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Agriculture-led Export Businesses

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THE AMERICAN UNIVERSITY IN CAIRO
School of Business, Economics and Communication Institute of Management Development

# Food Export Market

## Modeling and Potential Analys

Export Management Certificate – Course No. 6

Part One

# Market Window Analysis
## (Unmet Profitable Demand)

Concept & Estimation Methodology

## Prioritizing indicators and screening criteria:

The state of the art methodology to set priorities and screen markets and products in the fresh produce export market analysis consists normally of four types of prioritizing indicators and screening criteria;

(A) Potential market size,
(B) Potential profitability,
(C) Competitive position, and
(D) Export country potential.

Inside these four general types, the methodology[1] develops quantitative indicators for twelve specific prioritization and screening criteria. In developing the nine indicators the methodology also develops and utilizes the specific items as intermediate.

The overall prioritization and screening concepts, (1) product/market size, (2) profitability and (3) competitive position are quantified by the methodology as ten specific prioritization indicators as follows:

A. Potential Market Size
   1. Total Market Size (total consumption as indicator of consumer eating preferences);
   2. Import Market Size (seasonal imports as indicator of capacity of self-supply); and
   3. Profitable Demand Market Size during the Egyptian Seasonal Export Window.

B. Potential Profitability and Value Added
   4. Profit and Margins per Metric Ton;
   5. Total Profits for Profitable Demand Volumes.

C. Estimated Competitive/Comparative Position
   6. Seasonal Position
   7. Transport Cost Position
   8. Wage Rate Position
   9. Landed Cost per Unit

D. Export Country Potential
   10. Production season and geographical position;
   11. Country exports to the potential export markets and the capability of delivering high quality products

[1]The methodology, specially what so called Profitable Demand Analysis™ , has been developed few years ago by SRD-group. Applications of this methodology in different countries and for different products proves that this good and workable methodology in most cases.

## A. Potential Market Size

The objective of the market size screening criteria and quantitative indicators is to give priority to the largest volume opportunities among the potential markets analyzed. Three separate, but related, market size concepts are developed in the three component screening criteria and quantitative indicators;

| Screening criteria | As an indicator of |
|---|---|
| (1) Historical consumption volumes and trends | Consumer eating patterns and preferences |
| 2) Historical import volumes and trends by season | Capability to self-supply, import dependence, and capacity to fund imports |
| (3) Profitable Demand | Unsaturated potential import volumes during the Egyptian seasonal export window. |

### 1. Total Market Size

Total consumption, including recent total and per capita volumes and long term trends, will be used as indicators of consumers eating preferences and patterns. The intent of this indicator is to prioritize those markets where large consumption gives evidence of established and stable consumer product awareness and eating pattern dependence.

### 2. Import Market Size

Seasonal import volumes during recent years, and longer term trends, will be used as indicators of three market size concepts:

a. The capability of the country to self-supply its consumption demand
b. The demonstrated capability of consumers, marketers and importers and related infrastructure to handle, store, transport and pay for imports to meet local production gaps.
c. The demonstrated capability of the economy to fund the foreign exchange requirements of these imports.

### 3. Profitable Demand Market Size

The Profitable Demand concept of market size is defined as the volume of a particular product which a specific country market has consumer demand capacity to import above recent year levels during the Egyptian seasonal export supply window at prices to Egyptian exporters above their Egyptian

break-even cost level. The Profitable Demand concept develops a quantitative estimate of the volume of unmet consumer demand at, or above, prices which would be break-even or better for the Egyptian exporters during the seasonal window when Egypt can supply to that market.

The profitable demand concept and methodology address the issue that quantity and price interact and that a single large supplier, and/or a number of smaller but significant suppliers can and will affect prices with the volumes they supply. This methodology provides a relatively simple method for estimating the seasonal import volume and unmet volume demand issues from the point of view of a particular supplier, such as Egypt. By estimating a sale price at which an Egyptian supplier would break-even, the methodology utilizes historical volume and price data to estimate how much additional product this market would absorb during the months Egypt could potentially supply before the price would be forced below that break-even price. The following section includes additional conceptual and methodological detail on the Profitable demand™[2] methodology is as follows.

