet, Cofaz and Graydon. The information provided is generally extensive, so reports from these organisations can be quite expensive.

- Rules, regulations and quality standards
  It is important to verify whether the exporter can comply with EU and national regulations on products and packaging and the specifications requested by the trade partner.

When making an offer, the following elements should be included:
- Date of quotation and reference number. This number can at a later stage be used on contracts, payment and shipping documents as easy reference to the consignment in question.
- Full names and addresses of both parties
- Product and product specifications
- Packaging specifications
- Quantity in kgs, litres
- Price per kg/litre, currency and total amount
- Delivery terms (Incoterms 2000)
- Delivery period
- Payment terms
- Validity of the quotation. The period of validity depends very much on the volatility of market prices. In very volatile markets, the validity of the quotation might only be 24 hours.
- Waiver. A very important element of the quotation. The waiver gives the exporter an escape clause not to honour the quotation, even when accepted by the EU trade partner. A waiver in the offer is quite customary and can be worded as follows:
  - This quote is subject to our confirmation
  - This offer is without any obligations
  - This offer is subject to confirmation by means of a sales contract

  An offer made without waiver and accepted by the buyer obliges the exporter to deliver the goods according to the quotation
- Referral to the general sales conditions of the exporter. General sales conditions apply to all offers and contracts and stipulate items like:
  - Retention of title of the goods (in case of non-payment)
  - Product liability
  - Force majeur (when an exporter cannot supply due to circumstances beyond his control like strikes, fires, political unrest, perils of the sea)
  - Resolution of disputes
  - Delayed payment, late/non delivery
  - Inspection procedures
  - Exclusion of Value Added Taxes (VAT) in price quotations

Please remember that the general sales conditions of an exporter might conflict with the general purchasing conditions of an importer.

13.4 Handling the contract

Once the offer has been accepted by the buyer and reconfirmed by the exporter, a sales contract will be prepared. Reference is made to the sales contracts of the International Chamber of Commerce (ICC).

The ICC sales contracts contain all the necessary elements and can be used as a sound basis.
However, in practice, an offer signed by both parties automatically converts into a sales contract.
An example of an offer/sales contract is given below:

Dried Fruit Importers B.V.
Havenweg 211
2039 JK Amsterdam
The Netherlands
Tel.:
Fax:
E-mail:
VAT no:
Chamber of Commerce Amsterdam
Bank: ING Amsterdam
Swiftcode:ING BNL 45

Sales Contract No. 03/10799

Buyer
Dried Fruit Wholesalers
2345 Regent Street
Cambridge, NA 3 4YU
United Kingdom

Amsterdam, 25th July 2003

Our ref.: 03/10799

Confirmation of sale No. 03/10799

Product:	Dried prunes in 10 kg boxes
Quality:	According to our specifications no. 1234
Origin:	Italy
Currenncy:	€

Quantity	Total (kg)	Price/kg	Total price	Delivery date
100 boxes	1,000 kg	€ 1.95	€ 1,950.00	10th August 2003

Incoterms 2000:	DDP Cambridge
Payment:	40 days after date of invoice
Documents:	Invoice
	Certificate of analysis
	CMR freight note

Our general sales conditions apply; a copy is attached to this contract
Please return a countersigned copy of this contract to us before the 30th July 2003

We thank you for this order

Yours truly,

Dried fruit importers BV,	Dried fruit Wholesalers
Seller	Buyer
Reg Leenes	John Curley

13.5 Sales promotion

To promote the exports of his products to markets in the EU, an exporter in the preserved fruit and vegetable sector can apply the following tools:

- Participation in trade fairs in the EU
  This is by far the most effective promotion tool, as the exporter has the opportunity to present his products to importers, agents and food processors from all EU countries. The most important trade fairs in the EU are Food Ingredients Europe, Health Ingredients Europe, and Biofach (organic food ingredients). Please check contact details in appendix 3.5 of this survey. Further reference is made to CBI's Your image Builder.
- Company brochures and product specifications

A company brochure should be factual, in order to inform potential trade partners on relevant information of the company. Lengthy stories about the founding family and historic reviews should be omitted, as these are of little interest to trade partners in the EU. Instead information should be given about production capacities, certification, tracking and tracing systems, processing equipment, organisation, markets (both domestic and export), turnover and personnel. This way, a potential trade partner will be able to form an image of your company. Be careful not to exaggerate and to 'walk your talk' (deliver what you promise).

- Visits to potential trade partners in the EU
  As personal contacts always work best in any sector, the exporter should invest time and money to visit EU trade partners. It is advisable to allow additional weeks after a trade fair to follow up on contacts and to make appointments with the most promising trade partners.
- Company stationery
  In order to build the right image for your company, make sure that the layout, colours and texts of your letterheads, invoices, business cards and envelopes is consistent and that good quality paper is used. Company stationery is an important ambassador for your company as it is sent/given to EU trade partners.
- E-promotion
  This applies to the use of e-mail and website. A website forms an easy reference for any EU partner to obtain information about your company. In designing a website for your company, the same rules apply as for company brochures: factual and to-the-point information is all a trade partner wants to see. Time is at a premium for trade partners in the preserved fruit and vegetable business and they do not want to spend any of it in reading information not relevant to their business.
- Samples
  Samples are a very important tool for promoting your products. The first thing interested trade partners in the EU will ask for is samples of your products. Often, they will inform you about their product specifications and request you to send samples according to these specifications. In sending samples (often by airmail), attention should be given to the packaging. Rough handling, and resulting damage, during transport is common; good packing ensures that your sample reaches your contact in the EU in top condition.

Appendices

APPENDIX 1 DETAILED HS CODES

The detailed HS codes are given in sequence of the product groups as mentioned under chapter 5 of this survey.
HS codes printed in bold type indicate that information is given in chapter 5 of this survey.

