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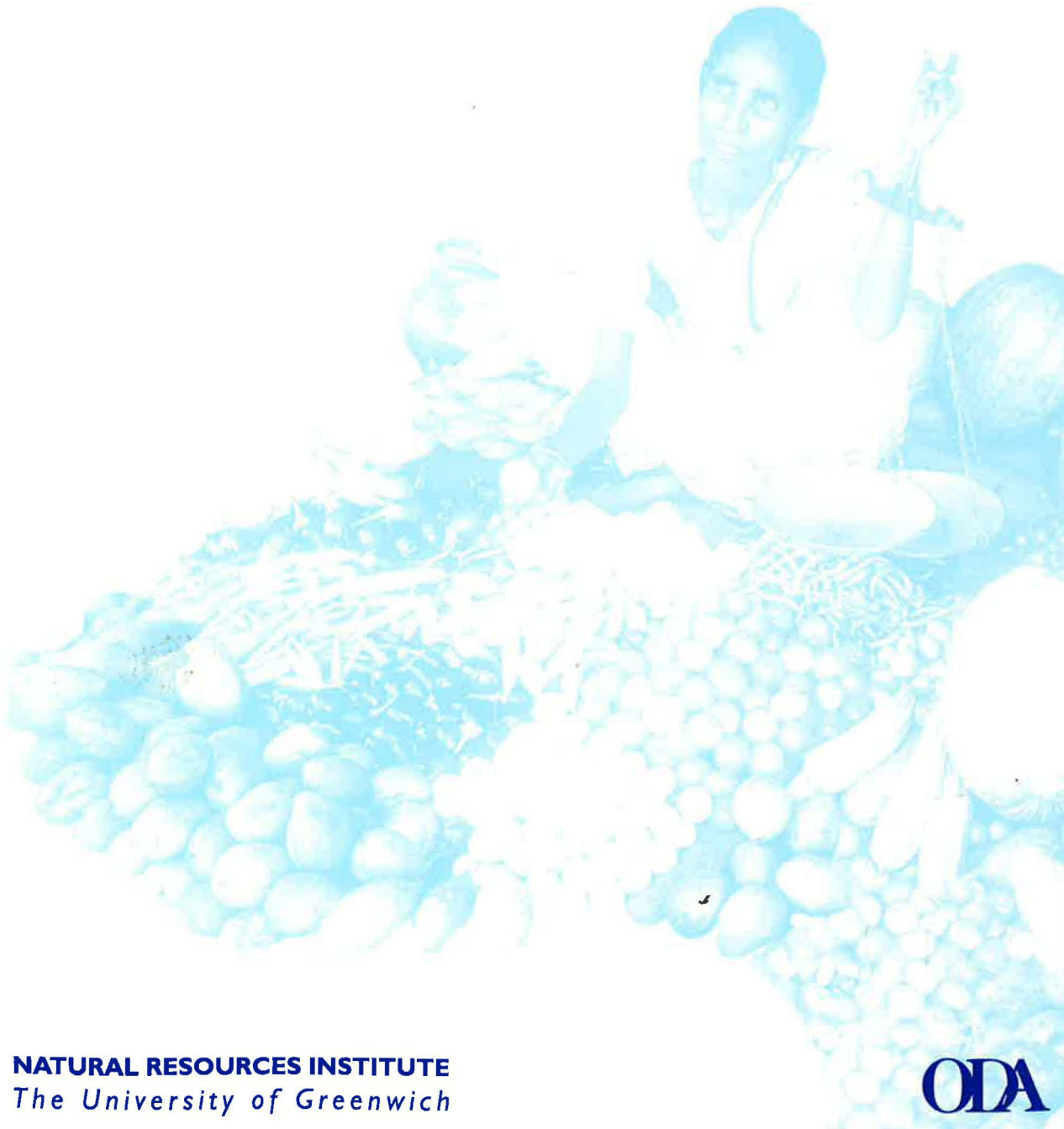
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The Potential for Selected Indian Horticultural Products on the European Market

11



The Potential for Selected Indian Horticultural Products on the European Market

Ann Gray and Ulrich Kleih

Marketing Series Volume 11



Natural Resources Institute

The University of Greenwich

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ABBREVIATIONS

ACP	Africa, Caribbean and Pacific
APEDA	Agricultural and Processed Food Export Development Authority
CIF	Cost Insurance Freight
EU	European Union
FOB	Free on Board
FAO	Food and Agriculture Organization of the United Nations
GSP	Generalized System of Preferences
GATT	General Agreement on Tariffs and Trade
IBEA	Intervention Board Executive Agency
ITC	International Trade Centre
NAFED	National Agricultural Co-operative Marketing Federation
NPC	Net Protection Coefficient
RNRRS	Renewable Natural Resources Research Strategy
UAE	United Arab Emirates

Approximate exchange rate: £1 = US\$ 1.50

SUMMARY

The current situation regarding imports of selected horticultural products from India into the European market in general, and the UK market in particular, is examined. The products selected for review are mango, melon, pomegranate, sapodilla, onion, and various Asian vegetables (okra, *tindori*, *kantola* and *parval*). The potential for either beginning or increasing volumes of sea-shipment is also investigated.

In 1994, India exported about 3000 tonnes of mango to Europe, 1000 of which went to the UK. There have already been some sea-shipments of mango to the UK, but it is noted that although mango has the most potential of all the products examined for increasing volumes of sea-freight, the very fragile Alphonso variety may not survive the long transit time. The Kesar and Pairi varieties may have some promise in this respect, but the low demand for the Rajapuri variety in the UK may limit its potential.

Indian exports of melon to Europe are insignificant and accounted for only 0.001% of the European market in 1994. The market for melon in the UK is growing substantially, but few traders are optimistic about the possibility of sea-freighting Indian melon, partly because the Indian season coincides with that of Spain against which it has little chance of competing, and partly because many believe that the fruit could not be preserved for the 30 or so days of transit.

There is some optimism about the development potential of papaya on European markets. The UK is attracted to good 'eating' papaya with good 'visual quality', but the sources are limited. The main suppliers are currently Brazil, Jamaica and Costa Rica. If the technical problems associated with importing papaya could be overcome, this could be a fast growth area.

No disaggregated data are available on the supply of pomegranates to Europe, but small volumes are imported into the UK both by sea and by air. It is generally felt that the UK demand is too low for pomegranates to have much potential. An improvement in the visual quality of the fruit would probably have the greatest impact on its expansion in the UK market.

Sapodilla is only traded by Asian wholesalers. It is a very low volume product in the UK and its extremely short shelf-life means that its potential for sea-shipment is not high.

Speciality bananas occupy a niche market with small sales. Although there is some potential for market growth, traders feel that the process is unlikely to be rapid.

There is little enthusiasm amongst traders for the import of Indian onions. Demand is very low and India would not be able to compete against the high domestic and European supply.

There is also a low demand in the UK for the other Asian vegetables reviewed. Of them all, okra (ladies finger) has the most potential for expansion on the UK market, but there is strong competition from suppliers in Africa, particularly from Kenya. Many traders feel that vegetables are too perishable for successful sea-transport, and their relatively low value on the UK market may not justify increasing exports from India.

Fruit and vegetable consumption in the UK is relatively low compared to the rest of Europe, but the UK market does appear to offer opportunities for expansion of horticultural export from India provided that Indian exporters can strengthen their competitive position.

Section 1

Introduction

The aim of this work was to identify horticultural products from Maharashtra or Karnataka with some UK or European market potential which could be expanded by the development of technologies for successful sea-shipment.

Indian horticulture has undergone considerable change during the last decade, with the establishment of larger commercial operations which draw on the latest production and post-harvest technologies to provide high quality produce.

India has already begun to make its mark with the volume of seedless grape imports into the UK and the rest of Europe expected to increase substantially in the years ahead. Grape planting in the main production region of Maharashtra is expanding so rapidly that Indian production is expected to be on a par with that of Chile by about 1998. Progress has been made with mangoes, particularly the Alphonso and Pairi varieties, and there have been shipments of high value vegetables, including asparagus, okra, fine beans and exotics. APEDA also identifies scope for the shipment of crops such as onions to fulfil seasonal niche requirements.

Other fruit crops likely to expand in India's export portfolio are pineapples, melons of various types, pomegranates and lychees; pomegranates and lychees show potential particularly for the European Christmas market. There are many others, including exotics, which could be exported effectively if the markets could be developed.

It has been suggested that the rationalization taking place in the supply and merchant/exporter sector in India will help to increase confidence in Indian trade and improve efficiency. There are now fewer merchants and those that remain are capable of dealing with the larger volumes required for the supermarket programmes, which are a major target for traders.

Maharashtra, on the northwest coast of India, has excellent climatic conditions for horticulture and is an important focus for the export-oriented production of fruit and vegetables. The state capital, Mumbai (formerly known as Bombay), is a major commercial centre and port. In Karnataka, bananas, mangoes, limes, jackfruit, papayas, table grapes, cashews and guavas are grown; local vegetables include onions, pumpkins and tomatoes. Horticultural production in Karnataka depends on irrigation after the monsoon season.

Table 1 shows the volume and value of fresh fruit and vegetable exports from India from 1992 to 1995. Grape exports increased by 67% during this period and after a temporary decline in 1993-94, exports of mangoes, other fresh fruit, onions, and other vegetables, all increased.

Table 1 Fresh fruit and vegetable exports from India from 1992 to 1995

Commodity	1992-93		1993-94		1994-95*	
	Quantity (tonnes)	Value (US\$m)	Quantity (tonnes)	Value (US\$m)	Quantity (tonnes)	Value (US\$m)
Fresh fruit						
Grapes	10 801	7.50	15 931	10.80	18 000	13.12
Mangoes	25 850	15.90	22 794	13.90	27 000	16.25
Other fresh fruit	43 633	11.80	39 781	10.90	48 000	13.75
Fresh vegetables						
Onions	390 000	59.70	357 132	58.23	405 000	66.25
Other vegetables	37 879	8.94	33 367	7.43	48 000	11.56

Source: APEDA, New Delhi (1995).

Notes: * Estimates.

The following products were selected for investigation by NRI and Cranfield University researchers, in consultation with APEDA, based on their apparent export potential before the study:

- mango (Alphonso, Banganpalli, Pairi, Kesar and Rajapuri varieties)
- melon
- papaya
- pomegranate
- sapodilla
- speciality bananas (apple banana, rice banana and red banana)
- Asian vegetables (onion, okra, *tindori*, *kantola* and *parval*).

Grapes were excluded because much work has already been done on the sea-shipment of grapes. Lychee was also omitted because the main production areas in India lie outside the focus of this study (Maharashtra and Karnataka).

The published data on imports, exports and prices for many of the products are scarce as they are minor items in trade. The report therefore relies heavily on other sources of information, such as wholesalers in the London markets, importers and supermarkets. The study focuses mainly on the UK as the largest importer of horticultural products from India.

Section 2

Potential for Importing Selected Products from India

TRANSPORT FROM INDIA

Air-Freight

Air-freight from India costs about US\$ 1.50/kg which is very expensive compared to other countries exporting to the UK and European markets; air-freight from East Africa, for example, costs roughly half as much. One importer claimed that Indian exporters are prevented from entering into a preferential price agreement with the airlines because of the irregular volumes of produce. The main air-freight companies transporting produce from India are Air India and Singapore Airlines. There is a minimum quantity requirement of 1 tonne.

The quality of the produce after air-freighting is often poor because:

- (a) temperature is not controlled during transport from the farm to the airport (whereas goods for shipment are placed in cooled containers at the farm before transport to Mumbai);
- (b) the fresh produce may be left in the heat for long periods as it is often required to reach the airport 18 h before take-off.

Sea-Shipment

The total transit time for shipping can be as long as 30–35 days. Loading at Mumbai takes about five days (the container has to be at the dock, and the papers for export cleared, before the ship arrives), shipping takes 18–24 days, and there can then be up to five days between landing in the UK, unloading, and transporting to the importer's warehouse.

Containers with a 20 tonne capacity are rare and transport in 40 tonne containers is more common. Shipping companies which transport produce from India include C.M.B. Shipping, Sealand, Mersk and P&O; the UK ports of destination are Dover, Sheerness, Southampton or Felixstowe.

Seasonality of Imports

The calendars in Appendix 1 show the importing seasons for Indian fruit and vegetables. With the exception of pomegranates, Asian vegetables and some ethnic fruits such as sapodilla, importing seasons tend to be very limited. For grapes, this is because of competing sources whereas for mango, it is due mostly to the seasonality of supply of the preferred varieties Alphonso, Kesar and Rajapuri.

A list of taxes and import duties for the products reviewed is shown in Appendix 2.

Fruits

MANGOES

India is the world's largest producer of mangoes and exports to the UK are expected to rise by 30% annually over the next five years; they have already risen during the last three years by 500% (Fresh Produce Journal, 1996). In 1991–92, mango represented 46% by volume of total fruit exports, principally directed at Middle East markets, compared to 24% for grape (Gulati *et al.*, 1994b).

Annual mango production in India stands at 9–10 million tonnes. They are grown throughout India but the main producing states are Andhra Pradesh (28.5% share of total production in 1992, according to Indian Horticultural Statistics), Uttar Pradesh (20.4%), Bihar (16.7%), Karnataka (7.7%), West Bengal (5%), Tamil Nadu (3.8%), Gujarat (3.7%) and Maharashtra (3.2%).

Although Alphonso accounts for only 2% of total mango production, its share of exports is very high. The main varieties are Dasherri, Banganpalli, Langra, Totapuri, Neelam, Badami and Chausa (Eurofruit, 1992).¹

The main destination for Indian mango exports has been the Middle East, with minor exports to the UK, Canada, Singapore and Australia. However, the unit FOB value realization is higher for the UK and Singapore than for the Middle Eastern countries (Gulati *et al.*, 1994b).

North America, which accounts for 50% of world imports, is the leading market for fresh mangoes, followed by the EU and the Middle East. The EU market is dominated by Brazil and Mexico, the USA, by Venezuela, Mexico, Haiti and Brazil, and the Middle East, by India and Pakistan (Eurofruit, 1992).

¹ Gulati *et al.* (1994b) found that mango production costs were about 20–40% of the orchard-gate price, indicating good margins for fruit farmers. This suggests improbably high farm-gate prices; it is not clear which costs were taken into account, or whether an average price or the highest price was used. Differences in product variety and quality are not distinguished.

Although Asia accounts for 70% of world production, India's share of the export trade in mangoes is less than 10%.