## Methodology Note:
## Profitable Demand Concept and Estimation Methodology

Knowing when the market window of opportunity occurs in a given market is much simpler than knowing the depth or magnitude of the window. To estimate the depth of the market at the Egyptian break-even price requires additional logic and analytical effort. In order to understand the results of this additional analysis, it is necessary to understand some of the underlying methodology and evidence of its soundness. This explanation of the concept and methodology used for estimation presents a case study using data for Egyptian grapes in the German market. This case study illustrates the MTI methodology used for all products and markets except for a few special cases. SED™ has developed this practical way of estimating weekly market window depth, which called *Profitable Demand*. To estimate the "depth" of the market window requires not only weekly wholesale price data for a particular market, but also weekly marketed quantities.

*Weekly Supply*. Figure 1 outlines total weekly supply quantities available in the German market from domestic and imported sources. Weekly supplies are very small during the first 8 weeks of the year and then increase to about 20,000 metric tons per week in March. By May and June supply rates have decreased to about 10,000 Mt/week. By end of July supply rates have increased to about 70,000 Mt/week, and then reach a peak of over 95,000 MT/week in August and September. There was a sharp drop in supply in May and by November and December the supplies are again very low. Since grapes will spoil in less than one week, this supply must be consumed or

[2]SRD group ideas with some slight modification and recent data.



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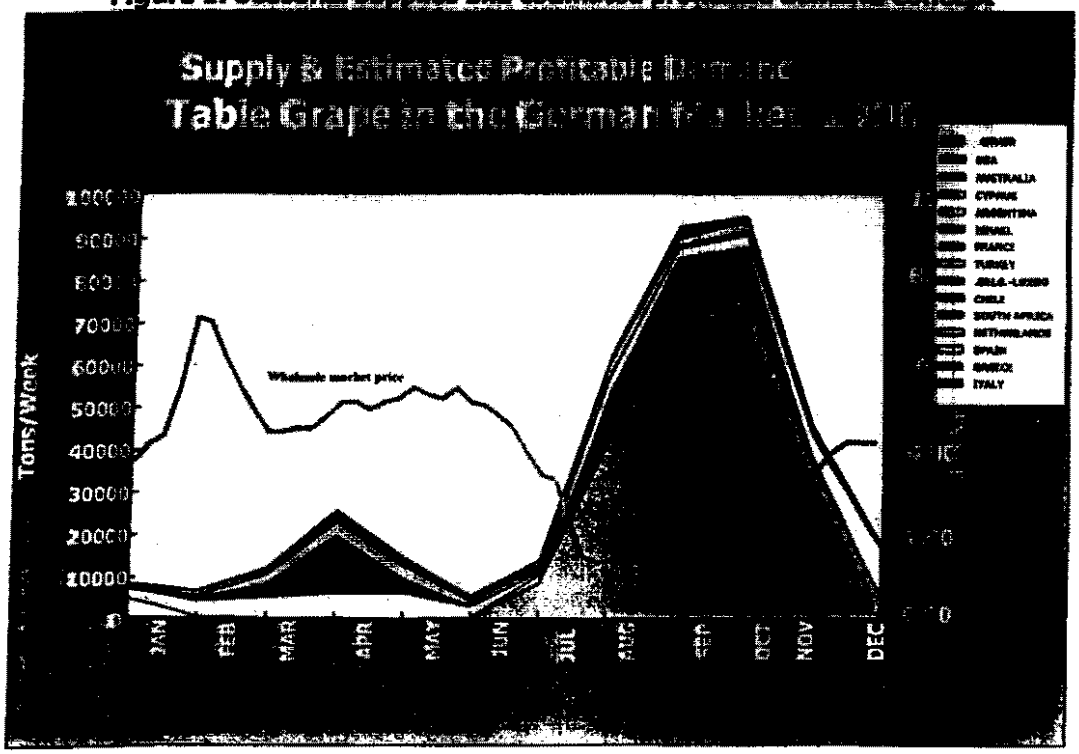
processed rapidly. The type of weekly quantity supply data displayed in figure 1 is necessary for making the *Profitable Demand* estimates used in this analysis.