HS code		Description
FRUIT JUICE, CONCENTRATE		
2009		**Fruit juices (incl. grape must) and vegetable juices, unfermented and not containing added spirit**
	11	**frozen orange juice**
	19	**unfrozen orange juice**
	20	**grapefruit juice**
	30	juice of any other single citrus fruit
	40	pineapple juice
	50	tomato juice
	60	grape juice (including grape must)
	70	apple juice
	80	juice of any single fruit or vegetable
	90	mixtures of juices
CANNED VEGETABLES		
2001		**Vegetables, fruit, nuts and other edible parts of plants, prepared or preserved by vinegar or acetic acid:**
	1000	**cucumbers and gherkins**
	2000	onions
	9010	mango chutney
	9020	fruit of the genus Capsicum other than sweet peppers or pimentos
	9030	sweet corn (Zea mays var. saccharata)
	9040	yams, sweet potatoes and similar edible parts of plants containing 5% or more by weight of starch
	9060	palm hearts
	9065	**olives**
	9070	sweet peppers
	9075	salad beetroot (beta vulgaris var. conditiva)
	9085	red cabbages
	9091/96	other
2005		**Other vegetables prepared otherwise than by vinegar or acetic acid, not frozen, not preserved by sugar**
	10	homogenised vegetables
	20	potatoes
	40	peas (pisum sativum)
	51/59	**beans (vigna spp., phaseolus spp.)**
	60	**asparagus**
	70	olives
	80	**sweet corn**
	90	other vegetables and mixtures of vegetables
CANNED FRUIT		
2008		**Fruit, nuts and other edible parts of plants, otherwise prepared or preserved, whether or not containing added sugar or other sweetening matter or spirit, not elsewhere specified or included**
	20	**pineapples**
	30	**citrus fruit**

HS code		Description
	40	pears
	50	apricots
	60	cherries
	70	**peaches**
	80	strawberries
	91	palm hearts
	92	**mixtures**
	99	other fruit
FROZEN VEGETABLES		
0710		**Vegetables (uncooked or cooked by steaming or boiling in water), frozen**
	10	potatoes
	21	peas (pisum sativum)
	22	beans (vigna spp., phaseolus spp.)
	29	other leguminous vegetables
	30	spinach, New Zealand spinach and orache spinach
	40	sweet corn
	8010	olives
	8051	sweet peppers
	8059	capsicum or pimenta
	8061/69	mushrooms
	8070	tomatoes
	8080	artichokes
	8085	asparagus
	8095	other frozen vegetables
	90	mixtures of vegetables
DRIED FRUIT		
0803		**Bananas, including plantains, fresh or dried**
	0090	bananas
0804		**Dates, figs, pineapples, avocados, guavas, mangoes and mangosteens, fresh or dried**
	1000	**dates (fresh and dried)**
	2090	**figs**
0806		**Grapes, fresh or dried**
	2011/91	currants
	2012/92	sultanas
	2018/98	other dried grapes
0813		**Other dried fruit; mixtures of nuts or dried fruit**
	1000	**apricots**
	2000	**prunes**
	3000	apples
	4010	peaches, including nectarines
	4030	pears
	4050	papayas
	4060	tamarind fruit
	4070/95	other dried fruit
5012/15/19/91/99		mixtures of dried fruit
FROZEN FRUIT		
0811		**Fruit and nuts , uncooked or cooked by steaming or boiling in water, frozen**
	10	strawberries

HS code		Description
	20	raspberries, blackberries, mulberries, loganberries, black, white or red currants and gooseberries
	90	**other fruit**
DRIED VEGETABLES		
0712		**Dried vegetables, whole, cut, sliced, broken or in powder, but not further prepared**
	2000	**onions**
	3000	mushrooms and truffles
	9005	potatoes
	9011/19	sweet corn
	9030	**tomatoes**
	9050	carrots
	9090	other vegetables and mixtures of vegetables
JAM		
2007		**Jam, fruit jelly, marmalade, fruit or nut puree and fruit or nut pastes, being cooked preparations, whether or not containing added sugar or other sweetening matter**
	10	homogenised preparations
	91	citrus fruit
	99	other fruit
PRESERVED MUSHROOMS		
2001		**Vegetables, fruit, nuts, and other edible parts of plants, prepared or preserved by vinegar or acetic acid**
	9050	mushrooms
2003		**Mushrooms and truffles, prepared or preserved otherwise than by vinegar or acetic acid**
	1030	cultivated mushrooms
	1080	other mushrooms
	2000	truffles
PROVISIONALLY PRESERVED FRUIT AND VEGETABLES		
		FRUIT
0812		**Fruit and nuts, provisionally preserved**
	10	cherries
	20	strawberries
	9010	apricots
	9020	oranges
	9030	papaws (papayas)
	9040	fruit of the species *vaccinium myrtillus*
	9050	black currants
	9060	raspberries
	9070/95	other fruit
		VEGETABLES
0711		**Vegetables provisionally preserved**
	10	onions
	20	olives
	30	capers
	40	cucumbers and gherkins
	90	other vegetables

APPENDIX 2 DETAILED IMPORT/EXPORT STATISTICS

The source of the data presented below is Eurostat COMEXT 2001.
The leading suppliers mentioned in the statistics supplied at least 80 percent of total value imports in 2001.