EU Imports of Mangoes

In 1994, India exported about 3000 tonnes of mangoes to Europe out of a European import total of approximately 150 000 tonnes (including intra-EU trade).

Data on EU imports of selected commodities are presented in Appendix 3. In 1994, the Netherlands, Europe's leading mango importer, imported 22 000 tonnes, none of which came from India. This figure includes produce shipped to the Netherlands and re-exported to other countries in Europe such as Germany, Belgium, France and Italy. The UK is probably the single largest market and in 1994, imported 12600 tonnes, 1000 tonnes of which came from India. France imported about 12 000 tonnes (10 tonnes from India) and Germany, about 10000 tonnes (40 tonnes from India).

The annual growth rate in the European market as a whole is thought to be about 20%, with the German market expanding fastest at 32% (Eurofruit, 1992).

The volume of mangoes imported into the EU from India in 1992 and 1994, and the total imports from outside the EU (including exports from India), are shown in Figure 1. The total volume of the European mango trade, both inside and outside the EU, is also shown. Total intra- and extra-EU imports increased by 20% between 1992 and 1994.

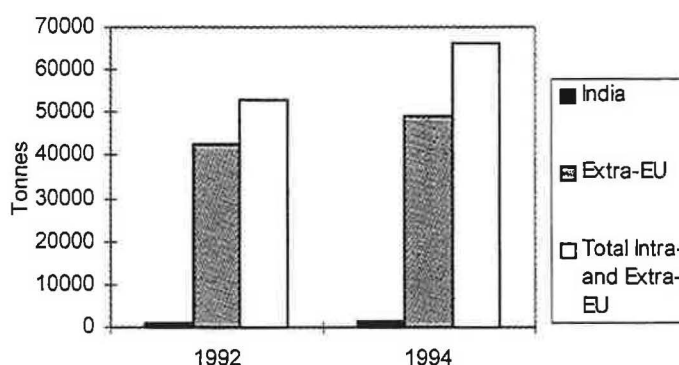


Figure 1 Volume of mango imports into the EU, 1992 and 1994

Source: Eurostat trade data.

Most mangoes are imported into Europe between March and August. APEDA estimates a market niche for Indian mangoes from March to April, and from June to July, of about 6750 tonnes. APEDA also believes that in order to be competitive, all the mangoes will have to be shipped by sea.

UK Imports of Mangoes

Figure 2 shows the total imports of mangoes, guavas and mangosteens into the UK from 1990 to 1995.

Figure 2 shows that there has been no appreciable upward trend in mango imports into the UK from 1990 to 1995. However, UK trade returns show that imports before 1990 increased from less than 9000 tonnes in 1986. There is no obvious explanation for the apparent fall in imports in 1993. It may be due to errors in data collection following the establishment of the common market in Europe at the end of 1992 which led to problems in recording intra-

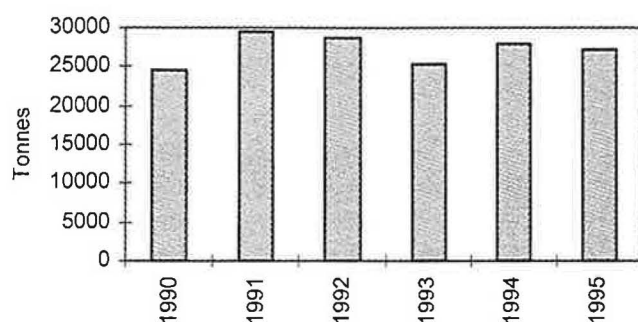


Figure 2 UK imports of mangoes, 1990-95

Source: Business Monitor Publications.

Notes: Includes guavas and mangosteens.

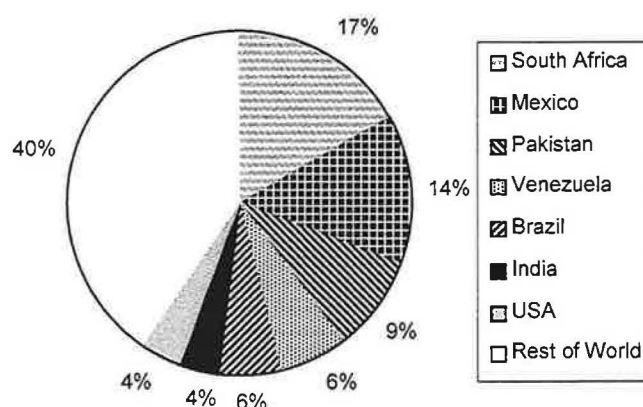


Figure 3 UK imports of mangoes, market shares of suppliers, 1995

Source: Business Monitor Publications.

Notes: Includes guavas and mangosteens.

European trade, or it may reflect adverse weather conditions in the producer countries. However, as the imports come from all over the world and a similar fall was observed for most of the products under review, problems with data collection are probably responsible.

Figure 3 shows that in 1995, India had a relatively small share – 4% – in the UK market. South Africa and Mexico dominated with shares of 17% and 14%, respectively.

Appendix 1 shows the availability of mangoes from competing source countries on the UK market. However, it should be noted that the aggregated trade statistics differentiate between varieties. The varieties imported from India are Alphonso and to a lesser extent, Kesar, Banganpalli, Pairi and Rajapuri, all from Maharashtra and Gujarat States; importers sometimes receive a mixed basket of varieties which differ in maturity and size.

Market Profile

The large supermarket chains demand mangoes of excellent appearance and good eating quality, i.e., high sugar content, delicate fragrance, firm fibreless flesh and a stone constituting only a small proportion of the total weight of the fruit. Consumers are accustomed to seeing mangoes with one side red and the other green, like those from South America; Indian mangoes are generally yellow-orange in colour.

Mangoes must be accurately size-graded because they are sold by the piece in retail outlets and the trade shows a marked preference for cartons containing fruit of uniform size. Although

there is no requirement for a minimum weight, a rough guide would be 250 g for the smallest, 450 g for medium and 600 g for large fruit. These guidelines may vary, however, depending on the time of year and the source of the mango.

There is no doubt that the demand for Indian mangoes in the UK is strong, and that most Indian varieties command a premium because of their superior quality. Although they are generally more expensive in the supermarkets than mangoes from other sources, a significant number of consumers in a niche market appear to be willing to pay the higher price.

The Alphonso variety, which grows only in India and Egypt, is widely considered to be of superior quality because of its consistently good flavour and smooth (non-fibrous) texture. However, it tends to be small and the supermarkets claim that the British consumer has a preference for large mangoes. Of the size ranges generally on offer (large, medium and small), the large and medium sizes sell best.

Chausa mangoes also have good eating quality, i.e., non-fibrous with an agreeable flavour. The Kesar and Banganpalli varieties tend to be cheaper because sea-shipment reduces transport costs significantly. However, although they withstand sea-freighting better than the Alphonso variety, losses are still high and there are many problems associated with their shipment.

The Banganpalli season is from the end of March to April, and the Kesar, Pairi and Rajapuri season, from May to June. Demand for the Rajapuri variety, which is mainly consumed by the Asian community who like to buy unripe fruit for making pickle, is limited. One wholesaler claimed that if these mangoes ripen at all, consumers will not buy them. Limited demand suggests poor potential for sea-shipment.

Mangoes are traded mainly by wholesale importers and some suppliers to the supermarket chains. Many wholesalers in the London markets claim that of all Indian produce traded, mangoes are the largest imports by volume, followed by grapes.

Price

The selling price for Alphonso mangoes on the wholesale markets around May to July 1996 was reported to be between £ 5.50 and £ 6.00 for a box of 12 (about 3 kg). In one major supermarket, Alphonso mangoes were selling for £ 0.99–£ 1.19 each between April and June, whereas mangoes from other parts of the world at this time were selling for £ 0.69–£ 0.79 each.

Figures 4 and 5 show the average wholesale price for mangoes over one year in London and Birmingham.

Transport

Wholesalers generally import mangoes as part of a larger consignment of fruit and vegetables, either on a daily or a weekly basis. Importers for supermarket chains also air-freight mangoes.

Sea-Shipment. This year, some mangoes have been sea-freighted from India. It was expected that around 15 containers would be channelled to Europe in the March to August period (Fresh Produce Journal, 1996).

Many importers for the supermarkets have experimented with sending consignments by sea, with varying degrees of success. A sea-shipment in 1993 failed because it had not been properly pre-cooled and had been left in the sun at the Indian port for a long time. According to the importers, produce can only be shipped while it is in the middle of its season because the quality is inadequate for shipment at the beginning or the end of the season.

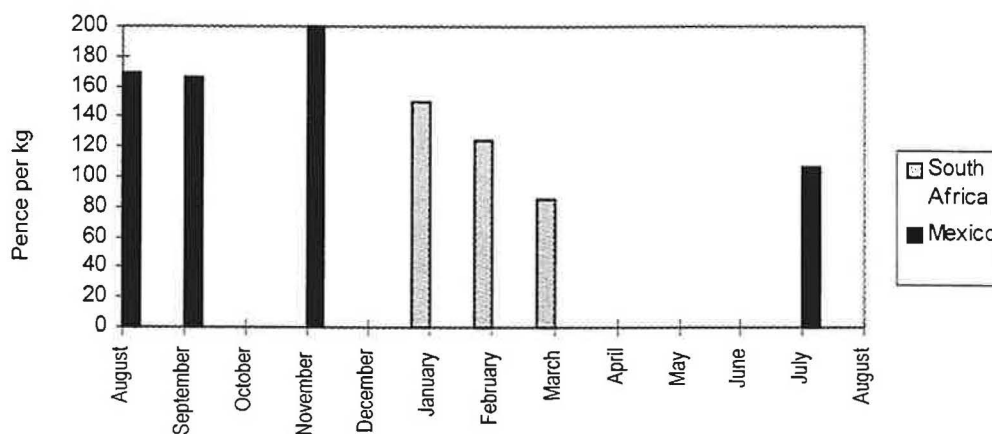


Figure 4 Average price of mango (pence/kg) in New Covent Garden Market, London, August 1995–August 1996 (by country of origin)

Source: Fresh Produce Journal (various editions).

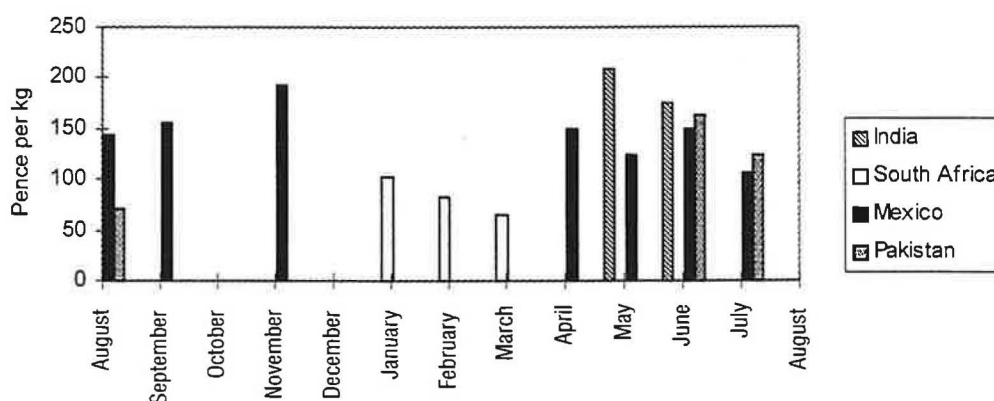


Figure 5 Average price of mango (pence/kg) in Birmingham Market, August 1995–August 1996 (by country of origin)

Source: Fresh Produce Journal (various editions).

Many importers think that in the future, large-scale consignments of mango will have to be transported by sea using controlled atmosphere technology. The Kesar variety has been reported to travel well by sea.

The chairman of the Tenants' Association in New Spitalfields Market claims that when mangoes are transported by sea, wastage can be as high as 20%. As the fruit has to be picked earlier, it is considered to be of a lower quality and therefore commands a lower price.

It is worth noting that according to one source, many shipping companies now refuse to take mangoes. This is because some importers have refused to pay the freight charges to the shipping company when the mangoes have arrived in poor condition.

Potential

Although growth is likely to be slower than in the 1980s, the potential for increasing exports of Indian mangoes to the UK is thought to be high, especially for the Alphonso, Kesar and Banganpalli varieties. APEDA predicts that India could expand annual sales to the UK from about 1000 tonnes to 6500 tonnes over the next three years.

In view of fierce competition, particularly from market leaders such as South Africa and Mexico, India will probably have to reduce prices. Costs could be cut by successful sea-shipment, and increased export volumes could promote economies of scale, so the reduced price need not mean that the import of Indian mangoes is uneconomic. It is unlikely that increased volumes from India would in themselves drive the market price down.

The perceived superior quality of Indian mango varieties may not guarantee price premia in the future as other countries may develop new products with equal eating quality. There are unconfirmed reports that Jamaica is already working on the development of such varieties.

The Chairman of APEDA believes that India has been unable to realize its full export potential for the following reasons:

- (a) there has been an over-dependence on the Alphonso variety, production of which is limited;
- (b) Indian mangoes are expensive and high air-freight charges of US\$ 1.50/kg offer limited scope for export development.

He claims that more must be done to encourage the export of newer varieties such as Chausa, Safeda and Badami, as well as the popular Dasherri (Fresh Produce Journal, 1992).

Before Indian mangoes can be imported into the UK on a large scale, the following problems also need to be addressed:

- uniformity of produce
- maturity
- packaging
- difficulties with the cool chain.

Some UK sources suggest that the Indian product is relatively expensive because of strong demand from within India itself.

Overall, there is good potential for India to exploit the growth in the mango market and capitalize on the reputation for quality which already exists.

MELON

EU Imports of Melon

Melon exports from India to the EU market are insignificant in terms of market share. Appendix 3 shows that in 1994, the EU imported just under 800 000 tonnes, including intra-EU trade, of which a mere 4 tonnes were imported by Germany from India.

Figure 6 shows that melon imports increased by 25% during the period 1991–94 from 33 000 to 44 000 tonnes. Data for 1993 are missing.

Germany was the largest EU importer with over 200000 tonnes (including the 4 tonnes from India) followed by the UK which imported about 130000 tonnes (none of which came from India). Between January and September 1995, however, a small increase in imports from India to the UK was noted; of a total 21000 tonnes, 18 tonnes were from India. Italy, France and the Netherlands were the next most significant importers, importing between about 112 000 and 120 000 tonnes.