**Figure 1. Seasonal supplies and estimated profitable demand concept**



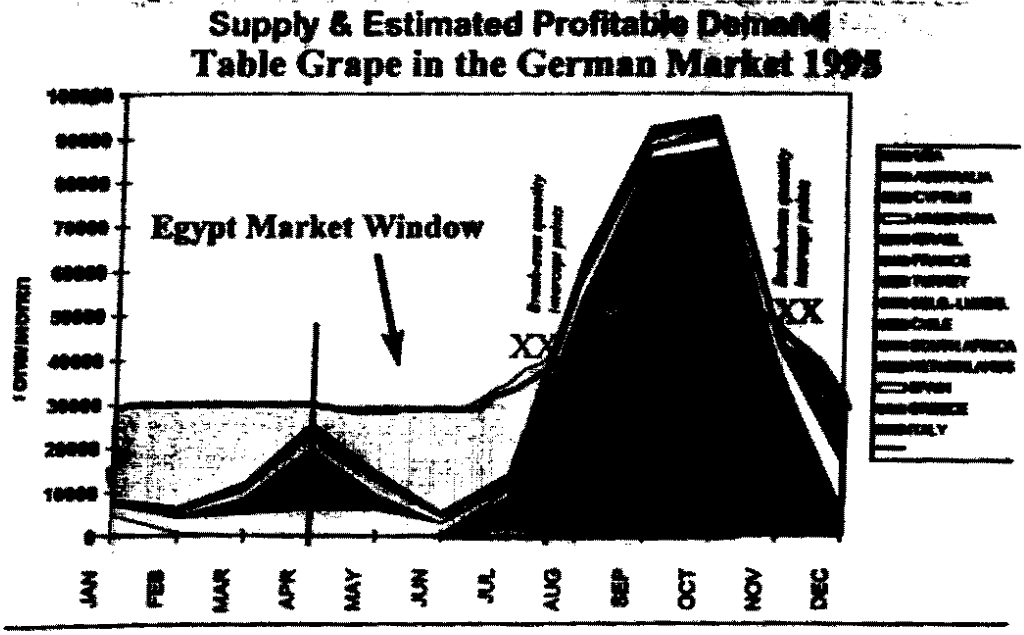

*Supply & Break-even Price Intercept Points* . The first step in estimating *Profitable Demand*, which is to identify the points during the year when the wholesale price is equal to the Egyptian Break-even price. The Egyptian Break-even price is the total cost of production, packing, transport, tariffs and handling to place one kilo of grapes in a German wholesale market. In the case of Egyptian grapes in the German market, the break-even price is approximately $2 per. The average wholesale price in 11 German wholesale markets in 1995 was $2.75/kg during the 15th and 25th weeks of the year. The double XX in figures 2-4 indicated the quantities marketed in Germany in the in the 15th and 25th weeks. These points are called the break-even quantity intercept points and represent the quantities marketed at the Egyptian break-even price. From Figure 1 we can see that this quantity is approximately 50,000 metric tons per week. This is a very important strategic fact for a potential Egyptian exporter to know about each market since it tells him the quantity that market can absorb each week at or above prices which will give him profit.

The more important question, however, is how strong or deep demand would be during the "window" period after the 25th week and before the 15th week. A review of price and volume patterns for the last three years indicates that these points are acceptably consistent. It is clear therefore that German consumer in the 15th and 25th weeks will pay retail prices supporting a

wholesale price around of around $2.75/kg for approximately 5,100 kilos per week. If volumes increase (as they do from the 15th to the 25th weeks) the prices will drop below the break-even point. What the Egyptian grower/exporter needs to know about the market is what quantity will be absorbed per week at of above $2.75/kg in the periods from July to March. Figure 4 present *Profitable Demand* levels as a horizontal line whose shape is drawn on the basis of three alternative demand theories or hypotheses.

**A. Reduced Off-Season Demand due to Cultural Diet Patterns.** One possible seasonal demand hypothesis is that German consumers have an on-season preference for consuming grapes in their diet, which is based on historical custom. Under German climactic conditions fresh grapes have been produced for centuries mostly in August-Sept. This hypothesis argues that Germans therefore have customarily prepared meals during that season that include grapes and therefore have a high customary preference for fresh grapes during that season. This argument would suggest that if the same quantity of grapes were offered to them in January their demand would be reduced and hence the price they would be willing to pay for an equal quantity would be less. Conversely, the quantity they were willing to consume, assuming this on-season preference would have to be less in January than in August.