Table 1 Imports of preserved fruit and vegetables by EU member countries, 1999-2001
€ 1,000 / tonnes

	1999		2000		2001	
	value €	volume	value €	volume	value €	volume
Total	**11,842,433**	**11,857,998**	**12,486,480**	**12,414,900**	**12,060,082**	**13,364,566**
Extra-EU	**4,516,104**	**4,272,655**	**4,807,633**	**4,582,415**	**4,545,980**	**4,754,146**
Developing countries	**3,086,297**	**2,780,584**	**3,277,953**	**2,965,508**	**3,049,290**	**3,108,171**
Leading suppliers						
The Netherlands	1,845,388	1,680,988	1,909,125	1,787,226	1,705,350	1,722,530
Belgium	1,115,780	1,261,720	1,137,521	1,341,236	1,104,619	1,412,379
Germany	971,018	1,068,524	1,063,769	1,162,810	1,081,687	1,220,205
France	959,164	1,012,297	962,766	964,305	1,018,865	1,514,724
Spain	764,431	833,620	798,298	895,549	840,622	928,018
Italy	644,546	826,748	659,489	703,724	669,584	838,587
Brazil	776,542	667,609	832,977	760,011	551,792	707,318
Turkey	554,104	500,467	546,408	466,966	539,181	532,800
Poland	388,662	444,800	442,911	529,298	506,367	657,860
China	337,547	295,312	439,072	372,272	418,764	382,522
USA	439,087	380,720	443,607	363,399	392,241	293,356
Greece	299,326	331,722	319,653	361,258	294,156	341,133
United Kingdom	248,587	198,994	247,214	197,505	257,699	197,996

Table 2 Imports of fruit juice/concentrate by EU member countries, 1999-2001
€ 1,000 / tonnes

	1999		2000		2001	
	value €	volume	value €	volume	value €	volume
Total	**3,908,162**	**4,157,275**	**4,274,658**	**4,627,485**	**3,683,095**	**4,592,922**
Extra-EU	**1,528,381**	**1,576,191**	**1,688,211**	**1,818,316**	**1,393,725**	**1,839,765**
Developing countries	**1,108,856**	**1,013,901**	**1,207,449**	**1,139,836**	**922,670**	**1,138,945**
Leading suppliers						
The Netherlands	813,532	622,032	875,987	685,472	703,586	656,917
Brazil	767,132	657,637	821,521	748,962	540,893	696,421
Germany	447,223	671,392	469,702	712,194	461,858	767,418
Belgium	319,432	317,982	332,845	351,469	260,123	283,801
Italy	206,325	266,536	230,351	279,237	220,186	280,518
Spain	191,647	290,603	216,157	327,957	199,842	308,821
France	135,908	193,176	154,080	215,755	186,482	232,084
Poland	83,073	82,237	127,287	149,877	172,387	219,922
USA	159,484	218,652	156,836	211,948	120,111	149,719
Austria	103,642	96,331	129,764	98,751	111,185	104,421

Table 3 **Imports by EU member countries of canned vegetables, 1999-2001**
€ 1,000 / tonnes

	1999		2000		2001	
	value €	volume	value €	volume	value €	volume
Total	**2,123,656**	**2,200,807**	**2,117,837**	**2,087,349**	**2,214,609**	**2,273,522**
Extra-EU	**584,829**	**566,982**	**579,401**	**532,153**	**595,032**	**551,457**
Developing countries	**466,214**	**440,120**	**465,145**	**420,300**	**476,729**	**437,303**
Leading suppliers						
The Netherlands	350,747	426,573	352,437	454,774	371,841	447,855
France	310,290	333,849	292,542	313,915	323,474	347,345
Spain	179,744	134,539	179,281	141,546	197,949	161,405
Belgium	235,478	225,597	202,405	212,002	190,224	219,315
Germany	149,387	129,946	174,083	149,820	182,301	150,421
Italy	116,484	236,224	120,964	126,973	130,570	244,670
China	97,741	94,749	117,940	115,580	112,316	110,616
Turkey	112,186	133,290	95,096	105,724	99,717	113,860
Peru	81,668	37,874	93,719	40,730	91,691	40,645
Greece	79,835	69,389	87,321	77,472	85,134	69,423
Morocco	77,972	80,053	64,982	66,848	65,763	66,973

Table 4 **Imports by EU member countries of canned fruit, 1999-2001**
€ 1,000 / tonnes

	1999		2000		2001	
	value €	volume	value €	volume	value €	volume
Total	**1,531,463**	**1,594,521**	**1,569,853**	**1,697,696**	**1,558,704**	**1,691,735**
Extra-EU	**601,005**	**671,566**	**606,986**	**725,999**	**612,581**	**719,024**
Developing countries	**475,338**	**543,930**	**474,397**	**582,466**	**522,171**	**642,393**
Leading suppliers						
Italy	198,898	236,177	182,640	216,433	186,118	223,886
Germany	146,824	103,081	174,094	123,139	182,612	129,066
Spain	151,363	167,094	144,618	167,277	144,240	162,958
Greece	127,596	167,754	135,569	192,592	121,685	194,559
Thailand	153,641	192,029	136,438	201,794	117,281	169,265
The Netherlands	104,324	109,154	116,007	120,889	117,136	114,878
South Africa	66,219	73,485	59,625	70,644	56,576	70,162
France	80,360	52,888	67,443	43,175	55,992	37,481
Belgium	54,494	38,975	60,154	47,002	54,741	45,802
Turkey	35,630	31,954	33,836	31,453	46,821	46,192
Kenya	44,991	43,726	43,207	51,102	44,683	55,851
Costa Rica	31,204	34,881	42,094	41,075	42,323	45,367
China	35,286	47,612	27,987	37,544	37,059	44,297
Philippines	25,541	30,635	35,272	45,167	31,963	40,914

Table 5 **Imports of frozen vegetables by EU member countries, 1999-2001**
€ 1,000 / tonnes

	1999		2000		2001	
	value €	volume	value €	volume	value €	volume
Total	**1,359,053**	**1,832,160**	**1,420,103**	**1,833,681**	**1,606,464**	**2,599,504**
Extra-EU	**282,447**	**363,713**	**295,713**	**295,888**	**356,698**	**368,711**
Developing countries	**147,156**	**122,970**	**160,870**	**132,449**	**191,193**	**163,490**
Leading suppliers						
Belgium	385,835	590,467	414,069	631,404	470,173	750,184
France	181,191	282,291	186,407	245,670	207,729	763,689
The Netherlands	175,006	209,087	175,662	210,326	183,543	225,488
Spain	124,685	145,913	133,796	159,105	150,986	176,339
Poland	54,158	140,904	53,908	132,718	82,420	174,650
China	48,658	36,523	61,260	42,579	70,693	54,920
United Kingdom	62,424	74,779	53,057	60,818	59,693	68,613
Germany	54,972	62,308	59,950	66,859	58,088	60,298
Hungary	32,759	62,996	32,666	61,472	43,367	77,060