The data for 1995 were not available for intra-EU trade and therefore, imports of melon from Spain to the UK are not given.

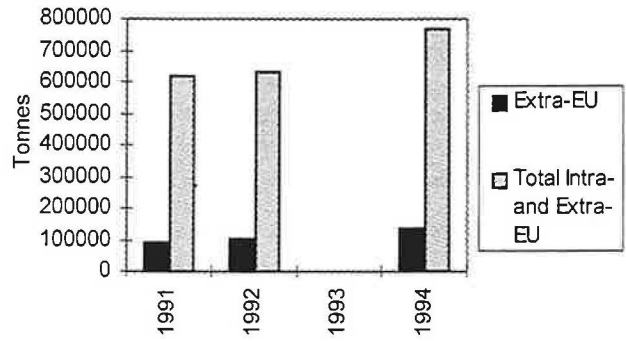


Figure 6 Volume of melon imports into the EU, 1991-94

Source: Eurostat trade data.

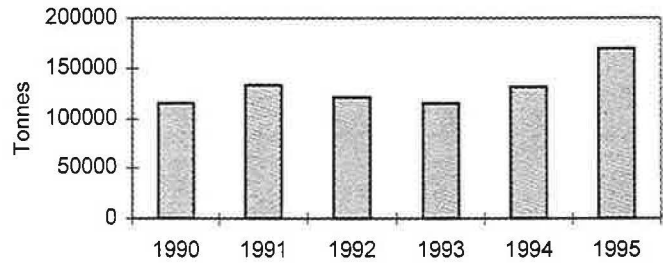


Figure 7 UK imports* of melon, 1990-95

Source: Business Monitor Publications.

Notes: *Includes water melon and papaya.

Imports of melon into the UK followed a gradual upward trend between 1990 and 1995, despite an apparent decline in 1993 (Figure 7). The reasons for this apparent decline can probably be attributed to the problems with data records discussed above. The wholesalers, importers and supermarkets interviewed believe that melon is a large growth area on the European market. Figure 8 shows the origin of the UK melon imports in 1994.

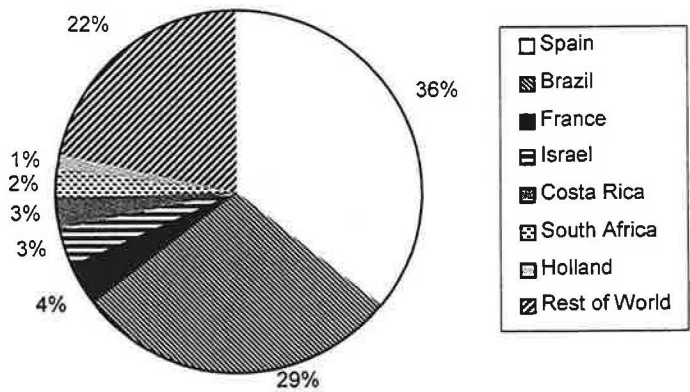


Figure 8 UK imports of melon, market shares of suppliers, 1994

Source: Fresh Produce Desk Book (1996).

In 1994, the main suppliers to the UK were Spain, which supplied a substantial 36% of the market, and Brazil, which supplied 29%. According to one importer, India's main competitors are Spain in the summer months from April to September, Israel throughout most of the winter with the Galia, Ogen and Cantaloupe varieties, and Morocco and Central America in early spring with the Galia variety. The supermarkets say that Galia is the most popular variety. Yellow varieties are supplied in the greatest volume.

Price

Melons were reported to sell on wholesale markets in July 1996 for £ 8–£ 10 for 5 kg (air-freighted). Melons trucked from Spain between July and September tend to be much cheaper at around £ 0.40/kg (Figure 9).

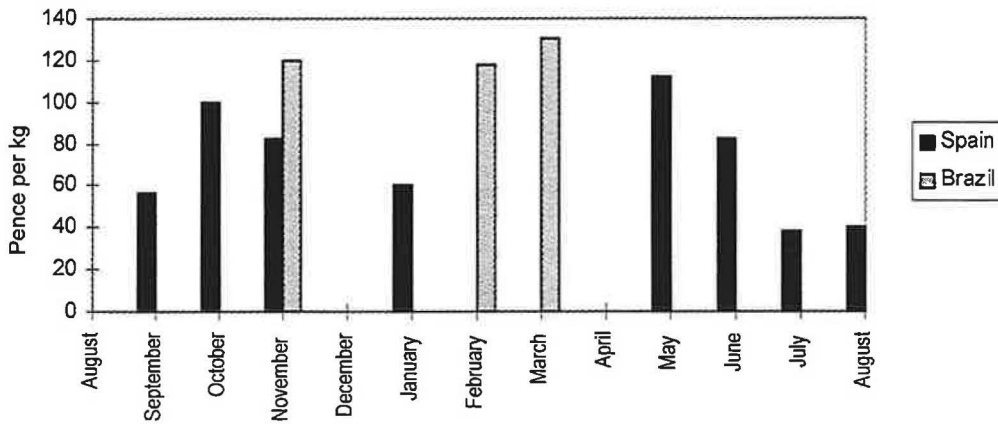


Figure 9 Average price of Galia melon (pence/kg) in New Covent Garden Market, London, August 1995–August 1996 (by country of origin)

Source: Fresh Produce Journal.

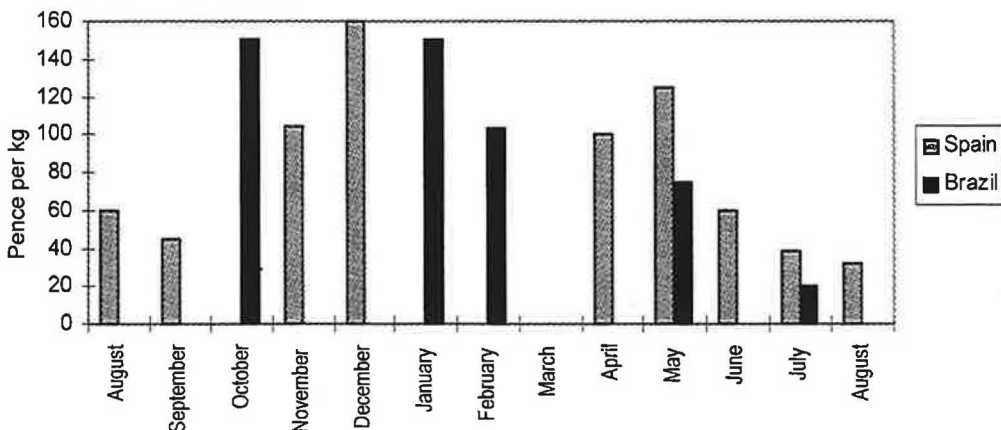


Figure 10 Average price of Galia melon (pence/kg) in Birmingham Market, August 1995–August 1996 (by country of origin)

Source: Fresh Produce Journal.

Transport

Only melons with a long shelf-life could be sea-freighted, although opinions differ as to which varieties would have a chance of surviving the journey. However, importers claim that the varieties with a longer shelf-life are not attractive for the UK market. Controlled atmosphere shipment of melons from South America has been successful, but the total shipping time of about 15 days is much less than the 30–35 days it would take from India.

Potential

There is possibly a market window in the UK for Indian melons from February to April, between the end of the South American and South African season and the beginning of the Spanish season. The varieties which may have potential are Galia, Honeydew and Cantaloupe.

Generally, however, traders expressed scepticism about the potential for shipping Indian melon for two main reasons:

- (a) as they can be trucked overland from Spain at low cost and the Indian and Spanish seasons coincide, there is little point in competing;
- (b) it may not be possible to preserve them for the 30 or so days of transit; the 15 days from Brazil is thought to be the longest possible time they can be kept before starting to rot.

PAPAYA

Although consumption of papaya is increasing, its performance does not match that of mango, avocado or lychee. The chance of papaya being a market leader is constrained because:

- it is extremely fragile
- it is easily damaged during sea transport
- European consumers have little knowledge of it.

The four main areas which import fresh papaya are Southeast Asia, Japan, Europe and North America. The world fresh papaya market totals about 100 000 tonnes of which the European market accounts for 18 000 tonnes (Loeillet, 1995).

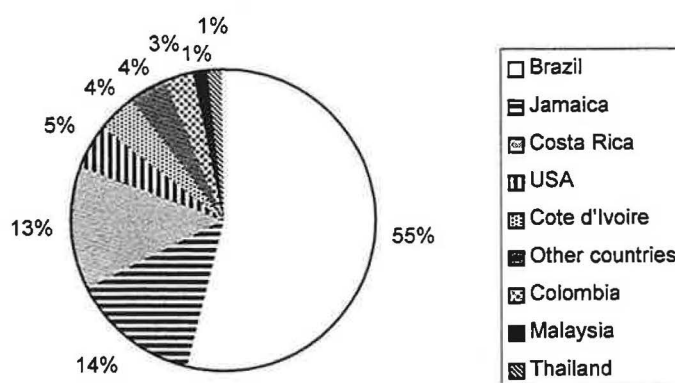


Figure 11 Market shares of suppliers of fresh papaya to the EU, 1993

Source: Fruitrop (Eurostat).

The European Market

Consumption of papaya in the European community exceeded 10000 tonnes for the first time in 1993. Net imports into Europe totalled 8200 tonnes (revealing very high intra-community exchanges). The market is quite young. In 1976, the nine member countries of the EEC imported less than 200 tonnes of papaya; this has now increased to 3300 tonnes (Loeillet, 1995).

The structure of European papaya imports has changed considerably during the last 20 years. From the middle of the 1980s, export sources have become more varied. Côte d'Ivoire, the initiator and former market leader with an 81% share in 1976, was overtaken by Brazil which now ships over 4000 tonnes, representing 54% of European imports (not counting intra-community trade). Numbers of exporting countries increased not only at the expense of Côte d'Ivoire, which now has only 4% of the market, but also of the USA, which lost 20% in 17 years and now has less than 5% of a growing market (see Figure 11). Costa Rica had a 26% market share in 1992 but its exports had dwindled to 13% in 1993. Jamaica's exports exceeded 1000 tonnes in 1993.

Consumption of Papaya in Europe

The Netherlands, Germany, the UK and France account for 75%–90% of the EU total imports of papaya, depending on the year. It is often difficult to measure consumption in individual EU member countries because of intra-EU trade but Spain, with domestic production in the Canary Islands (6500 tonnes used almost entirely for national consumption) is the giant in Europe. It is followed by the Netherlands, Germany, the UK and France.

Between July 1993 and June 1994, the Netherlands imported 3300 tonnes of papaya which was the largest volume entering any one country. Much of this would have been destined for re-export to other parts of Europe. The second largest importer was the UK (over 2000 tonnes), followed by Germany (about 1200 tonnes) and France (923 tonnes) (Loeillet, 1995).

With the exception of Brazil, the lead supplier (Figure 11), each exporting country has its special clients. In 1994, the UK took 44% of papaya imports from Brazil and 38% from Jamaica (Figure 12). All exports from Côte d'Ivoire and Spain go to France. Costa Rica is the second largest supplier for both the Netherlands and Germany.

To a great extent, consumption of papaya still coincides with the winter and spring holidays in Europe. Prices and demand are highest at Christmas and Easter.

In Europe, even though growth of papaya over the past 15 years has been good with imports increasing by a factor of more than 50 (Loeillet, 1995), annual per caput consumption is small at less than 25 g (compared to 70–130 g in the USA since the mid-1980s).

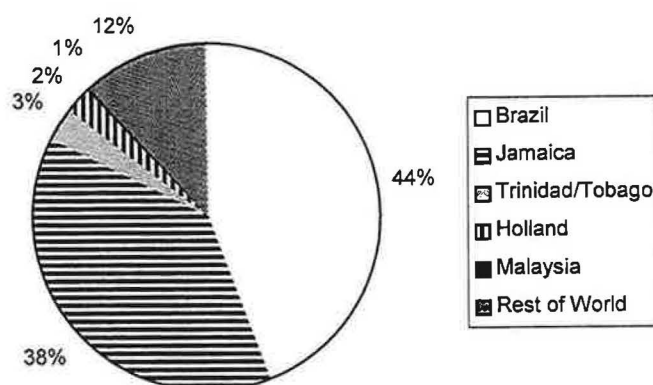


Figure 12 Market shares of suppliers of fresh papaya to the UK, 1994

Source: Fresh Produce Journal (1996).

In the UK, one supermarket chain sells the Solo variety of papaya from Jamaica, Ghana and Brazil. The market is slowly growing and could probably grow much faster with more supermarket promotion. Supermarkets currently sell a small total volume of 4000–6000 papayas/week.

There are several reasons why papaya has not taken off to the same extent as mango or lychee. It is an extremely delicate fruit and the rules for picking, packing and transport are very strict. At the point-of-sale, shelf displays must be carefully arranged rather than using the modern techniques for distributing fruit and vegetables. Supermarkets are becoming increasingly influential in the fresh produce sector and they lay down rules for quality, particularly regarding the firmness of fruits, their shelf-life, and their ability to withstand touching by shoppers. Papaya cannot meet these criteria. It is also highly sensitive to various moulds and insects which damage both its appearance and organoleptic quality.

Prices

On the French market, which is a good indicator for Europe as a whole, the price of air-freighted papaya remains fairly steady throughout the year. It is an up-market sector and demand increases by only a small amount during the period of generally high consumption in December and the first four months of the year. By contrast, demand for sea-freighted papaya increases considerably at this time of year.

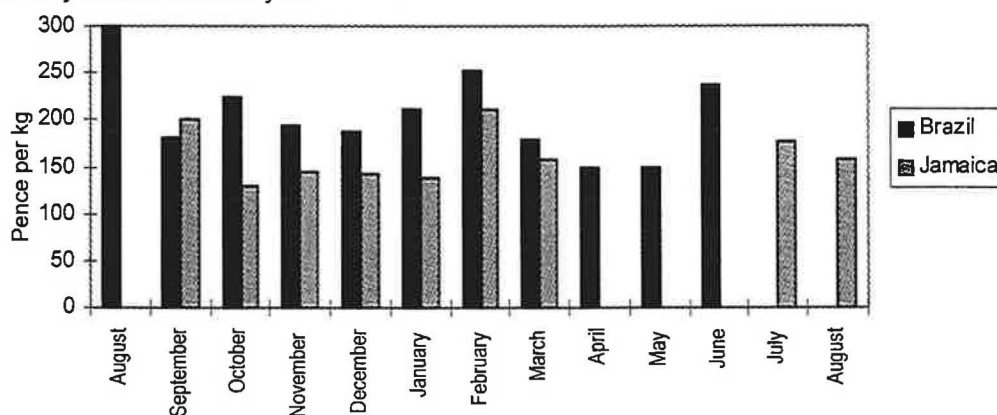


Figure 13 Average price of papaya (pence/kg) in New Spitalfields and Western International Markets, London, August 1995–August 1996 (by country of origin)

Source: Fresh Produce Journal.