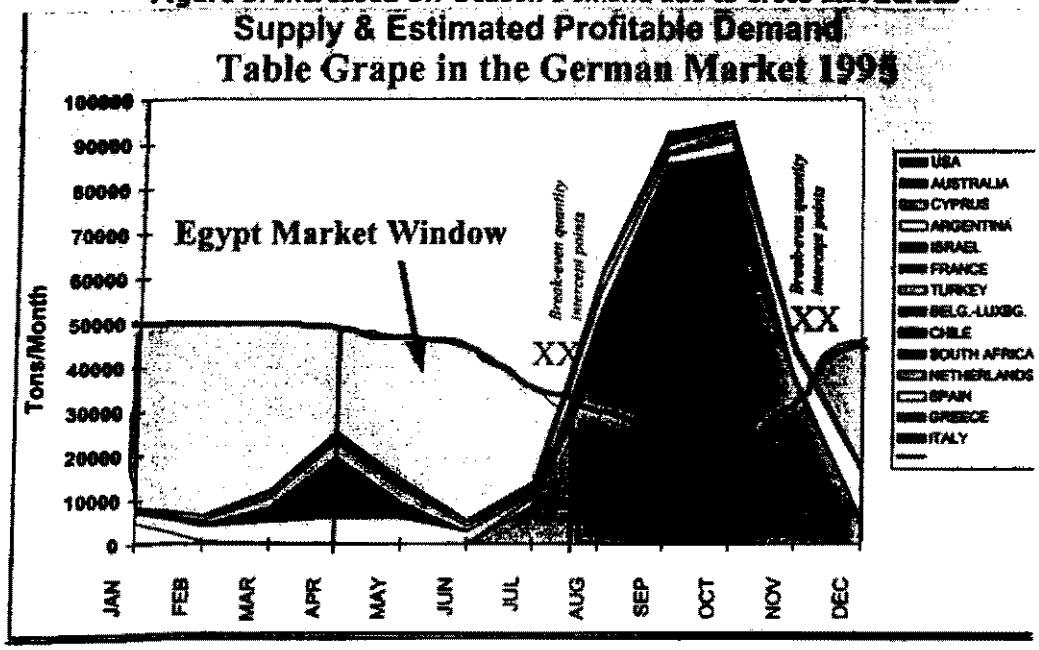
**Figure 2 Reduced Off-Season Demand due to Cultural Diet Patterns.**




Since the quantity they were willing to consume in August at the break-even price of $2.75/kg was 5,100 tons, the quantity demanded in January would have to be less. The Reduced Off-Season Demand hypothesis would give rise to a Profitable Demand line shaped like Figure 1 where the quantity demanded drops on both sides of the intercept points.

**B. Increased Off-Season Demand due to Cross Elasticities.** The second possible theory or hypothesis about off-season demand is just the opposite of the first and argues that the demand for fresh grapes is actually higher during the off-season when they have not historically been available from domestic sources. This argument is based on a well-known economic theory called *cross elasticity of demand.* This theory argues that the demand for any single product is determined in part by the availability or supply of competing products.

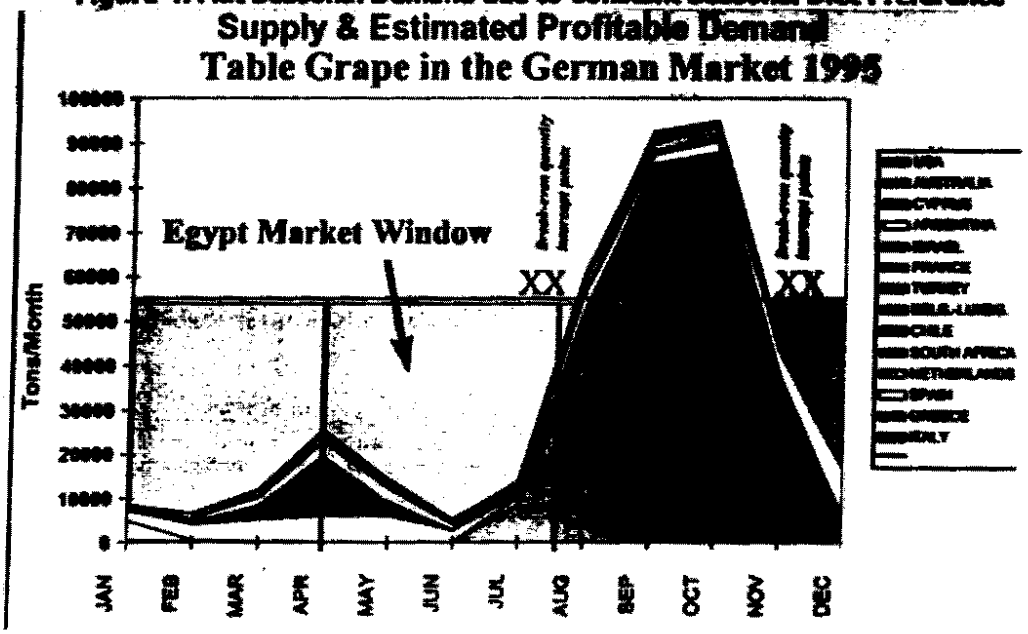
**Figure 3. Increased Off-Season Demand due to Cross Elasticities**