Table 6 **Imports of dried fruit by EU member countries, 1999-2001,**
€ 1,000 / tonnes

	1999		2000		2001	
	value €	volume	value €	volume	value €	volume
Total	**830,189**	**551,058**	**869,426**	**547,475**	**821,111**	**554,127**
Extra-EU	**612,434**	**410,634**	**650,013**	**416,951**	**589,649**	**427,353**
Developing countries	**435,385**	**323,362**	**461,768**	**326,562**	**404,448**	**335,140**
Leading suppliers						
Turkey	280,988	217,729	296,654	222,309	249,110	232,202
USA	148,828	75,905	157,688	78,083	152,996	80,334
France	53,512	29,451	55,172	27,584	55,315	25,501
Tunisia	43,611	22,184	50,982	26,076	48,211	27,756
Greece	55,793	47,703	53,654	38,163	44,499	29,813
Germany	25,656	9,827	30,004	12,300	39,048	12,002
Chile	26,867	15,120	26,196	13,197	30,804	15,784
The Netherlands	33,350	24,053	30,936	24,506	28,610	21,019
South Africa	27,903	17,973	20,435	11,511	18,108	11,027

Table 7 **Imports of dried vegetables by EU member countries, 1999-2000**
€ 1.000 / tonnes

	1999		2000		2001	
	value €	volume	value €	volume	value €	volume
Total	**373,302**	**139,841**	**404,708**	**169,405**	**426,796**	**180,661**
Extra-EU	**200,567**	**72,990**	**214,303**	**81,794**	**221,848**	**74,185**
Developing countries	**129,767**	**47,936**	**148,101**	**58,385**	**140,312**	**49,980**
Leading suppliers						
China	56,269	25,348	75,504	34,643	60,463	25,366
France	49,999	20,918	54,162	20,983	52,857	19,417
Germany	39,524	11,982	39,450	12,682	45,406	13,258
USA	39,719	15,375	37,745	13,741	35,727	12,764
The Netherlands	27,746	15,689	35,320	24,936	28,778	26,745
Italy	15,647	4,273	16,845	5,752	18,266	5,275
Spain	13,077	4,847	12,924	5,304	16,189	6,883
Turkey	11,462	3,009	12,689	3,428	15,103	4,628
Egypt	13,761	7,771	15,937	9,290	14,708	8,127
Serbia Montenegro	11,809	725	10,625	658	13,651	951
India	12,524	5,757	11,442	5,384	12,294	5,239
Belgium	11,354	4,873	9,804	5,564	11,817	8,353
Poland	6,597	5,090	7,387	4,972	10,607	5,923
Hungary	6,905	2,354	7,957	2,907	9,554	3,160

Table 8 **Imports by EU member countries of jam, 1999-2000**
€ 1,000 / tonnes

	1999		2000		2001	
	value €	volume	value €	volume	value €	volume
Total	**350,380**	**248,592**	**379,961**	**263,587**	**390,846**	**286,286**
Extra-EU	**16,422**	**13,905**	**17,718**	**12,672**	**24,011**	**16,825**
Developing countries	**9,687**	**8,000**	**10,812**	**6,797**	**17,198**	**11,630**
Leading suppliers						
France	72,673	36,744	81,560	42,402	75,154	43,097
The Netherlands	61,589	62,646	54,999	57,225	59,872	60,968
Germany	47,984	32,352	50,448	34,705	56,735	42,472
Belgium	51,608	36,756	55,616	41,954	55,595	42,773
Denmark	26,947	16,284	30,012	17,143	33,656	18,610
Italy	25,000	21,889	28,311	23,080	31,688	27,544

Table 9 **Imports of preserved mushrooms by EU member countries, 1999-2001**
€ 1,000 / tonnes

	1999		2000		2001	
	value €	volume	value €	volume	value €	volume
Total	**345,723**	**255,897**	**342,865**	**249,606**	**308,278**	**225,349**
Extra-EU	**64,154**	**53,110**	**76,126**	**64,641**	**79,799**	**70,091**
Developing countries	**46,763**	**41,034**	**54,363**	**49,999**	**53,213**	**53,852**
Leading suppliers						
The Netherlands	184,714	131,610	165,337	120,828	128,580	93,681
China	44,592	39,582	52,941	49,377	50,494	52,170
Spain	29,706	19,921	34,251	21,713	42,482	24,510
France	43,627	38,826	41,445	31,330	34,114	25,350

Table 10 **Imports of provisionally preserved fruit and vegetables by EU member countries, 1999-2001,**
€ 1,000 / tonnes

	1999		2000		2001	
	value €	volume	value €	volume	value €	volume
Total	**194,973**	**196,740**	**247,863**	**225,992**	**259,336**	**219,397**
Extra-EU	**107,758**	**103,647**	**139,437**	**111,097**	**151,850**	**118,576**
Developing countries	**77,432**	**73,305**	**103,745**	**82,454**	**113,799**	**89,344**
Leading suppliers						
China	23,990	18,894	41,878	28,039	37,313	26,144
Spain	21,763	18,590	27,714	24,655	35,166	32,578
The Netherlands	22,401	27,819	27,578	30,334	25,972	27,806
India	11,838	21,800	18,101	27,032	22,537	32,018
Morocco	13,709	9,263	13,937	7,861	18,125	7,563
Turkey	12,432	12,006	12,133	8,737	13,324	10,639
Poland	8,064	8,003	10,657	9,034	10,735	7,825
Italy	11,709	14,202	9,271	8,791	8,973	8,180
France	8,413	7,003	7,967	8,068	8,330	7,057
United Kingdom	3,617	2,167	5,260	3,183	7,988	5,417
Greece	5,947	4,944	10,906	13,263	7,419	7,367
Belgium	4,864	6,071	6,576	9,980	6,904	6,594
Serbia Montenegro	5,728	1,481	4,937	910	6,591	1,101