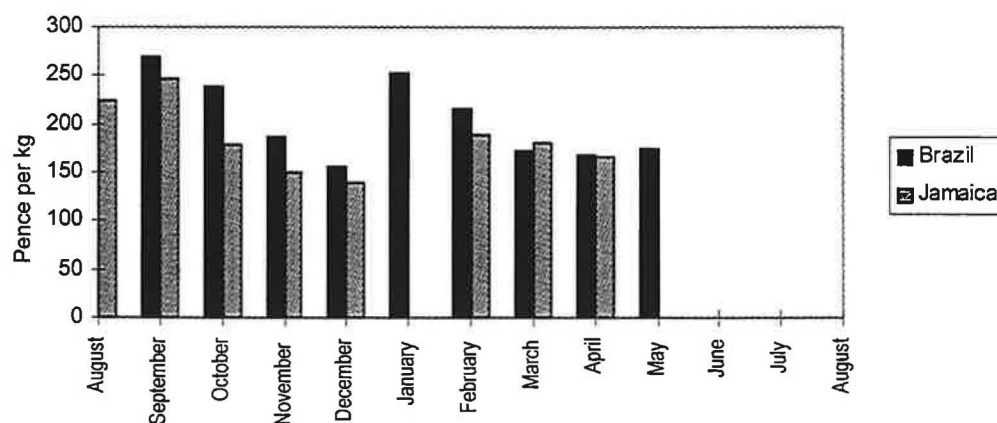


Figure 14 Average price of papaya (pence/kg) in Birmingham Market, August 1995–August 1996 (by country of origin)

Source: Fresh Produce Journal.

Transport

The short conservation period (from three to 14 days when ripe) further hampers the development of papaya consumption and makes sea-transport a delicate operation. It is difficult to determine the ideal picking time for maximizing future fruit quality because papaya is a climacteric fruit and must be picked green and mature. (Fruit in general can be classified as either climacteric or non-climacteric on the basis of their respiration pattern during ripening.) It ripens badly if picked too green and deteriorates rapidly if picked too ripe. However, Brazil, which is the market leader, and Costa Rica have started to transport papaya by sea.

Potential

There is some optimism about the development potential of papaya on European markets, in spite of the drawbacks. There is potential for increased demand in the UK market for fruit with an agreeable taste, a good texture, and an attractive appearance, but the sources are limited. If the transportation problems could be overcome, it could be a very fast growth area. Loeillet (1995) recommends research on transport, pre- and post-harvest protection of fruits, and better control of timing and picking.

POMEGRANATE

Pomegranates are traded by a small number of importers, largely in the wholesale sector, and no specific figures are available for either European imports or UK market segmentation. Indian pomegranates of the Ganesh variety are imported as part of mixed consignments of fruits and vegetables. Some wholesale traders have stopped importing pomegranates because of the poor quality of some of the vegetables in these consignments.

A German importer in Hamburg who had imported a trial shipment of pomegranates from India claimed that the Indian variety was unsuitable for the German market because it was not of the red colour to which the German consumers were accustomed.

Traders say that the UK market for pomegranates is small. One supermarket chain sells about 2000 boxes/week (with 10–12 pomegranates in a box) throughout the year. Of the larger importers, one imports about 12 000 boxes/month (with 12–15 in a box) and another, about 1000 boxes/week, throughout the Israeli season (two months).

India's main competitor is Spain, which supplies pomegranates to the UK between late September and late January. Most Spanish imports are transported overland to the UK, taking only about two days. The other main competitors are Egypt and Israel. Indian pomegranates are available on the UK market between September and February.

One UK supermarket buys pomegranates from Spain and Israel between September and November, and from India during November/December for the Christmas market.

Price

Air-freighted pomegranates from India are sold by one supermarket chain at around £ 0.89 each. This compares to road-freighted pomegranates from Spain which, although possibly of a lower quality, sell for £ 0.29 each.

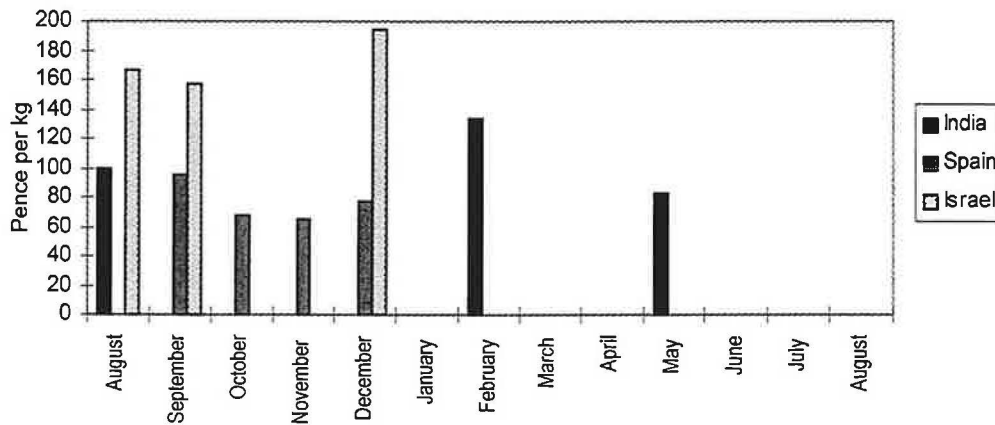


Figure 15 Average price of pomegranate (pence/kg) in New Covent Garden Market, London, August 1995–August 1996 (by country of origin)

Source: Fresh Produce Journal.

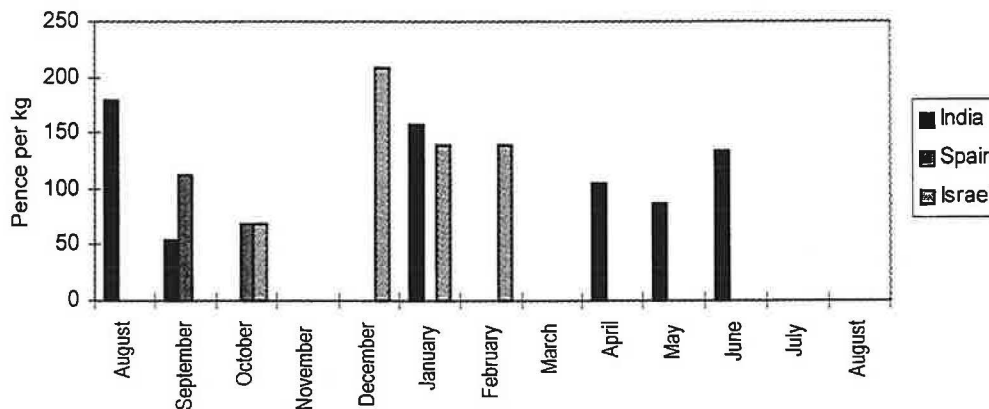


Figure 16 Average price of pomegranate (pence/kg) in Birmingham Market, Birmingham, August 1995–August 1996 (by country of origin)

Source: Fresh Produce Journal.

Transport

Indian pomegranates are transported both by air and by sea. There is a significant difference between the prices of air-freighted and sea-freighted products. When air-freighted, they retail for about £ 0.80 each throughout the year, whereas when they are sea-freighted they sell for about £ 0.40–£ 0.60 each. The success of sea-shipment can be very variable, especially during the summer months. One importer air-freights pomegranate during the summer because there is too high a risk that it would not survive the journey by sea at this time.

Potential

It is generally felt that the UK demand for pomegranate is too low to offer potential for sea-shipment. Export of pomegranates from India to the UK was found to be non-viable by one importer because the net price gained by the exporter was lower than the price on the Indian domestic market. Another importer, who currently imports 12 000 boxes/month, felt that the volume could be increased by a factor of four if successful sea-shipment could be achieved and the price reduced to compete with Spain.

This market is a small growth area and is not very dynamic. Pomegranates have been available on the UK market for many years but in spite of consumer awareness, consumption has not increased significantly. The low demand can be partly attributed to the fact that the fruit, which is full of seeds and has a lot of pith, is difficult to eat. Pomegranates are also reported to be highly price sensitive. A representative of one of the supermarket chains believed that an improvement in visual quality would have the greatest impact on growth in the UK market.

SAPODILLA

Sapodilla is an egg-shaped fruit which turns to a russet brown when ripe. It should only be eaten when fully mature, i.e., when it is soft to the touch and the translucent flesh is honey-coloured, because immature fruit produces a particularly unpleasant-tasting latex. Once cut, the sapodilla, known by the Indian communities as *chikoo* or *nispero*, is eaten fresh as a dessert, or mixed with rum and coconut. When ripe, the fruit has a short shelf-life of only a couple of days at room temperature, but it may keep longer if it is unripe.

In terms of area and production in India, sapodilla is not a major fruit but it is an important export. The main sapodilla-growing states in India are Karnataka, Gujarat, Andhra Pradesh and Maharashtra. Karnataka alone produces about 65% of Indian sapodilla (Gulati *et al.*, 1994b).

The cost of sapodilla production is probably low in some areas of India. The only available information relates to Gujarat. The cost of production and orchard-gate price estimates in Gujarat were Rs 0.66 and Rs 3.002²/kg, respectively (Gujarat National Horticulture Board, 1992), but the basis for these estimates was not explained.

Exports

Indian exports during 1980/81–1992/93 have shown a dramatic upward trend. While exports were almost negligible between 1981 and 1986, they had increased to about 1600 tonnes by 1988–89 and hovered around that figure thereafter except in 1990–91. The unit value realization in rupees has marginally increased over time, although it has fluctuated widely. However, in dollar terms (and real terms), the unit value realization has declined due to a rapid depreciation of the rupee against the US dollar.

The main destinations for Indian sapodilla are the UAE, Bahrain and Saudi Arabia. These countries account for about 80% of India's sapodilla exports. The other export destinations are Qatar, Oman, UK, Kuwait and France. The unit value realization is about 50% higher from Europe than from the Middle Eastern countries, but only small quantities are exported to Europe (Gulati *et al.*, 1994b).

UK Imports of Sapodilla

Appendix 1 shows that sapodilla is available on the UK market throughout the year.

Sapodilla was included under the heading 'other fresh fruit' in trade data until 1993 but from then onwards, it was placed in a more specific category with tamarinds, cashew apples, lychees and jackfruit. Comparison with the years before 1993 is therefore impossible, and it is difficult to discern any trend from 1993 to 1995. Furthermore, it is probable that sapodilla contributes only a small amount to the 1000–1500 tonnes of imports shown in Figure 17. Lychee is likely to be present in the largest volume in the group.

² Using the exchange rate from July 1992 of 55 Rs to the £1, this is equivalent to a production cost of 1.2 pence/kg and an orchard-gate price of 5.5 pence/kg.

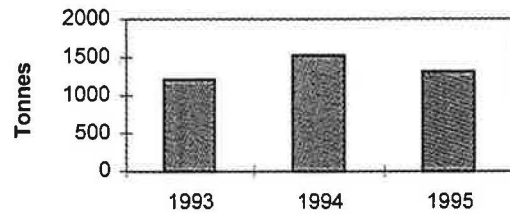


Figure 17 UK imports of sapodilla*, 1993–95

Source: Business Monitor Publications.

Notes: *Data include tamarinds, cashew apples, lychees and jackfruit.

The principal sources of 'other fresh fruit' for the UK are South Africa, New Zealand, Israel, Madagascar and Thailand.

In the UK, sapodilla is traded solely by the Asian wholesalers. It is not viewed with much interest by the supermarket chains because it has a narrow customer base, a short shelf-life, and is difficult to handle owing to the fact that it is only edible when soft. Wholesalers agreed that the market for sapodilla is small. One large wholesaler in London said that he imports only 5–10 boxes (of 6 kg each), two or three times a week.

In general, sapodillas are imported three to five times a week, all the year round, as part of consignments of mixed fruits and vegetables. Competitors to the Indian sapodilla are Thailand, Malaysia, Sri Lanka and St Lucia.

Price

Sapodilla was reported to sell for around £ 1.76–£ 1.98/kg (£ 0.80–£ 0.90/lb) on the wholesale markets in July 1996. In Figure 18, data from the Fresh Produce Journal for the period August 1995 to August 1996 show much higher prices, ranging from £ 3.00 to £ 7.00/kg.

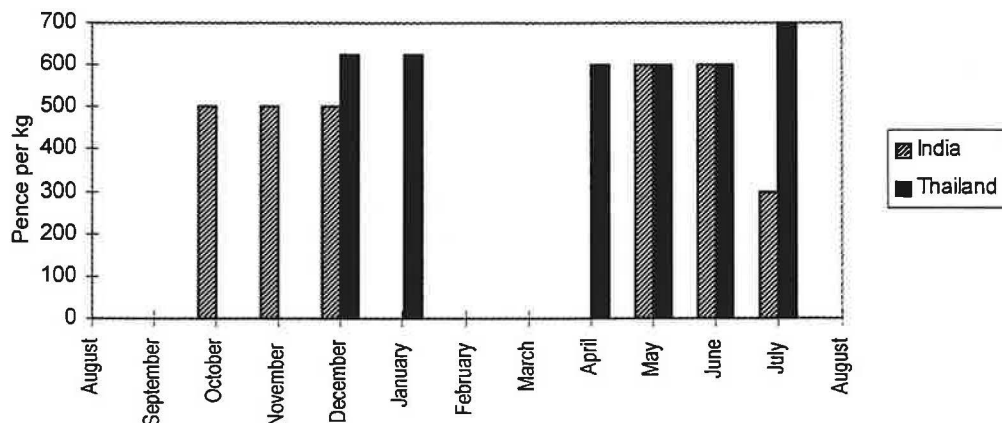


Figure 18 Average price of sapodilla (pence/kg) in New Covent Garden Market, London, August 1995–August 1996 (by country of origin)

Source: Fresh Produce Journal.

Transport

All consignments of sapodilla are transported by air. Traders showed no confidence in the potential for shipping because of its short shelf-life of around two days.