In our case this theory would argue that during the summer months from August-October German household are faced with an abundance of fresh grapes and with many other fresh fruits such as cherries, peaches etc. Demand for any single one of these fresh fruits will be depressed because so many of their logical competing substitutes are available. Thus, this theory argues, housewives would pay more for the same quantity of grapes offered in January when the available substitutes are scarce. If the *Profitable Demand* line were drawn based on the cross-elasticity theory it would have the same illustrated in Figure 2 where a larger quantity would be demanded at or above the break-even price as one moved further off-season from the intercept points

**C. Flat Seasonal Demand due to Constant Seasonal Diet Preference.** A final argument can be made for a flat *Profitable Demand* line based on the hypothesis that household would eat the same basic weekly diet year round if faced with the same prices for the same quantities for a particular product. This hypothesis argues that people do not have strong seasonal diet preferences. This hypothesis would produce a flat *Profitable Demand* line similar to the one shown in Figure 4.

**Figure 4. Flat Seasonal Demand due to Constant Seasonal Diet Preference**




The three alternative hypotheses give full range of alternative conclusions about the level of off-season *Profitable Demand*, only one of them can be correct for a particular product and market. There are some cases where one can be rather certain that there are important seasonal consumption preferences such as November demand for cranberries to coincide with the European Thanksgiving holiday, and February/May demand for flowers due to European Valentines and Memorial Day holidays. In Japan, for example, early summer meals traditionally include fresh grapes. In other countries similar patterns exist which affect demand. Since our Egyptian analysis does not include any of these obvious seasonal preference items, the question is how the markets will behave for Egyptian grapes. The only way to practically test these hypotheses would be to have a case situation in a substantial market where off-season supply was equal to or greater than on-season supply and observe what happens to the prices.

The objective of the Profitable Demand indicator is to prioritize those markets that are deep in the sense of having the largest unsaturated capacity to absorb additional imports of this particular product without softening prices below profitable levels for Egypt.

## B. Potential Profitability and Value Added

### 4. Profit and VA Margins per Kg. or MT

The first prioritization and screening criterion for potential profitability and value added is met with an indicator which estimates profit and VA margins per Kg. or MT which could be obtained in a specific product/market at historical prices paid .for imported products. Although frequently used, and occasionally as the principle prioritizing indicator, profit margin estimates are

of limited export strategy value, and unless balanced by volume-linked profitability concept, can miss-prioritize products and markets by focusing on opportunities where prices may fall apart under volume supply pressure.

5. Total Profit & VA for Profitable Demand Volumes

A safer approach to prioritizing using profitability criteria is to combine unit margin estimates with total profitability and value added estimates at a predetermined point along the price/volume continuum which is quantified in the Profitable Demand methodology. This will shift the priority focus to product/market opportunities, which present the best AND the most robust profitability opportunities.

## C. Estimated Competitive/Comparative Position

Three factors appear to be the major elements in competition between locations supplying perishable fruit and vegetables seas transport position and wage rate position. These major factors, along with other input costs and yields, combine to contribute to landed cost differences. While packaging costs and yield levels are both very important components of overall landed cost differences, these factors can and do change in the short run and do not usually represent longer run or underlying factors in competitive position. The methodology accounts for all of these factors as short run cost retailers in the last indicator, landed cost, but balances this estimate with separate consideration of differently measured longer run indicators for season, transport and wage rate positions.