Table 11 **Exports by EU member countries of preserved fruit and vegetables, 1999-2001**
€ 1,000 / tonnes

	1999		2000		2001	
	value €	**volume**	**value €**	**volume**	**value €**	**volume**
Total	**8,945,895**	**9,075,715**	**9,590,841**	**9,645,255**	**9,683,255**	**10,073,523**
Extra-EU	**1,526,622**	**1,182,423**	**1,803,895**	**1,468,376**	**1,895,580**	**1,506,529**
Leading destinations						
Germany	2,105,035	2,252,260	2,051,097	2,207,500	2,075,554	2,342,574
France	1,339,402	1,629,754	1,440,960	1,778,672	1,470,613	1,841,300
United Kingdom	1,092,424	1,070,042	1,186,966	1,154,965	1,182,554	1,170,436
The Netherlands	595,987	660,902	661,483	631,560	593,013	631,618
USA	472,921	294,523	556,929	357,603	542,822	356,860
Belgium	494,383	592,167	508,573	584,910	515,716	643,180
Italy	466,350	447,336	503,247	472,429	503,118	480,683
Spain	266,200	277,607	312,152	345,443	338,237	370,721

APPENDIX 3 USEFUL ADDRESSES

3.1 Standards organisations

INTERNATIONAL

International Standardisation Institute (ISO)
E-mail: central@iso.org
Internet: www.iso.org

EUROPEAN UNION

Comité Européen de Normalisation (CEN)
European Normalisation Committee
E-mail: infodesk@cenorm.be
Internet: www.cenorm.be

BELGIUM

Institut Belge de Normalisation (IBN)
E-mail: info@ibn.be
Internet: www.ibn.be

FRANCE

Association Française de Normalisation (AFNOR)
E-mail: norminfo@afnor.fr
Internet: www.afnor.fr

GERMANY

Deutsches Institut für Normung eV (DIN)
E-mail: postmaster@din.de
Internet: www.din.de

ITALY

Ente Nazionale Italiano di Unificazione (UNI)
E-mail: uni@uni.com
Internet: www.unicei.it

THE NETHERLANDS

Nederlands Normalisatie Instituut (NEN)
Netherlands Standardisation Institute
E-mail: info@nen.nl
Internet: www.nen.nl

UNITED KINGDOM

British Standards Institution (BSI)
E-mail: info@bsi.org.uk
Internet: www.bsi.org.uk

3.2 Sources of price information

INTERNATIONAL

FAO (Food and Agriculture Organization)
Publisher of 'Monthly Bulletin of Statistics', 'Commodity and Market Review', and 'Food Outlook'
E-mail: FAO-HQ@fao.org
Internet: www.fao.org

International Trade Centre (ITC)
Publisher of 'Market News Service for Fruit Juices'
E-mail: itcreg@intracen.org
Internet: www.intracen.org

UNITED KINGDOM

Agra Europe Ltd.
Publisher of 'The Public Ledger'
E-mail: marketing@public-ledger.com
Internet: www.public-ledger.com

Foodnews
Address: 80 Calverley Road, Tunbridge Wells, Kent TN1 2UN, United Kingdom
Telephone: +44 (0)1892 5338 13
Fax: +44 (0)1892 5448 95
E-mail: marketing@foodnews.co.uk
Internet: www.foodnews.co.uk

3.3 Trade associations

EUROPE

Association of the Industry of Juices and Nectars from Fruit and Vegetables of the European Union (AIJN)
E-mail: aijn@skynet.be
Internet: www.aijn.org

European Association of Fruit and Vegetables Processing Industry (OEITFL)
(Organisation Européenne des Industries Transformatrices des Fruits et Légumes)
E-mail: oeitfl@sia-dvi.be
Internet: www.oeitfl.org

Federation of the Associations of EU Frozen Food producers (FAFPAS)
(Fédération des Associations de Fabricants de Produits Alimentaires Surgelés de l'UE)
E-mail: fafpas@sia-dvi.be

European Federation of Dried Fruit (FRUCOM)
(Fédération Européenne de Commerce de Fruits Secs)
Telephone: +49 (0)40 3747 190
Fax: +49 (0)40 3747 1926
E-mail: frucom@waren-verein.de

Confederation of the Food and Drink Industries of the EU (CIAA)
E-mail: ciaa@ciaa.be
Internet: www.ciaa.be

BELGIUM

Verbond van Groentenverwerkende Bedrijven en Industrie-groenten Groothandelaars en Exporteurs (VEGEBE)
Telephone: +32 (0)2 2380 620
Fax: +32 (0)2 2380 408
E-mail: vegebe@kmonet.be

Belgafood
(Belgian Professional Union for the Import of Foods)
Telephone: +32 (0)2 5373 060
Fax: +32 (0)2 5394 026

FRANCE

French Association of Preserving Industry
(Chambre Syndicale Nationale des Industries de la Conserve)
Telephone: +33 (0)1 5391 4444
Fax: +33 (0)1 5391 4470

French Federation of Preserving Cooperations
(Fédération Nationale des Conserveries Coopératives et S.I.C.A.)
Telephone: +33 (0)1 4326 1447
Fax: +33 (0)1 4326 3520
E-mail: fncc@wanadoo.fr

French Federation of Fruit Preserving Industry
(Fédération Nationale des Syndicats de Confituriers et Conserveurs de Fruits)
Telephone: +33 (0)1 5391 4491
Fax: +33 (0)1 5391 4470

French Association of Dried Food Products Industry
(Syndicat National des Déshydrateurs des Produits Alimentaires)
Telephone: +33 (0)1 5391 4444
Fax: +33 (0)1 5391 4470

GERMANY

German Association of Fruit and Vegetables Processing Industry
(Bundesverband der Obst-, Gemüse und Kartoffelverarbeitenden Industrie e.V.)
Telephone: +49 (0)228 3540 25
Fax: +49 (0)228 3618 89
E-mail: bogk-vds@t-online.de