Potential

Sapodilla is a very low volume product in the UK, and its extremely short shelf-life means that its potential for shipping to the UK is not good.

SPECIALITY BANANAS

In 1993, world production of all varieties of banana was 50.5 million tonnes, 40% of which came from Asia. In 1992, India's share of the total world production of 49.6 million tonnes was 14.1% (Gulati *et al.*, 1994b). The other major producers are Brazil, Philippines, Indonesia and China. The three largest banana exporters are Ecuador, Costa Rica and Colombia, and the three largest importers, the USA, Germany and Japan.

India produced about 7 million tonnes of bananas in 1992. The main banana-producing states in India are Maharashtra (27% of production), Tamil Nadu (20%), Gujarat (13%), Madhya Pradesh (9%) and Andhra Pradesh (7%). Yields are highest in Maharashtra (52 tonnes/ha) and lowest in Andhra Pradesh (16 tonnes/ha).

Although bananas are available throughout the year, Gulati *et al.* (1994b) noted that in India, August to October and December to March are periods of brisk trading. The main varieties grown are Dwarf Cavendish (Tamil Nadu and Maharashtra), Robusta (Tamil Nadu and Karnataka), and Rasathali, Chakrakeli and Poovan (Andhra Pradesh).

In 1992, production costs were low at Rs 1.04/kg in Tamil Nadu and Rs 0.56/kg in Gujarat. This compares to an orchard-gate price of Rs 1.153³/kg in Gujarat.

Saudi Arabia and Bahrain both import banana from India but the main export destination is Nepal.

Gulati *et al.* (1994b) calculated the Net Protection Coefficient (NCP), which indicates the export competitiveness of a product, for the bananas produced in India. The NCP suggested that banana is an export competitive crop and that export to the Middle East, Europe and the USA should be promoted.

Banana is a popular crop with small farmers in India because it provides them with a regular income; unlike grape and mango, it can be harvested all the year round. There are major supplies of speciality bananas in Jalgaon (Maharashtra) within 200 km of Mumbai.

UK Imports of Bananas

The market shares of suppliers of all varieties of banana to the UK in 1994 are shown in Figure 19. St Lucia and Jamaica were the largest suppliers, with 19% and 17% of the market, respectively.

³ Using the exchange rate from July 1992 of 55 Rs to the £1, this is equivalent to a production cost of 0.02 pence/kg in Tamil Nadu and 0.01 pence/kg in Gujarat. The orchard-gate price in Gujarat is roughly equivalent to 0.02 pence/kg.

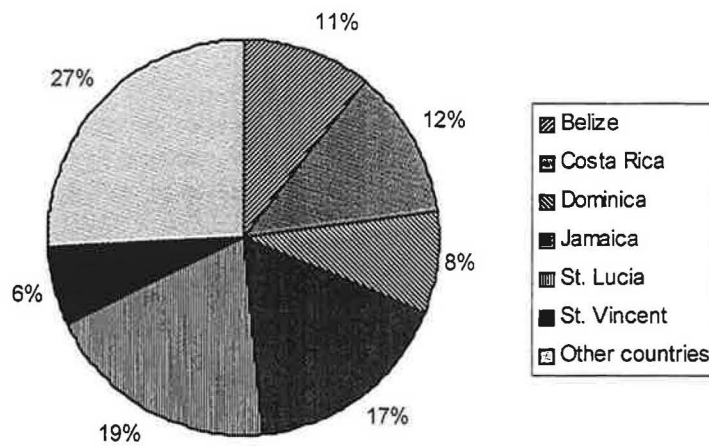


Figure 19 UK imports of bananas, market shares of suppliers, 1994

Source: Fresh Produce Desk Book (1996).

Market Profile

The varieties of banana examined here are apple banana, rice banana and red banana.

The apple banana is very small and does not exceed 10 cm in length. It is usually peeled and eaten raw, or sliced and added to fresh fruit salad. The flesh is much creamier and sweeter than that of the regular banana. As it ripens, which takes between three and seven days at ambient temperature, its thin, smooth skin changes colour from green to golden yellow.

The red banana is a relative newcomer to the UK market. It is smaller than the traditional fruit and has brownish-pink or red skin, according to ripeness.

Rice bananas are small, green, unribbed and no longer than 8 cm. They can be found in speciality outlets throughout the year. They are particularly sweet and have a very short shelf-life, especially at room temperatures.

Price

In August 1996, apple bananas commanded a premium. They were selling for about £ 1.49 for six, compared to about £ 0.90 for the standard Cavendish type.

Transport

One banana importer reported that apple bananas were shipped from Colombia. The main problem with banana imports in general is the long time needed to transport them (about 14 days by ship). Apple bananas are air-freighted to the UK. It is not possible to transport them by sea because quality would be lost if they were to remain in transit for 14 days. They are also difficult to pack because of their shape and thin skin.

Potential

There is a niche market for speciality bananas with small sales. Some growth potential is apparent, but the traders interviewed felt that rapid growth was unlikely. One major importer who attempted to bring apple bananas from Colombia found that UK demand was insufficient to support a viable operation. A spokesman for a major supermarket said that they did not sell speciality bananas on economic grounds. Supplies were difficult to maintain, wastage was high and customers were unwilling to buy.

The Significance of The EU Banana Regime for Indian Exporters of Speciality Bananas

The common organization of the EU banana market came into force on 1 July 1993, completing the Single European Market in bananas. This regime consists of quality standards, 'internal income compensatory aid and restructuring incentives', and external trade measures based on a tariff quota system. With the exception of those which relate to quality standards, speciality bananas are subject to these measures.

The internal income compensatory aid and restructuring incentives, which apply only to the EU and Africa, the Caribbean and Pacific (ACP), compensate banana producers for any loss of income resulting from reductions in price following the introduction of the banana regime. India does not qualify for this aid or for restructuring incentives.

The external trade provisions of the banana regime only apply to imports of fresh bananas. All bananas entering into free circulation in the Community require an import licence. In the UK, licence administration is the responsibility of the Intervention Board Executive Agency (IBEA).

Imports of bananas from India and other non-traditional ACP states (known as 'third' countries) are subject to a tariff quota system. Within the tariff quota, currently set at 2.2 million tonnes,⁴ third country bananas are subject to a duty of 75 ECU/tonne. Imports which exceed these quotas are subject to a prohibitively high tariff of 793 ECU/tonne or approximately £ 0.59 to 1 kg of bananas (using an exchange rate of 1.36 ECU to the £ sterling).

Indian producers wishing to export speciality bananas to Europe must receive a share of the tariff quota. Obtaining a licence outside this quota at a charge of 750 ECU/tonne would increase costs so much that the operation would not be viable.

Therefore, the exporter or producer in India must establish contact with an importer who has a licence to bring bananas into Europe and who is willing to invest in the import of Indian bananas. The majority of licences (66.5%) are granted to importers who have previously traded in third country and/or non-traditional ACP bananas, and 30% are granted to those who have previously traded in traditional ACP or EU bananas. Only 3.5% of licences are allocated to newcomers, i.e., those with no record of trade in third country or non-traditional ACP bananas.

The European Union Banana Traders' Association may be able to provide information on any potential trader willing to collaborate in importing speciality bananas from India. The address of this association is given in Appendix 4.

Vegetables

Indian vegetables are imported mainly by wholesalers and primarily for the ethnic market in the UK. Air-shipments are received all the year round, from one to five times a week. The composition of the shipment varies according to availability but typically contains onion, *tindori*, *kantola* and *parval*. The quality of most of these vegetables is often variable and in some cases, poor.

One major supermarket claims to carry some exotic vegetables in areas with a high proportion of Asians in the community but as a rough estimate, less than 50 of the 360 stores in the UK would stock them.

⁴ The tariff quota is set annually in the light of forecasts of likely supplies and market requirements, and can be increased during the year if the need arises. The tariff quota of 2.2 million tonnes was originally designed for twelve member states. Since the accession of Austria, Finland and Sweden to the EU, the Commission has increased the quota annually to take account of consumption in those member states, pending agreement in Council for a permanent increase in the tariff quota.

There is strong competition from Africa, especially Kenya, where cheaper and often better quality products are grown. Some wholesalers import Indian vegetables only if Kenya is not supplying.

None of the supermarket chains currently sells imported Indian vegetables, but one supermarket believes that there could be opportunities for products such as sweet onions and legumes in the winter. However, Indian vegetables often have a relatively low value on the UK market, so they may not prove to be a viable growth area from the Indian producers' and exporters' points of view.

Transport

All imports of Asian vegetables to the UK are air-freighted.

Potential

None of the wholesalers believed that Asian vegetables could be sea-freighted because they are highly perishable and last for only about 36 hours. Furthermore, demand for Asian vegetables in the UK is limited.

ONION

Onion production in India has increased at an average rate of 3% per annum over the last decade. Onions are grown chiefly in the States of Maharashtra (34% of total output), Karnataka (19%), Gujarat (10%), Bihar (10%) and Uttar Pradesh (9%). The highest yield is obtained in the Punjab (28 tonnes/ha) followed by Gujarat (26 tonnes/ha) and Maharashtra (20 tonnes/ha). There are two harvesting seasons for onions in India: September–October and March–April (Gulati *et al.*, 1994b).

Average onion yields in India as a whole have been consistently low (10.4 tonnes/ha) compared to those in other developing countries such as China (15.85 tonnes/ha), Thailand (12.42 tonnes/ha) and Pakistan (12.13 tonnes/ha) (FAO, 1992). However, India is one of the world's largest producers of onion and is already a significant exporter.

Exports from India

The main markets for Indian onions are Bangladesh, Malaysia, Sri Lanka, UAE, Singapore, Saudi Arabia and Bahrain. Exports to major markets in Europe and North America are relatively low (Gulati *et al.*, 1994b).

Onions are included in the 'negative list' under the category of canalized items. Items in this list are only permitted through a canalizing agency which in this case is the National Agricultural Co-operative Marketing Federation (NAFED). Gulati *et al.* (1994b) reported that this process should be more transparent. As NAFED is currently an exporter as well as a canalizing agency, it has an advantage over other exporters (for example, reserving the lucrative Sri Lankan market for itself).

EU Imports of Onions

As with melon, Indian onion imports to Europe are insignificant. In 1994, Germany was the largest European importer but of the 290000 tonnes imported, only 1 tonne came from India. The UK imported about 200 000 tonnes, none of which came from India. France imported 62 tonnes from India and was the largest as well as the only other importer from that country.

Group of gourds
including kantola
(top right)



Specialty bananas



Mangoes



Okra



Tindori (tindola)



Sapodilla

Wholesalers claimed that in 1995, there was a shortage of onion and the trade statistics from January to September reveal a small increase in Indian imports. The UK, which imported the highest total quantity of around 85000 tonnes during this period, imported 600 tonnes from India (0.7% of total UK imports of onion). The Netherlands was the only other country to import onions from India (270 tonnes out of a total of 65000 tonnes). However, imports from India remain insignificant.

In 1996, the market situation changed and there was a glut of onions from the UK, the Netherlands, Spain, Chile and South Africa.

Figure 20 shows a dramatic 30% decline in UK onion imports between 1990 and 1993, but volumes had virtually recovered by 1995. Again, the apparent fall in imports is probably the result of problems in data collection over this period.

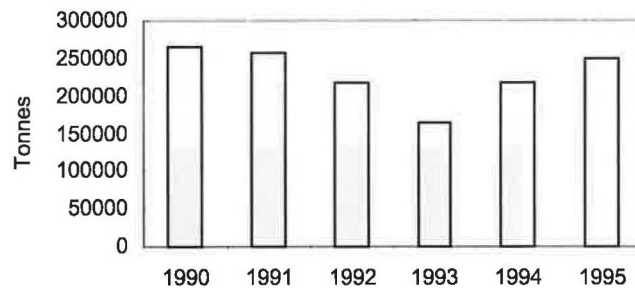


Figure 20 UK imports of onions, 1990–95

Source: Business Monitor Publications.

Notes: Includes shallots, fresh or chilled.

Figure 21 shows that Spain and the Netherlands dominate the UK market for onions, supplying almost 60% between them. It must be noted that the aggregated data do not distinguish between varieties, and that the red variety from India would serve only a small niche market. It would seem from discussions with traders that UK imports of red onion are dominated by Italy.

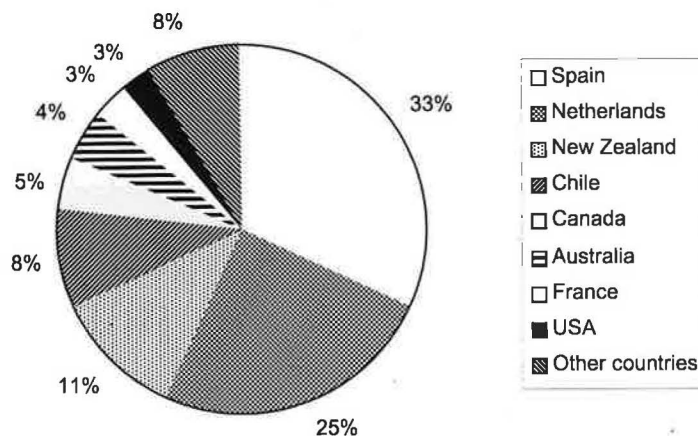


Figure 21 UK imports of onions, market shares of suppliers, 1995

Source: Business Monitor Publications.

Wholesalers in the Western International Market in London import red onions for use in salads. They say that India is competing with Spain, Italy, the Netherlands and the UK. India

supplies in a market window from April to June but the variety of red onion, and whether it is consumed more as an ethnic product than the European variety, is not known.

Potential

Importers showed little enthusiasm for Indian onions. They felt that the demand for red onions in the UK was very small, and that India should not try to export products which can be grown in Europe.

OKRA

No specific data are available on the principal source countries for okra (also known as ladies fingers), but discussions with traders showed that Brazil, Kenya and Zimbabwe are major suppliers, and that West African countries, such as Ghana, are becoming more important.

Market Profile

The main markets for okra cater for the Asian, West Indian, Greek and Cypriot communities, and ethnic restaurants. However, it is being increasingly offered for sale by the supermarket sector. Consumers prefer okra to be young, tender, with few seeds, 68 cm in length and of a uniform light green colour.

Price

No price data were available between October and April, but Figure 22 shows that prices ranged from £ 2.00 to £ 3.50/kg.