6. Seasonal Position.

The seasonal position indicator estimates the proportion of the non- domestic supply window, which can be supplied by Egypt. Thus if a particular country can produce a specific product to supply its demand during 4 months of the year, the non-domestic supply window is 8 months. If Egypt can supply that product to four of the gap months. The seasonal position prioritization and screening indicator is both an absolute and a comparative or competitive indicator. Not only can this indicator be used as an absolute prioritization indicator, it can also be used as a competitive or comparative position indicator when placed alongside a similar estimate made for major competitive suppliers.

7. Transport Cost and Agility Position

Transport cost and agility indicators present basic underlying transport position taking into account distance and refrigerated sea traffic pattern factors. These indicators are not directly limited to average current transport pricing structures and routings, dependent as they are on volume flows, and scheduled vs. charter transport system differences. The shorter run realities of current pricing schemes is taken account of in the composite landed cost

indicator 9 while this indicator 7 estimates transport costs and transit times which are expected to emerge with the volume flows implied by the Profitable Demand indicator. Thus this indicator should be a more accurate view of Egypt's underlying geographic transport position, rather than just the current low-volume transport cost which current carriers would charge to the new-market destination. Thus indicator 7 is a longer run comparative and competitive transport position indicator while indicator 9 covers the short run transport cost reality relevant to evaluating start-up competitive position.

Of particular competitive significance from the transport perspective are product/market situations in which the perishability of the product may position Egypt to ship by sea because of its proximity to a given market where a competitor is forced to ship by air at a much higher cost. The competitive significance of these inter-modal differences will be both captured in the quantitative indicators and emphasized in the narrative analysis.

8. Wage Rate Position

For most perishable export crops, labor is the third largest cost, behind packaging and transport, which are respectively first or second depending on whether transport is by air or sea. Thus wage rates are a major competitive and comparative advantage factor Although rising wage rates are an obvious objective of expanded exports and wage rates are expected to change in the short run, Egypt 's comparative position vis vis potential competitors is an important prioritizing and screening criteria.

9. Landed Cost per Unit

Landed cost/unit estimates are intermediate steps in arriving at profitability indicators mentioned above. They may be further used as independent estimates for competitors. The landed cost indicator concept is the same whether the estimates are based on in-depth primary statistical sources, more general secondary source estimates, or bracketed sensitivity analysis estimates across a range of different yield and cost as assumptions.

**D. Export Country Potential**

This indicator is very important at least in the short run. Production season and geographical position as well as the country exports to the potential export markets are the main quantitative indicators for this criteria:

10. Production season and geographical position;

Egypt capacity to produce a fresh produce item that shows high potential in an export market with slight modifications in production systems to fit the market windows is very important indicator in selecting candidate crops. The easy to adapt to the market needs the higher weight should be given to this fresh produce item.

11. Country exports to the potential export markets and the capability of delivering high quality products

The capacity to compete in the target export markets effectively is another important indicator. The indicator could be traced by looking at the Egyptian exports to this market during the last 5-10 years. If the Egyptian exporters were able to hit the market even with small quantities successfully this will give an indicator that with some modifications the Egyptian exporters could increase the Egyptian exports to this market.

## Ranking Process:

Taking into account the eleven quantitative indicators mentioned above it will be relatively easy to rank the candidate crops according to their export market potential.