Waren-Verein
Telephone: +49 (0)40 3747 190
Fax: +49 (0)40 3747 1919

ITALY

Italian Association of Food Industry
(Associazione Italiana Industrie Prodotti Alimentari, AIPPA)
E-mail: aiipabo@mclink.it
Internet: www.aiipa.it

THE NETHERLANDS

Netherlands Horticulture Commodity Board
(Productschap voor de Tuinbouw)
E-mail: pt@tuinbouw.nl
Internet: www.tuinbouw.nl

Netherlands Association of Fruit and Vegetables Processing Industry
(Vereniging van de Nederlandse Groenten en Fruitverwerkende Industrie, VIGEF)
E-mail: vigef@vsl.nl
Internet: www.vigef.nl

Netherlands Dried Fruit Trade Association
(Nederlandse Vereniging voor de Handel in Gedroogde Zuidvruchten, Specerijen en Aanverwante Artikelen)
E-mail: info@nzv-org.nl
Internet: www.zuidvruchten.nl

Netherlands Mushroom Growers Association (CNC)
(Coˆperatieve Nederlandse Champignonskwekersvereniging)
E-mail: info@cnc.nl
Internet: www.cnc.nl

UNITED KINGDOM

British Association of Fruit and Vegetables Processing Industry (BFVCA)
Telephone: +44 (0)20 7420 7110
Fax: +44 (0)20 7836 0580

National Dried Fruit Association (NDFTA)
Telephone: +44 (0)207 7227 488
Fax: +44 (0)207 7222 009

Food & Drink Federation
(members include the British Fruit & Vegetable Canners' Association)
E-mail: generalenquiries@fdf.org.uk
Internet: www.fdf.org.uk

British Frozen Food Federation
Telephone: +44 (0)1476 5153 00
Fax: +44 (0)1476 5153 09
Internet: www.bfff.co.uk

3.4 Trade fair organisers

ANUGA
Frequency: biennial (2003 K^ln)
E-mail: anuga@koelnmesse.de
Internet: www.koelnmesse.de/anuga

Bio Fach (Certified organic products)
Nürnberg Messe GmbH
Frequency: annual (Nurnberg)
E-mail: info@biofach.de
Internet: www.biofach.de

Food Ingredients Europe
Miller Freeman BV
Frequency: biennial, alternates with Health Ingredients Europe (2003 Frankfurt, 2004 Amsterdam, 2005 London)
E-mail: fi@unmf.com
Internet: www.fi-events.com

IFE
Frequency: biennial (2003 London)
E-mail: ife@freshrm.co.uk
Internet: www.ife.co.uk

Natural Products Europe
New Hope International Media Ltd.
Frequency: annual (Amsterdam)
Internet: www.expoeurope.com

SANA
Fiere e Comunicazioni
Frequency: biennial (2002 Bologna)
E-mail: info@sana.it
Internet: www.sana.it

SIAL
Frequency: biennial (2002 Paris)
Telephone: +33 (0)1 4968 5499
Fax†: +33 (0)1 4731 3782
Internet: www.sial.fr

3.5 Trade magazines

Flüssiges Obst (German edition)
Fruit Processing (English edition)
E-mail: fruit.processing@psp.net
Internet: www.fruit-processing.com

Food Management
(Dutch language)
E-mail: vmt@keesing.nl
Internet: www.vmt.nl

Foodnews
(English language)
E-mail: marketing@foodnews.co.uk
Internet: www.foodnews.co.uk

Fruit World International
(English, German, French language)
E-mail: adve@agropress.com
Internet: www.agropress.com

International Food Ingredients
(English language)
E-mail: fi@unmf.com
Internet: www.ifi-online.com

Quick Frozen Foods International
(English language)
E-mail: davidqffi@skynet.be
Internet: www.quickfrozenfoods.com

Voedingsmiddelen Technologie (VMT)
(Dutch language)
E-mail: vmt@keesing.nl
Internet: www.vmt.nl

Voedingsmiddelen Industrie
(Dutch language)
E-mail: food@reedbusiness.nl
Internet: www.reedbusiness.nl

3.6 Other useful addresses

INTERNATIONAL

International Chamber of Commerce
E-mail: icc@iccwbo.org
Internet: www.iccwbo.org

IFOAM
(International Federation of Organic Agriculture Movements)
E-mail: headoffice@ifoam.org
Internet: www.ifoam.org

EUROPE

TransFair International
(Fair trade organisation)
E-mail: info@transfair.org
Internet: www.transfair.org

GERMANY

BCS ÖKO-GARANTIE GMBH
(Contact point for organic certification)
E-mail: info@bcs-oeko.de
Internet: www.bcs-oeko.de

Ecocert
(Contact point for organic certification)
E-mail: info@ecocert.de
Internet: www.ecocert.de

Naturland Verband für naturgemäßen Landbau e.V
(Germany's Naturland association for organic agriculture)
E-mail: naturland@naturland.de
Internet: www.naturland.de

UnitednatureX Europe / Green Trade Net Office
(Green Trade Net is an information network on organic raw materials worldwide)
Telephone: +49 (0)228 7215 776
Fax: +49 (0)228 7215 777
Internet: www.green-tradenet.de

Deutsches Tiefkühlinstitut e.V.
E-mail: infos@tiefkuehlinstitut.de
Internet: www.tiefkuehlinstitut.de

FRANCE

Ecocert
(Contact point for organic certification)
E-mail: info@ecocert.fr
Internet: www.ecocert.fr

THE NETHERLANDS

CBI/AccessGuide
(CBI's database on European non-tariff trade barriers
E-mail: accessguide@cbi.nl
Internet: www.cbi.nl/accessguide

SKAL
(Internationally operating organisation, inspecting and certifying sustainable agricultural production methods and products)
E-mail: info@skal.com
Internet: www.skal.com

Stichting Max Havelaar
(Max Havelaar Foundation, fair trade organisation)
E-mail: website@maxhavelaar.nl
Internet: www.maxhavelaar.nl

UNITED KINGDOM

Soil Association
(IFOAM accredited contact point for organic certification)
E-mail: info@soilassociation.org
Internet: www.soilassociation.org

APPENDIX 4 LIST OF DEVELOPING COUNTRIES

The countries listed below are taken from the OECD DAC list of countries receiving Official Development Assistance (Part I). The list used is the one as at 1/1/2000.