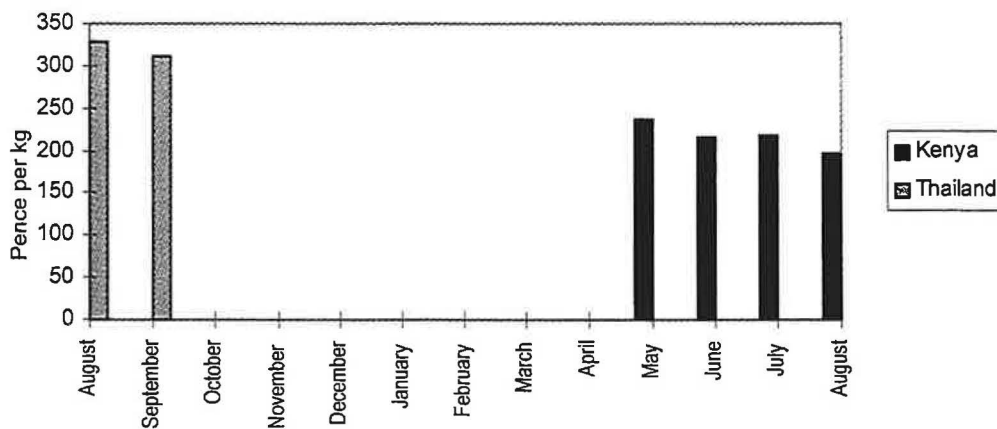


Figure 22 Average price of okra (pence/kg) in Birmingham Market, August 1995–August 1996 (by country of origin)

Source: Fresh Produce Journal.

Potential

Although okra is not being promoted in the UK, the market seems to be growing steadily and may therefore offer more opportunities to exporters, particularly during the winter months. However, the Indian season from July to October does not coincide with this market window, and despite the fact that okra has been available on the UK market for some time, there is still a lack of consumer awareness about it.

There is potential for small growth of okra in the UK market, but India faces strong competition from other countries, especially Kenya; Kenya can produce a high quality vegetable which can be air-freighted at a much lower price. Okra may be too perishable for sea-freighting.

PARVAL

Parval is closely related to *tindori* and is found predominantly in specialist Indian outlets. Available throughout the year, it is usually chopped and added to curries and soups. It is consumed mainly by the Asian community and has relatively low demand in the UK.

TINDORI

Tindori is thin-skinned with moist, pale green flesh containing many tiny seeds; its taste is similar to that of cucumber, although some varieties are bitter. It may be eaten raw in salads or sliced in vinegar like gherkin to which it is closely related. Indians use *tindori* fried with spices, as a pickle ingredient, or curried with potatoes. It has a reasonable shelf-life of about two weeks if kept in cool conditions. *Tindori* is consumed mainly by the Asian community, and has low demand in the UK.

KANTOLA

This vegetable, which resembles a gooseberry with spines, belongs to the bitter gourd family, Cucurbitaceae, and is most likely to be found in specialist Indian retail outlets. It is less bitter than some gourds and becomes sweeter when ripe; the seeds change from green to pink or red at full maturity. *Kantola* is usually eaten whole, either blanched for a short period or soaked in brine for about 2 hours. Alternatively, it may be preserved for several days in a cool, dark place.

Kantola also has low demand in the UK and is consumed mainly by the Asian community.

Potential

Neither the London wholesalers nor the importers for the multiples believe that *parval*, *tindori* and *kantola* have potential for expansion on the UK market because of low demand. They are also thought to be too perishable for successful sea-shipment.

Section 3 The Demand for Fresh Fruit and Vegetables in the United Kingdom

MARKET SIZE AND TRENDS IN CONSUMPTION

In 1993, the total market for fruit and vegetables in the UK was worth about £ 6000 million in retail, catering and processing values. Of this, about 43% by value was fruit, 23% vegetables, 18% salads and 16% potatoes. In terms of volume, about 12 million tonnes of fruit and vegetables were consumed of which 23% was fruit, 23% vegetables, 10% salads and 45% potatoes. The differences in percentages for value and volume reflect the relatively high unitary value of fruit and the low unitary value of potatoes (Gibbs *et al.*, 1994).

Trends in Fruit and Vegetable Consumption

Budd (1995) notes that although the British have become generally more prosperous over the last two decades, the extra wealth has not been used to increase their intake of fresh vegetables (Figure 23). There has been a modest increase in *per caput* fruit consumption from 902 g/week in 1990 to 968 g/week in 1994,⁵ but total vegetable consumption has declined from 2280 g/week to 2081 g/week during the same period.⁶ Despite the fact that total consumption of fruit is falling in the UK, the market for tropical fruit is growing.

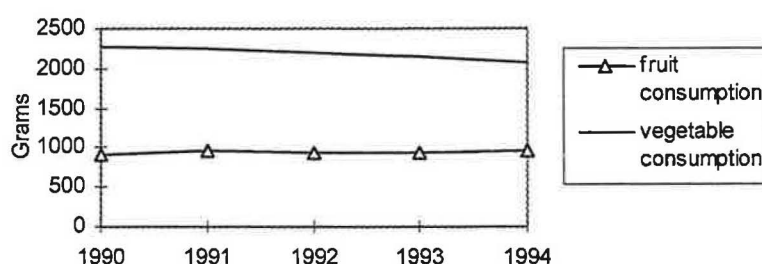


Figure 23 Total *per caput* weekly fruit and vegetable consumption, 1990–94

Source: National Food Survey (1995) *Household Food Consumption and Expenditure*.

Overall, levels of fruit and vegetable consumption remain low in the UK compared to the rest of Europe.

Table 2 Total *per caput* consumption (kg) of fruit and vegetables in the UK, 1990–91

	EU Average	UK
Total vegetables excluding potatoes	117	65
Potatoes	78	99
Total fruit:	61	38
apples	19	14
pears	6	3
peaches	4	2
citrus	32	21

Source: Gibbs *et al.* (1994).

Table 2 shows that with the exception of potatoes, for which consumption is second only to Spain, *per caput* consumption of fruit and vegetables in the UK is lower than the EU average. The Geest Fresh Produce Report (1993) showed that in other European countries, not only were substantially more fruit and vegetables already being eaten than in the UK, but also that consumption was increasing.

Although the demand for fresh fruit and vegetables appears to be fairly static, there have been changes in demand structure. Many consumers are replacing traditional fruit and vegetables with more expensive exotic varieties.

Unfortunately, no official statistics on the consumption of individual exotic fruits have been published, possibly because of the relatively small quantities involved. Therefore, international trade statistics have been used to indicate the quantities of exotic fruit consumed in the UK.

⁵ Includes fruit juices and other fruit products.

⁶ Includes fresh, frozen and processed vegetable products.

Recent trends in EU imports of melon, mango, sapodilla and onion are given in Appendix 3; trends in UK imports of the products under review have been noted in Section 1.

PATTERNS OF CONSUMPTION

The University of Strathclyde has forecast the pattern of fresh fruit and vegetable consumption by product type up to the year 2005. The results are summarized in Table 3.

Table 3 Consumption (1000 tonnes) of fresh fruit and vegetables by product category 1993–2005

	1992	1993	2000	2005	% increase 1993–2005
Fruit	2729	2800	3400	4000	+43
Vegetables	2687	2800	3000	3200	+14
Salads	1143	1200	1400	1600	+33
Potatoes	5757	5600	5400	5100	-9
Total	12 316	12 400	13 200	13 900	+12

Source: Gibbs *et al.* (1994).

An increase in consumption of 12% is predicted, i.e., from 12.4 million tonnes in 1993 to 13.9 million tonnes in 2005, driven mainly by rising demand for fresh fruit. This modest upward trend may be attributed to an increased awareness of the nutritional values of fruit, increasing emphasis on the merchandizing of fresh fruit and vegetables by the supermarket chains, and the extension of the range of retail outlets (convenience stores, newsagents, petrol forecourt shops, etc.). However, most of these factors have been in place for the last 10 years, during which increases in overall consumption have been relatively small.

Gibbs *et al.* (1994) predict that less well known vegetables will be introduced, and their consumption increased, in line with consumer demand for variety.

Catering

Demand for fresh fruit and vegetables in the catering industry was about 2.5 million tonnes in 1993 (Gibbs *et al.*, 1994).

MAINSTREAM, EXOTIC AND ETHNIC MARKETS

The market for fruit and vegetables can be divided into three categories: mainstream, exotic and ethnic.

Mainstream produce is consumed by the majority of the population, regardless of nationality, and includes products such as apples, bananas, melons and onions.

Exotic products are those with a relatively high value based on high production and/or transit costs. They are probably consumed only by a relatively small percentage of the population. Distribution is limited to the top class retail, restaurant and catering outlets. Products in this category include pomegranate, papaya, speciality banana and okra. Although mango may still be considered to be exotic, it is moving increasingly towards more mainstream consumption.

Exotics are expensive at present and this alone may restrict the market size. Mango is probably the only product amongst those reviewed with good prospects for high volume sales, but in order to realize this potential, lower prices and consistent quality need to be achieved.

The retail of ripe fruit demands careful management to keep in-store damage to an acceptable level. It is thought that the failure of papaya to achieve significant market growth may have been partly due to earlier problems with quality which arose from deficient management (Hallam, 1988).

Ethnic products are those which are consumed only by certain sections of the non-indigenous population, such as Indians, Pakistanis and Bangladeshis. Products in this category include saponilla and some of the Asian vegetables such as *kantola*, *parval* and *drumstick*. Distribution is generally limited to the retail outlets which serve these sectors, but in areas where there is a significant ethnic community, some supermarkets attempt to cater for its needs by stocking particular fruits or varieties.

Quality requirements, in terms of packaging or sizing for example, do not appear to be as stringent in the ethnic market as in other parts of the retail trade. However, the quality of produce on offer in 'ethnic' shops is often similar to that in many independent greengrocers (Hallam, 1988).

Although the ethnic market may provide an outlet for lower quality produce, the returns are correspondingly low and consequently, it may not offer significant trading opportunities for new exporters.

While on the market, all products pass through a number of phases: launch, growth, maturity, saturation and decline. Delmas (1991) included some of the products under review in a representation of the cycle for the French market, and it is thought that these products would be similarly placed in a cycle for the UK market.

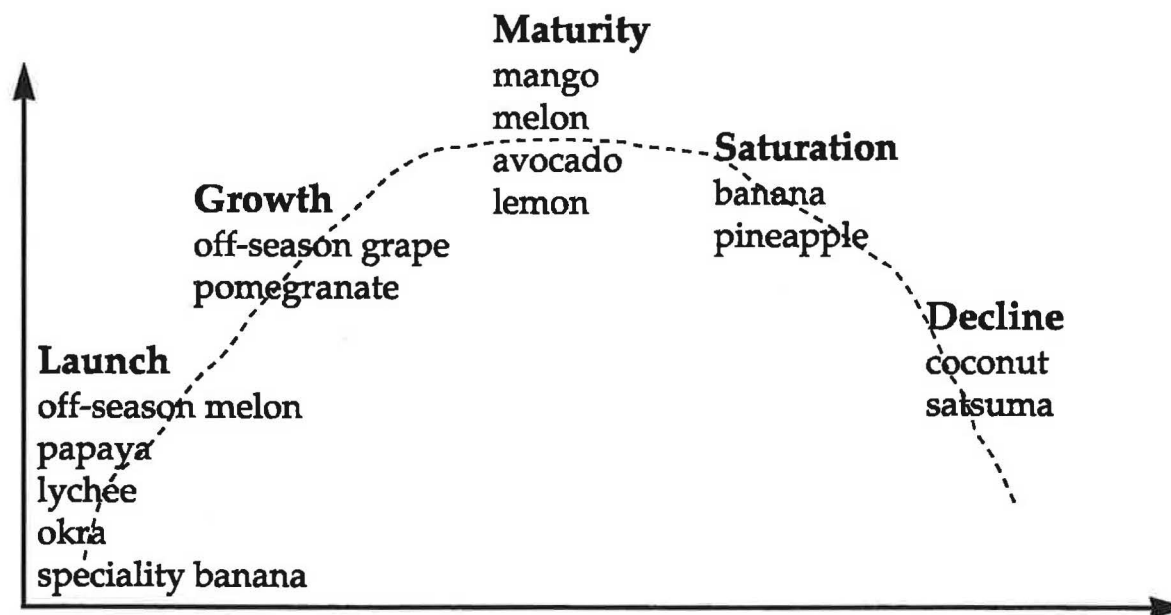


Figure 24 The product cycle for selected fruit and vegetables

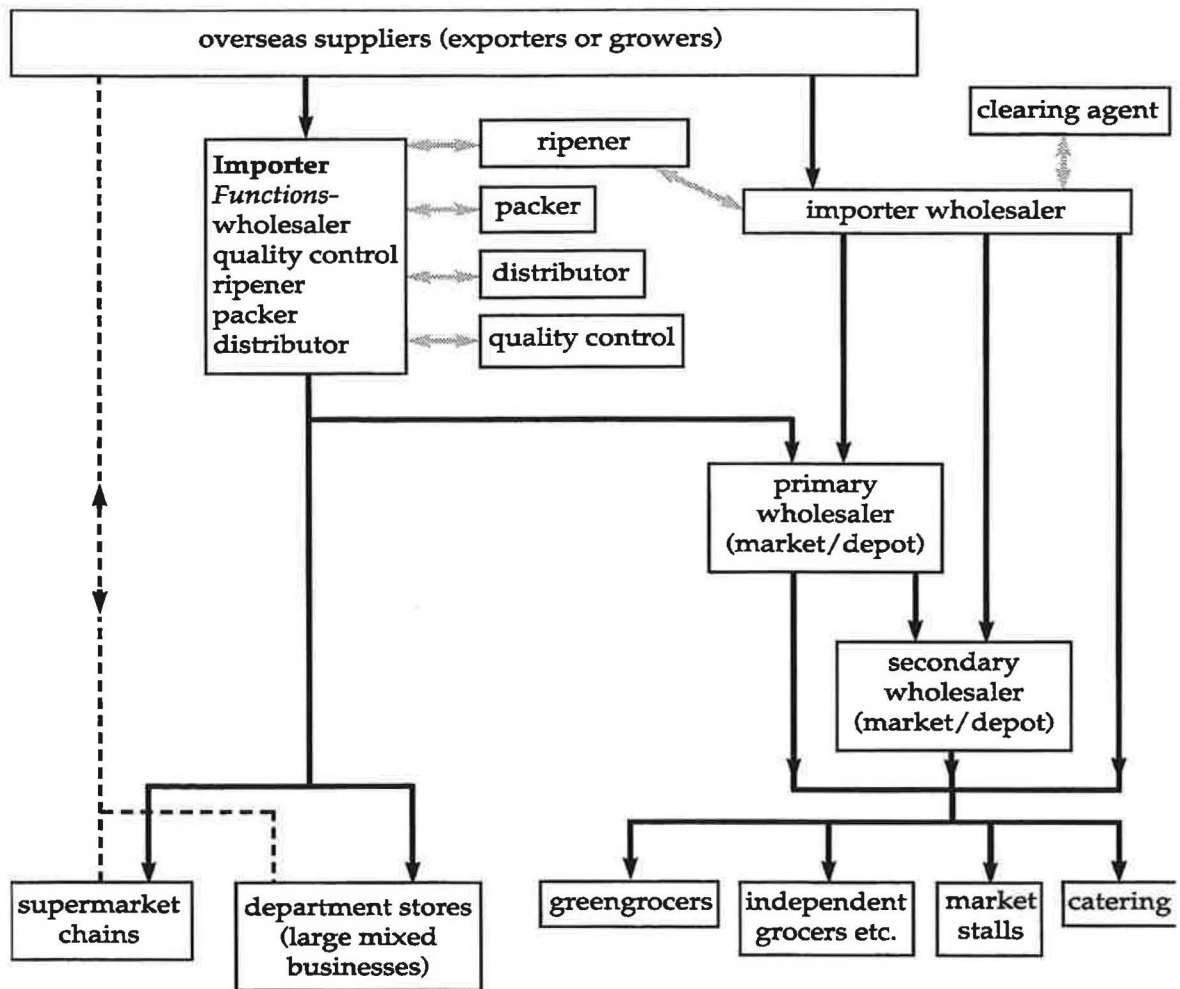
Mature products, and products which have reached the end of their growth, tend to leave the exotics section and enter the range of mainstream products.

Section 4

The Marketing of Imported Fresh Fruit and Vegetables in the United Kingdom

Figure 25 shows the marketing system for fruit and vegetables. The basic functions of the system are importing, wholesaling, retailing, transportation and storage at the various stages.

In general, the extent to which these functions have been carried out by separate firms has been decreasing over the years and in many cases, shortened. There are fewer links in the chain.



Key

—> Procurement channels

↔ Contracting out of services (optional)

- - - - - This line is intended to demonstrate the relationship between the supermarket chain and department store and the producer, whereby the retailer has the same control over the conditions under which the produce is grown and transported but is not involved in organizing payment of the exporters for shipment of the produce.

Figure 25 Marketing channels for imported fruit and vegetables

Sources: Trade sources; Strathclyde University Wholesale Markets Study; Hallam (1988) ODNRI Bulletin No. 13.

IMPORTER-SUPERMARKET CHANNEL

There are now some large importing-wholesaling companies which deal particularly with the supermarket grocery chains. Supermarkets generally have two or three suppliers each for any one product line. The importers deal with both grower/exporters and exporters.

One importer estimated that about 50% of his produce was traded on a commission basis with a commission of 6–8%. Under this system, the exporter eventually receives the wholesale buying price, less any wholesaler and importer commission charges, the costs of certain additional marketing services such as ripening, and any customs duties and taxes payable. Therefore, although the commission system obviously safeguards the importer, exporters are more exposed to risk.

The rest of the produce is traded on a fixed price basis. Importers tend to reserve this form of trading for exporters with whom they have developed a working relationship built on trust.

For some imported fruits and vegetables, retailers require the importers to perform additional functions such as ripening, quality control, packing and re-packaging, pre-packing and labelling. The importers either perform these services themselves or contract them out. There is also an increasing tendency for more of these functions to be carried out by the exporter in the country of origin, such as pre-packing and labelling for retail display.

WHOLESALE CHANNEL

Most of the produce destined for ethnic markets, such as Asian vegetables, is likely to pass through the wholesaler channel. Wholesalers also operate on both a fixed price and a commission basis. When the goods arrive, they generally contract out import clearance to a clearing agent, a service for which they pay around £ 40–£ 50 per shipment.

RETAILERS

Fresh fruit and vegetables are handled by a variety of retailers. Figure 26 shows the market shares of each type.

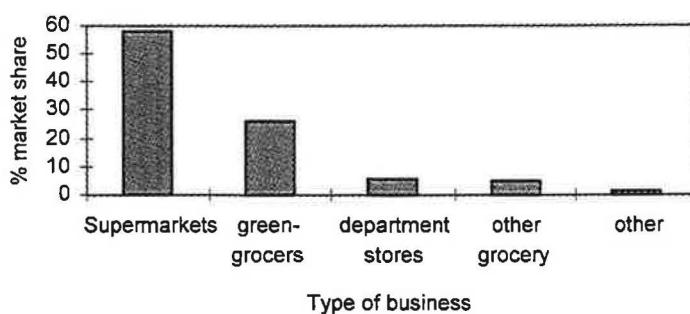


Figure 26 Market shares of different types of business for fruit and vegetables in 1991

Source: Business Monitor SDA 25 Retailing, 1991.

The large grocery retailers (supermarket chains and co-operatives) have increased their market share substantially since 1980. They held 58% of sales in 1991 (Business Monitor, 1992) and are reported to have increased this figure to between 60% and 70% of the market in 1996. In 1993, the fresh fruit and vegetable turnover in this sector was estimated to be £ 3236 million.

The importance of fresh produce in the portfolios of large grocery businesses has increased as they have been attracted to the high margins which can be earned on good quality and relatively unusual product lines (Gibbs *et al.*, 1994).

The large supermarkets buy most of their imported fresh produce either from importers or directly from growers or growers' groups. The supermarkets have acquired more and more control over the product back to its source, and the link between the supermarket and the producer has become much closer over the last decade. In this way, costs of transactions are reduced and market information is effectively exchanged; the supermarkets ensure that information about market requirements can be communicated to the exporters and producers, and information about the conditions under which the produce is being grown, and the pesticides being used, can be transmitted to the supermarkets.

On arrival in the UK, the produce is delivered to the supermarkets' distribution depots for onward distribution to each store in vehicles either owned by the retailers or operated on their behalf by a contractor.

For most of their supplies, the supermarkets no longer use the wholesale markets. In the late 1960s, over 90% of all fresh produce passed through the traditional metropolitan wholesale markets, but this percentage has halved as the supermarkets now prefer to procure their supplies directly from elsewhere.

Specialist greengrocers and fruiterers had a 46% market share in 1980 but this had fallen to 26% by 1991. In 1993, the turnover of specialist greengrocers and fruiterers was estimated to be £ 1445 million of which 78%, or £ 1127 million, represented sales of fresh produce. In 1994, the Strathclyde Survey of Specialist Fresh Produce Retailers found that a high proportion of the produce in specialist greengrocers shops came from wholesalers operating in wholesale markets.

Some department stores, or large mixed businesses, now sell fresh produce. The most important of these is Marks and Spencer which carries an extensive range of high value and speciality fresh produce.

A variety of other businesses also handles fresh produce. For example, fruit and vegetables are sold by independent grocers and small grocery multiple chains, butchers, fishmongers, drink, confectionery and tobacco retailers, independent convenience stores, and petrol station forecourt shops.

PREDICTED CHANGES IN THE RETAILING OF FRESH FRUIT AND VEGETABLES

In The University of Strathclyde Wholesale Markets Study, changes which might take place in the retail marketing of fresh fruit and vegetables in the UK over the next few years are predicted. The supermarket sector is expected to gain further market share and to source directly from growers and importers. The role of quality, local supplies of fruit and vegetables in supermarkets is also increasing.

As a consequence, there will be a further decline in the independent retail sector which is currently the heaviest user of wholesale markets. Independent retailers will continue to need wholesalers, but market wholesalers will face stiffer competition both from non-market wholesalers, who offer higher levels of service, and from cash-and-carry wholesalers, who offer more convenient access. The net result is likely to be a fall of over 40% in retail sales through wholesale markets in their present form, i.e., a reduction in sales from £ 1200 to £ 650 million in 2005.

Section 5

Conclusions

Although consumption of fruit and vegetables in the UK is relatively low compared to the rest of Europe, the UK market appears to offer some limited opportunity for expanding exports of horticultural products from India, particularly mango and papaya and to a lesser extent, pomegranates and speciality bananas. However, India's competitive position requires strengthening in several areas.

HIGH COST OF TRANSPORT FROM INDIA TO THE UK

Air-freight charges are very high and considerably increase the cost of supplying the UK or European market. Pandey (1995) found that there is also inadequate air cargo space for fruit and vegetables from India. The development of technologies for the successful sea-shipment of these commodities would reduce costs and enable an increase in the volume supplied, thereby increasing India's competitiveness.

QUALITY AND SUPPLY CONSIDERATIONS

The major growth area will be in the expansion of sales of exotics to the wider population rather than specifically to ethnic minority groups. It appears that a significant and increasing proportion of the exotic fruits described above will be bought through the large supermarket chains. These retail outlets require regular and predictably large volumes of the highest quality produce; current information suggests that India cannot often satisfy these stringent requirements.

Regular and predictably large volumes

Several of the importers for the supermarket sector claimed that it is difficult to ensure a regular and predictable supply of fruit from India because of management problems.

Quality

Importers supplying the supermarket sector had varied opinions as to the quality of India's produce. One large supermarket reported that during five years of selling Indian mangoes, little improvement in quality had been observed.

In a survey of importers carried out in 1995 dissatisfaction was frequently reported for general appearance, packaging, mechanical damage and size grading of mangoes. Mangoes were also perceived to suffer from particular problems with disease such as anthracnose. There was a high level of dissatisfaction with quality controls of exporters.

Variation in maturity, ranging from immature to over-ripe both within and between consignments, was another problem mentioned. There tends to be a higher proportion of over-ripe fruit towards the end of the season.

Other quality issues arise from improper handling, lack of storage facilities at ports and airports, poor transport links and problems with the cool chain in India.

Skilled management by Indian exporters is extremely important if stringent market requirements are to be met. Many importers felt that regular trips to the UK by exporters from India would enable managers to examine the condition of their produce on arrival and gain a better understanding of market conditions in Europe.

Packaging

Packaging is of central importance for ensuring the safe arrival of fragile fruit and vegetables. Packaging used by the exporter should serve several purposes: it should be functional, strong enough to withstand a substantial amount of handling and stacking, and resistant to moisture damage; it should be informative, with clear labelling which describes the fruit, the variety, the country of origin and grading facilities; finally, it should be attractive as many retailers display the produce in its original packaging.

Many wholesalers felt that the packaging of Indian fruit and vegetables was poor and claimed that the produce had often been crushed to destruction by the time it arrived. Other importers, whose experiences had been better, considered the average quality of packaging to be acceptable.

PRICE CONSIDERATIONS

UK consumers emphasize the importance of quality when buying any fresh fruit, but price is also an important determinant of competitiveness. Sea-freighting will obviously improve India's chances, particularly if technology can be used which will ensure that the quality is as good as air-freighted produce.

COMPETITION FOR THE EUROPEAN MARKET

Scope for promoting exports of fruit and vegetables to the UK may be limited given that consumption is relatively low compared to the rest of Europe. Although there is some scope for expansion of some of the products examined in this report, it is important to consider the production and marketing plans of competitors before embarking on investment programmes aimed at the European markets.

In the short term, importers might be willing to give exporters the benefit of the doubt and work together towards satisfying market requirements, but in the longer term, if importers cannot rely on a particular exporter for regular and punctual deliveries of goods of the required quality, they will look elsewhere for their supplies. The best competitive devices for an exporting country are probably quality control, reliability, price and quantity management (Hallam, 1988).

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Appendix 1

Supply Seasons for Horticultural Produce from India and Competing Countries in the UK Market

Fruit¹
1. Mango²

Sources of supply	J	F	M	A	M	J	J	A	S	O	N	D	Usual pack weights (kg)
Major Suppliers													
India													4
South Africa													4.5/5
Mexico													4.5/5
Pakistan													5
Venezuela													4/5
Brazil													5
United States													5
Other Countries													
Australia													5
Belize													4.5/5
Canary Is.													5
Colombia													4
Costa Rica													
Côte D'Ivoire													4
Ecuador													various
Egypt													5
The Gambia													4
Guatemala													4.5
Honduras													5
Israel													4
Jamaica													4.5
Kenya													4
Malaysia													5
Mali													4.5/5
Peru													5
Philippines													5
Puerto Rico													4/4.5
Spain													5
Sri Lanka	--	--	--	--	--	--	--	--	--	--	--	--	various
St Lucia													4/7
Sudan													4.5
Thailand													4.5
Uganda													5.5
Zimbabwe													various

Source: Fresh Produce Desk Book (1996).

Notes: ¹ The shaded area shows the months of availability on the UK market.

² The seasons of supply described in these charts are only approximate. The horticultural market windows change slightly every year.

2. Galia melons

Sources of supply	J	F	M	A	M	J	J	A	S	O	N	D	Usual pack weights
Antigua ¹	--	--	--	--	--	--	--	--	--	--	--	--	ct 6/9
Brazil													6 kg
Colombia ¹	--	--	--	--	--	--	--	--	--	--	--	--	10 kg, ct 6/8
Cyprus													18/20 lb, ct 4/10
Egypt													18/20 kg
Ethiopia													ct 4/9
France													10/12 kg
The Gambia													various
Greece													8/10 kg
The Netherlands													ct 5/6/7/8/9/10/12/15
Israel													5 kg
Jamaica ¹	--	--	--	--	--	--	--	--	--	--	--	--	various
Jordan ¹	--	--	--	--	--	--	--	--	--	--	--	--	various
Kenya													5 kg, ct 3/9
Morocco													4 kg
Pakistan													5/10 kg
Peru													6 kg
Portugal													ct 4/6
South Africa													5 kg
Spain													5/10 kg
Turkey													8 kg
Venezuela													5 kg
Zambia													5 kg

Source: Fresh Produce Desk Book (1996).

Notes: ¹ Supply according to market requirements; ct = containing.

3. Honeydew melons

Sources of supply	J	F	M	A	M	J	J	A	S	O	N	D	Usual pack weights (kg)
Argentina													8/16
Brazil													10
Chile													10/15
Colombia													10, ct 6/12
Ecuador													ct 5/10
France													10/12
Iran													12/15
Italy													various
Mexico													5
Peru													6
South Africa													10
Spain													5/10
Venezuela													5

Source: Fresh Produce Desk Book (1996).