Afghanistan
Albania
Algeria
Angola
Anguilla
Antigua and Barbuda
Argentina
Armenia
Azerbaijan
Bahrain
Bangladesh
Barbados
Belize
Benin
Bhutan
Bolivia
Bosnia & Herzegovina
Botswana
Brazil
Burkina Faso
Burundi
Cambodia
Cameroon
Cape Verde
Central African rep.
Chad
Chile
China
Colombia
Comoros
Congo, Dem. Rep
Congo, Rep.
Cook Islands
Costa Rica
Côte d'Ivoire
Croatia
Cuba
Djibouti
Dominica
Dominican republic
Ecuador
Egypt
El Salvador
Equatorial Guinea
Eritrea
Ethiopia
Fiji
Gabon
Gambia
Georgia
Ghana
Grenada
Guatemala
Guinea
Guinea-Bissau
Guyana
Haiti
Honduras
India
Indonesia
Iran
Iraq
Jamaica
Jordan
Kazakstan
Kenya
Kiribati
Korea, Rep. of
Kyrghyz Rep.
Laos
Lebanon
Lesotho
Liberia
Macedonia
Madagascar
Malawi
Malaysia
Maldives
Mali
Malta
Marshall Islands
Mauritania
Mauritius
Mayotte
Mexico
Micronesia, Fed. States
Moldova
Mongolia
Montserrat
Morocco
Mozambique
Myanmar
Namibia
Nauru
Nepal
Nicaragua
Niger
Nigeria
Niue
Oman
Pakistan
Palau Islands
Palestinian Admin. Areas
Panama
Papua New Guinea
Paraguay
Peru
Philippines
Rwanda
Samoa
São Tomé & Principe
Saudi Arabia
Senegal
Seychelles
Sierra Leone
Slovenia
Solomon Islands
Somalia
South Africa
Sri Lanka
St. Helena
St. Kitts-Nevis
St. Lucia
St. Vincent and Grenadines
Sudan
Surinam
Swaziland
Syria
Tajikistan
Tanzania
Thailand
Timor, East
Togo
Tokelau
Tonga
Trinidad & Tobago
Tunisia
Turkey
Turkmenistan
Turks & Caicos Islands
Tuvalu
Uganda
Uruguay
Uzbekistan
Vanuatu
Venezuela
Vietnam
Wallis & Futuna
Yemen
Yugoslavia, Fed. Rep.
Zambia
Zimbabwe

Note: Eurostat figures do not include figures for St. Kitts-Nevis

APPENDIX 5 USEFUL INTERNET SITES

www.intracen.org
Web site of ITC with link to MNS Market News Service. Depending on the product group, the MNS product specialist contacts these sources of information to obtain up-to-the-minute data concerning the prices of products, supply and demand and other economic information. The collected information is then analysed, tabulated and processed in a computer programme specially designed for each product group, then transmitted to MNS subscribers by airmail, E-mail or fax. (Language: English)

www.minlnv.nl
The web site of The Netherlands Ministry of Agriculture, Nature Management and Fishery provides information on policy and statistics on agriculture, nature management and fisheries. It also links up to other useful sites in Europe. For an overview of information by country, please refer to www.minlnv.nl/agribusiness/landen (Language: English and Dutch)

www.ifoam.org
Web site of the International Federation of Organic Agriculture Movements. Information on fairs, projects, events, regulations, reports and magazines on organic agriculture. Also provides links to other international organisations and databases including a collection of Country Reports on Organic Agriculture. (Language: English)

www.foodnavigator.com
Research and Information Centre on food ingredients and the food ingredients industry. This site offers a variety of sites, articles, surveys and other products relevant to the food sector. Each Internet review offers direct access to the chosen material and a brief explanation about the link. (Language: English)

http://apps.fao.org/page/collections?subset=agriculture
This Internet site contains the statistical database of the FAO (Food and Agriculture Organisation). It offers detailed information on production, imports and exports of several kinds of fruit and vegetables. (Language: English, French, Spanish, Arabic, and Chinese)

www.foodinfonet.com
Food Info Net is an Internet site for information and services related to food technology, R&D and manufacturing. The site combines the resources of food companies, research and academic institutions, industry suppliers, government agencies, and non-profit special interest groups. (Language: English)

www.fruchtsaft.de
Web site of the Association of the German Fruit Juice Industry (VdF) containing information on fruit juices, trade and (European) fruit juice associations. Moreover, it contains links to the fruit juice industry, publications and other relevant associations. (Language: German and English).

http://europa.eu.int
Main website of the EU giving access to all kind of information on EU matters

www.efsa.eu.int/index_en.htm
Website of the European Food Safety Authority

http://mkaccdb.eu.int/
Market access data base of the EU, giving trade barriers to third country suppliers

APPENDIX 6 REFERENCES

Specifications organic pear purée of a European processor of baby/infant food
The below-mentioned specification is quite extensive. Depending on the application of the product, the requirements of the buyer and the ability of the supplier to deliver all this information means that product specifications can be less extensive. This example shows it can be drawn up, but certainly not how it must be drawn up.

Product description
Produced from healthy pears, organically grown; without additives, especially without Vitamin C added. Aseptically packed.
Supply only with certificate from the EU-authorized certifying body in accordance with EU Council Regulation (EEC)2092/91 on organic production of agricultural products.
Types: preferably Conference, Abbate

Process description
Prepared from carefully selected and washed pears. The purée is heated during 1 minute at 105-110 ∞ C and within the shortest possible time cooled back to 15-18∞ C.

Legal requirements
The supplied material should be in accordance with applicable food legislation, and EU directives and standards.
Specifically:
- legislation on dietetic food for babies and infants
- legislation on organic farming and processing in accordance with (EEC)-Nr.2092/91

Production purpose
Preparation of baby and infant food.

Chain control
The supplier should deliver documentation relevant to the control of the basic seeds. All relevant documentation should be kept for two years and supplied to the processor upon request.

Packing
Packing material in accordance with the applicable regulations. The packing should be done aseptically (in case of steel container with liquid nitrogen flushing)
Packing unit: 800 kg steel container or 200 kg drums with inside Scholle bag.

Samples
A batch should be reserved, to supply to the buyer. A representative sample should be taken from this batch and sent to the buyer to be tested in sensory and analytical evaluation. After approval, all supplies should be referred to the approved sample.

Transport and storage conditions
Organic pear puree, aseptically packed, should be transported and stored at room temperature (10-25∞ C).
Shelf life: Steel container; 3 months after arrival
Drums; 12 months

Sensory characteristics
Appearance: Beige/yellow to dark yellow pear puree with minimal black and brown particles
Consistency: homogeneous, medium viscosity
Taste: fresh, aromatic, without foreign taste
Smell: fresh, without foreign smells

Microbiological characteristics

Characteristic	Unit	n	c	m	M	Certified in analysis
Total plate count at 30∞C	SFU/g	5	2	10≥	10x4	Yes
Salmonella	SFU/25g	5	0			1 per charge
Enterobacteriaceae	SFU/g	5	1	<10	10	1 per charge
Coliforms	SFU/g	5	1	0		1 per charge
E. coli	SFU/g	5	1	0		1 per charge
Moulds	SFU/g	5	1	10≤	10≥	Yes
Yeasts	SFU/g	5	1	10≤	10≥	Yes

n= number of samples
c= number of samples between m and M
m= lowest value, most often reached
M= highest value, not to be surpassed

Chemical characteristics

Characteristic	Unit	Minimum	Maximum	Method
∞ Brix, ref., 20∞ C		11	15	Refractometer
pH		3.8	4.3	Electrical pH-meter
Viscosity at 20∞C				
According to Bostwick	cm/30s	8	12	Bostwick- consistometer
Acidity calculated as pH 8.1 tartaric acid	g/kg	2	4.5	

Residues

Characteristic	Unit	Maximum	Method
Pesticides	ppb	10 per item	DFG S 19, GC-Headspace, DFG E 378
Aflatoxin (B1,B2,G1,G2)	µg/kg	0,05	HPLC
Patulin	µ/kg	50	HPLC
Lead	mg/kg	0.05	AAS
Cadmium	mg/kg	0.01	AAS
Mercury	mg/kg	0.005	AAS
Copper	mg/kg	2.0	AAS

Products should be non-GMO. Genetically modified DNA must not be detectable.

CBI: YOUR EUROPEAN PARTNER FOR THE EUROPEAN MARKET

The CBI (Centre for the Promotion of Imports from developing countries) is an agency of the Dutch Ministry of Foreign Affairs. The CBI was established in 1971. The CBI's mission is to contribute to the economic development of developing countries by strengthening the competitiveness of companies from these countries on the EU market. The CBI considers social values and compliance with the most relevant environmental requirements to be an integral part of its policy and activities.

CBI offers various programmes and services to its target groups:

Market information
A wide variety of tools to keep exporters and Business Support Organisations (BSOs) in developing countries in step with the very latest development on the EU market.
These include market surveys and strategic marketing guides for more than 40 product groups, manuals on export planning and other topics, fashion and interior forecasts and the CBI News Bulletin, a bi-monthly magazine. This information can also be obtained from our website at www.cbi.nl For all information on non-tariff trade barriers in the EU CBI has a special database, AccessGuide, at www.cbi.nl/accessguide
And finally CBI's Business Centre is offering free office facilities, including telephones, computers, internet and copiers for eligible exporters and BSOs. Market reports, international trade magazines, cd-roms and much more can be consulted in the information section of the business centre.

Company matching
The company matching programme links well-versed suppliers in developing countries to reliable importing companies in the EU and vice versa. The online matching database contains profiles of hundreds of CBI-audited and assisted exporters in developing countries that are ready to enter into various forms of business relationships with companies in the EU, as well as many EU companies interested in importing or other forms of partnerships such as subcontracting or private labelling.

Export development programmes (EDPs)
EDPs are designed to assist entrepreneurs in developing countries in entering and succeeding on the EU market and/or in consolidating or expanding their existing market share. Selected participants receive individual support over a number of years by means of on site consultancy, training schemes, trade fair participation, business-to-business activities and general export market entry support. Key elements usually include technical assistance in fields such as product adaptation, improving production, implementing regulations and standards and export marketing and management assistance.

Training programmes
Training programmes for exporters and BSOs on, among others, general export marketing and management; trade promotion; management of international trade fair participations and developing client-oriented market information systems. The duration of the training programmes vary between two days and two weeks and are organized in Rotterdam or on location in developing countries.

BSO development programme
Institutional support for capacity building for selected business support organisations.
The programme is tailored to the specific needs of participating BSOs and can include train-the-trainer assistance, market information systems support and staff training. CBI's role is advisory and facilitative.

Please write to us in English, the working language of the CBI.

Centre for the Promotion of Imports from developing countries
Centrum tot Bevordering van de Import uit de ontwikkelingslanden

Mailing address:
CBI
P.O. Box 30009
3001 DA Rotterdam
Phone +31 (0) 10 201 34 34
Fax +31 (0) 10 411 40 81
E-mail cbi@cbi.nl
Internet www.cbi.nl

Office:
WTC-Beursbuilding, 5th Floor
37 Beursplein, Rotterdam, The Netherlands.

Mailing address: P.O. Box 30009, 3001 DA Rotterdam, The Netherlands
Phone: +31 10 201 34 34 Fax: +31 10 411 40 81
E-mail: cbi@cbi.nl Internet: http://www.cbi.nl
Office: WTC-Beursbuilding, 5th floor
37 Beursplein, Rotterdam, The Netherlands