Notes: ct = containing.

4. Cantaloupe melons

Sources of supply	J	F	M	A	M	J	J	A	S	O	N	D	Usual pack weights (kg)
Argentina													8/16
Brazil													6
Costa Rica	--	--	--	--	--	--	--	--	--	--	--	--	10, ct 6/8
Ecuador													ct 5/10
Egypt													18/20
France													5
Honduras													6
Italy													various
Kenya													5, ct 3/9
Mexico													5
Spain													5/10
Tunisia													various

Source: Fresh Produce Desk Book (1996).

Notes: ct = containing.

5. Papaya: sources of supply on the UK market

Sources of supply	J	F	M	A	M	J	J	A	S	O	N	D	Usual pack weights (kg)
Barbados													4
Belize ¹	--	--	--	--	--	--	--	--	--	--	--	--	various
Brazil													6
Canary Is.													5
Colombia ²	--	--	--	--	--	--	--	--	--	--	--	--	various
Costa Rica													4.5, ct 9/14
Côte D'Ivoire													
Hawaii													5
India ³													
Israel													5
Jamaica													4.5
Kenya													5, ct 3/9
Malaysia													3.5
Mexico ¹									--	--	--		5
Peru													4/5
South Africa													4, ct 6/10
Venezuela													4, ct 8/12

Source: Fresh Produce Desk Book (1996);
Maxworth Orchards International
Limited.

Notes: ¹ Trials.
² According to market requirements.
³ Indian papaya is not currently available on the UK market.
ct = containing.

6. Pomegranates

Sources of supply	J	F	M	A	M	J	J	A	S	O	N	D	Usual pack weights (kg)
India													3/6, ct 12/15/20
Egypt													5
Iran													4/6
Israel													3.6
Pakistan													5
Peru													various
Spain													5/10
Thailand													various
Tunisia													5
Turkey													various

Source: Fresh Produce Desk Book (1996).

7. Sapodilla

Sources of supply	J	F	M	A	M	J	J	A	S	O	N	D	Usual pack weights (kg)
India													2
Malaysia													2
Sri Lanka													2
St Lucia													2
Thailand													2

Source: Fresh Produce Desk Book (1996).

8. Apple banana

Sources of supply	J	F	M	A	M	J	J	A	S	O	N	D	Usual pack weights
Colombia													3 kg
Costa Rica													various
The Gambia													7 lb
Kenya													3 kg
Malaysia													22 lb
Sri Lanka													various
Thailand													2 kg
Uganda													5 kg

Source: Fresh Produce Desk Book (1995).

9. Red banana

Sources of supply	J	F	M	A	M	J	J	A	S	O	N	D	Usual pack weights (kg)
Kenya													5
Malaysia													5
Tasmania													6
Uganda													6

Source: Fresh Produce Desk Book (1995).

10. Rice banana

Sources of supply	J	F	M	A	M	J	J	A	S	O	N	D	Usual pack weights
Indonesia													various
Thailand													various

Source: Fresh Produce Desk Book (1995).

Vegetables

1. Onions

Sources of supply	J	F	M	A	M	J	J	A	S	O	N	D	Usual pack weights
Argentina													23 kg
Australia													20 kg
Austria													20 kg
Canada													23/25 kg
Chile													20/23 kg
Egypt													various
France													
early													25/28 lb
main													25/28 lb
Germany													various
The Netherlands													
bulb													10/20 kg
picklers													10 kg
Hungary													20/25 kg
Israel													25 kg
Italy													20/25 kg
New Zealand													20/25 kg
Poland													20 kg
South Africa													55 lb
Spain													20 kg
Tasmania													20 kg
UK													
block													10/12.5/20/25 kg
cold-stored													10/12.5/20/25 kg
main													10/12.5/20/25 kg
over-wintered													10/12.5/20/25 kg
picklers													12.5 kg
sets													12.5 kg

Source: Fresh Produce Desk Book (1996).

2. Okra

Sources of supply	J	F	M	A	M	J	J	A	S	O	N	D	Usual pack weights
India													10 lb
Brazil													various
Cyprus													4.5/5.4/6.4 kg
Egypt													4 kg
Ethiopia ¹	--	--	--	--	--	--	--	--	--	--	--	--	2 kg
The Gambia													4 lb
Ghana													2 kg
Guatemala													various
Kenya													2/5 kg
Mexico													5 kg
Nigeria													4 lb
Pakistan													5 kg
Sri Lanka													2 kg
Surinam													5 kg
Thailand													2 kg
Turkey													various
Uganda													various
Zambia													4 lb
Zimbabwe													4 lb

Source: Fresh Produce Desk Book (1996).

Notes: ¹ Sporadic supply.

3. Tindori

Sources of supply	J	F	M	A	M	J	J	A	S	O	N	D	Usual pack weights (kg)
India													6
Kenya													6
Pakistan													6

Source: Fresh Produce Desk Book (1996).

4. Kantola

Sources of supply	J	F	M	A	M	J	J	A	S	O	N	D	Usual pack weights
India													3 kg
Zimbabwe ¹	--	--	--	--	--	--	--	--	--	--	--	--	various

Source: Fresh Produce Desk Book (1996).

Notes: ¹ Sporadic supply.

5. Parval

Sources of supply	J	F	M	A	M	J	J	A	S	O	N	D	Usual pack weights
India													5 kg
Kenya													various
Pakistan													various

Source: Fresh Produce Desk Book (1996).

Appendix 2

List of Taxes and Import Duties

List of import duties (August 1996)

Commodity	Flat rate % of CIF price
Mango	Free from duty with GSP ¹ certificate (normal rate 4%)
Melon	10.3%
Pomegranate	10.3%
Sapodilla	6% with GSP (normal rate 10.3%)
Papaya	free with GSP (normal rate 2%)
Banana (<i>Musa</i> varieties)	793 ECU/1000 kg net
Onion	11.2%
Okra	9% with GSP (normal rate 14.9%)

Source: Customs and Excise, UK.

Notes: ¹ Generalized System of Preferences (GSP) for which India qualifies for the commodities indicated. These certificates can be obtained in the country of origin.

None of the above commodities, apart from bananas, needs an import licence.

No VAT is charged on any fruit or vegetable product destined for human consumption.

Appendix 3

EU Imports of Melons, Mango, Sapodilla and Onion

The data in this appendix were taken from the Eurostat Database. It should be noted that some double counting is likely because of re-exports within the EU. For example, the Netherlands re-exports a substantial amount of the produce which arrives in the EU by ship.

Commodity Codes

The following codes were used to obtain information from aggregated trade statistics and for information on licences and duties:

- mango: 080450000
- melon: 08071900
- pomegranate: 08109085 (+31 Between 15 August and 15 November)
- papaya: 080720000
- okra: 07099090
- sapodilla: 0810908580
- onion: 07031019
- apple banana: (*Musa*) 803001900
- red banana: (*Musa*) 803001900

Imports of Selected Fresh Fruit and Vegetables into and within the European Union

EU Imports of Melons
Jan-Sep 1995

Source	France 1000 EC tonnes	Luxembourg 1000 EC tonnes	Netherlands 1000 EC tonnes	Germany 1000 EC tonnes	Italy 1000 EC tonnes	UK 1000 EC tonnes	Ireland 1000 EC tonnes	Denmark 1000 EC tonnes	Greece 1000 EC tonnes	Portugal 1000 EC tonnes	Spain 1000 EC tonnes	Sweden 1000 EC tonnes	Finland 1000 EC tonnes	Austria 1000 EC tonnes
a) Intra E	0	0	0	3	2	0	0	0	0	0	0	0	0	0
b) Intra E	15987	10661	8566	9307	20718	28320	8877	23252	1561	2774	14980	21180	0	0
c) Extra E	15987	10661	8566	9307	20718	28320	8877	23252	1561	2774	14980	21180	0	0
Total (b+c)	15987	10661	8566	9307	20718	28320	8877	23252	1561	2774	14980	21180	0	0
1994														
a) Intra E	0	0	0	6	4	0	0	0	0	0	0	0	0	0
b) Intra E	51295	100838	25217	37241	42032	78160	92193	179629	37986	114961	52907	83314	3417	4513
c) Extra E	22755	14986	3137	4844	21944	34406	11186	26586	2637	5918	26166	44211	0	0
Total (b+c)	74050	115824	28354	42085	63976	112566	103379	206215	40623	120879	79075	127525	3417	4513
1993														
a) Intra E	-	-	-	-	-	-	-	-	-	-	-	-	-	-
b) Intra E	-	-	-	-	-	-	-	-	-	-	-	-	-	-
c) Extra E	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total (b+c)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1992														
a) Intra E	0	0	0	0	1	0	0	0	0	0	0	0	0	0
b) Intra E	42199	84284	22702	28293	32013	45601	79204	167057	37111	101811	59308	81788	2512	3413
c) Extra E	17609	9042	5126	6002	11802	21315	9462	24566	3128	4581	24489	37052	12	26
Total (b+c)	59808	93326	27828	34295	43815	66916	88666	191623	40239	106392	83797	118840	2524	3439
1991														
a) Intra E	0	0	0	4	15	0	0	0	0	0	0	0	0	0
b) Intra E	43807	83554	22360	29747	27737	48862	72414	161488	40429	84739	57268	98164	2938	4468
c) Extra E	17763	8995	3742	5274	8538	15028	9105	21995	2434	4513	21346	33357	12	16
Total (b+c)	61570	92549	26102	35021	36275	63890	81519	183483	42863	89252	78614	131521	2950	4484

Source: Eurostat trade data

Imports of Selected Fresh Fruit and Vegetables into and within the European Union

Imports of Mango

(nb. the SITC code classifies mangoes together with guaves and mangosteens)
Jan-Sept 1995

	France		Luxembourg		Netherlands		Germany		Italy		UK		Ireland		Denmark		Greece		Portugal		Spain		Sweden		Finland		Austria	
	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes
a) India	40	21	34	17	4	3	75	32	1	-	1569	1028	0	0	43	76	0	0	4	2	1	0	0	0	0	0	1	-
b) Intra E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
c) Extra E	16926	13680	5557	4360	17361	13735	4183	2859	106	73	12271	10724	2	2	150	161	36	23	2001	1418	685	628	91	48	10	2	218	5
Total (b+c)	16926	13680	5557	4360	17361	13735	4183	2859	106	73	12271	10724	2	2	150	161	36	23	2001	1418	685	628	91	48	10	2	218	5

1994

	France		Luxembourg		Netherlands		Germany		Italy		UK		Ireland		Denmark		Greece		Portugal		Spain		Sweden		Finland		Austria	
	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes
a) India	25	9	32	16	1	0	100	40	0	0	1596	1048	0	0	91	150	0	0	4	1	0	0	0	0	0	0	0	0
b) Intra E	2539	1550	1669	1134	3773	2682	1053	7271	1274	636	2092	1436	183	109	273	210	147	140	1468	759	1636	1132						
c) Extra E	15516	10327	2546	1876	25777	19395	4590	3105	407	300	13488	11181	0	0	254	293	85	44	2643	1743	1085	889						
Total (b+c)	18055	11877	4215	3010	29550	22077	5643	10376	1681	936	15580	12617	183	109	527	503	232	184	4131	2502	2721	2021	0	0	0	0	0	0

1993

	France		Luxembourg		Netherlands		Germany		Italy		UK		Ireland		Denmark		Greece		Portugal		Spain		Sweden		Finland		Austria	
	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes
a) India	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
b) Intra E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
c) Extra E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total (b+c)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

1992

	France		Luxembourg		Netherlands		Germany		Italy		UK		Ireland		Denmark		Greece		Portugal		Spain		Sweden		Finland		Austria	
	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes
a) India	16	11	23	12	7	5	80	40	0	0	1612	1033	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0
b) Intra E	1143	717	1036	699	1652	1112	7433	5778	763	352	876	593	628	691	248	300	61	24	759	436	50	25						
c) Extra E	14404	9872	1991	1513	16274	12932	4865	3312	635	550	14971	12221	1	1	89	86	50	27	2750	1678	578	287						
Total (b+c)	15547	10589	3027	2212	17926	14044	12298	9090	1598	902	15847	12614	629	692	337	386	111	51	3509	2114	628	312	0	0	0	0	0	0

1991

	France		Luxembourg		Netherlands		Germany		Italy		UK		Ireland		Denmark		Greece		Portugal		Spain		Sweden		Finland		Austria	
	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes	1000 EC	tonnes
a) India	4	1	34	17	1	1	59	29	3	2	1195	859	0	0	46	48	0	0	4	1	0	0	0	0	0	0	0	0
b) Intra E	1282	40	1270	445	1535	11																						
c) Extra E	15122	28	2363	1330	11869	1330																						
Total (b+c)	16404	68	3633	1775	13404	1341	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Appendix 4 Contacts

J. O. Sims Ltd 16 Winchester Walk London SE1 9AQ UK	Importer
Frumar 4th Floor Tolworth Towers Tolworth Surrey UK	Importer
Utopia Spalding, Lincs UK	Importer
Mack Multiples Paddock Wood, Kent UK	Importer
Geest Spalding, Lincs UK	Importer
Prats Bananas UK	Importer
T. Port (GmbH & Co.) 2000 Hamburg 1 Germany	Importer
J. Sainsbury plc Stamford House Stamford Street London SE1 9LL UK	Supermarket chain
Waitrose Southern Industrial Area Bracknell Berkshire RG12 8YA UK	Supermarket chain
Safeway UK	Supermarket chain
Wholesalers in: New Spitalfields market, UK Covent Garden market, UK Western International Market, UK	

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Eurofruit Magazine
London
UK

Batige Marketing
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India is a major producer of a number of horticultural crops, including mango, bananas, onions and Asian vegetables and has traditional markets in Asia and the Gulf. Yet a very small percentage of the total production of around 90 million tonnes of fruit and vegetables is destined for export. The development of other markets for export represents an important opportunity for national economic growth and can contribute directly to rural incomes through rural employment opportunities and smallholder involvement.

The Potential for Selected Indian Horticultural Products on the European Market reviews past trends and prospects on the European market in general and the UK market in particular for horticultural exports from India. The principal products reviewed are mango, melon, papaya, speciality banana, onion and Asian vegetables. The book considers the structure of marketing and demand for fresh fruit and vegetables in the United Kingdom. It also examines the market outlook for selected Indian horticultural exports and the factors that will govern their performance.

The book will be relevant to agricultural policy makers in India, development agencies and to the private sector involved in the production and export of agricultural produce.