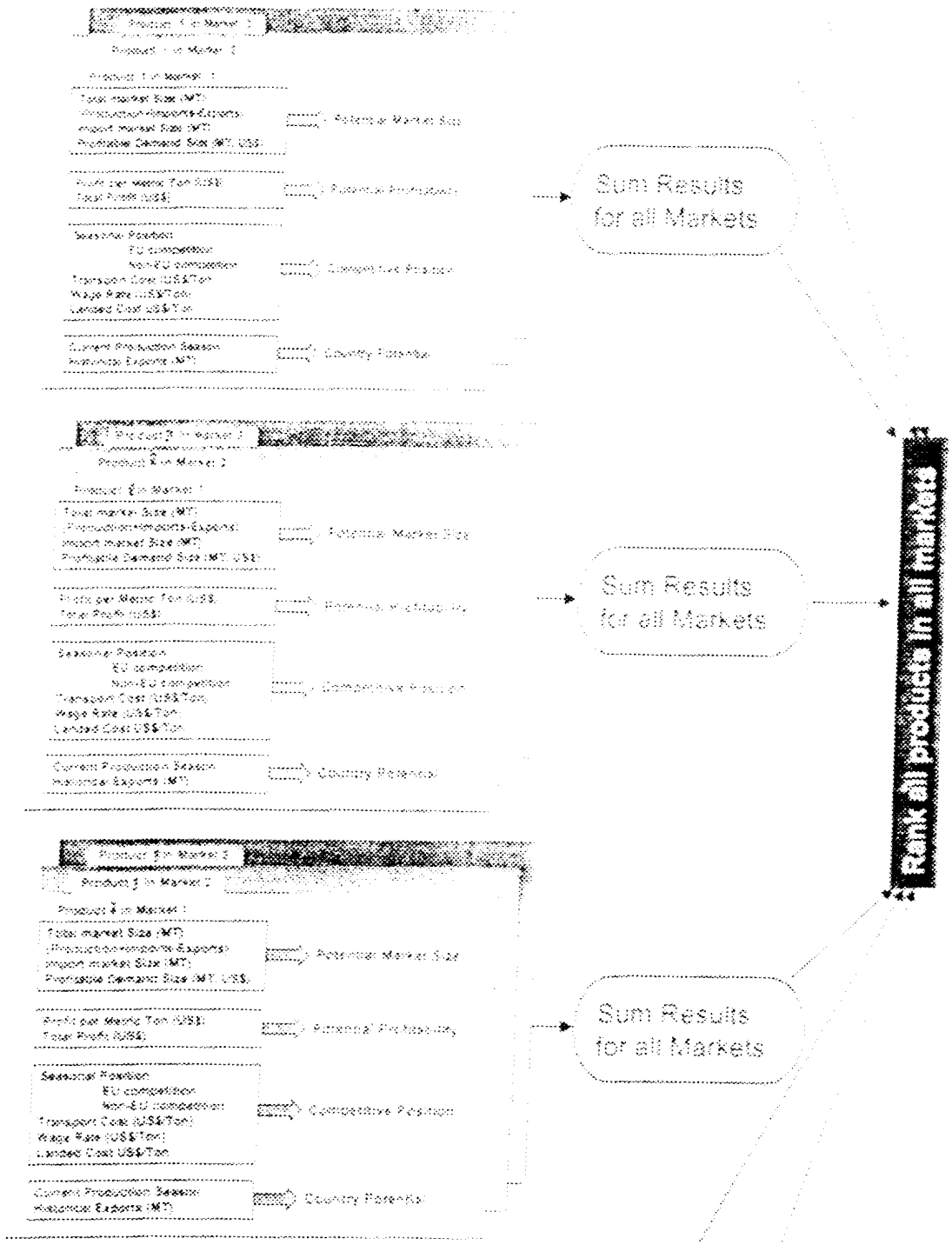
The ranking process is straightforward:
1. Apply the eleven criteria for each product in each potential export market.
2. Sum the results for all potential markets for each commodity.
3. Multiple-sort candidate crops in all potential markets.

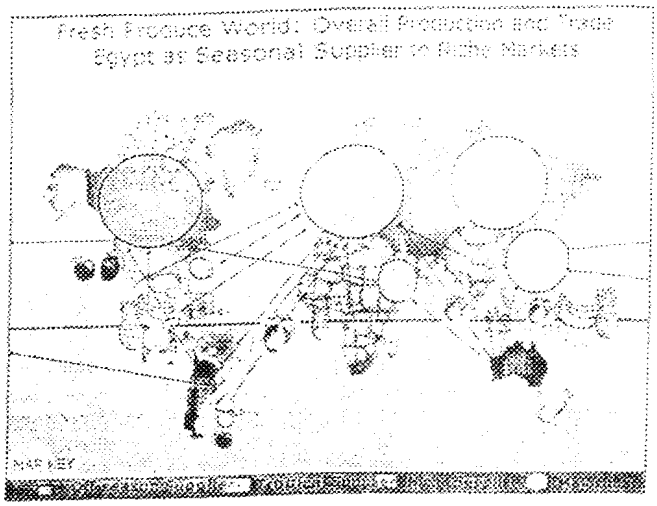
The flowing table summarizes the above mentioned qualitative indicators in practice:

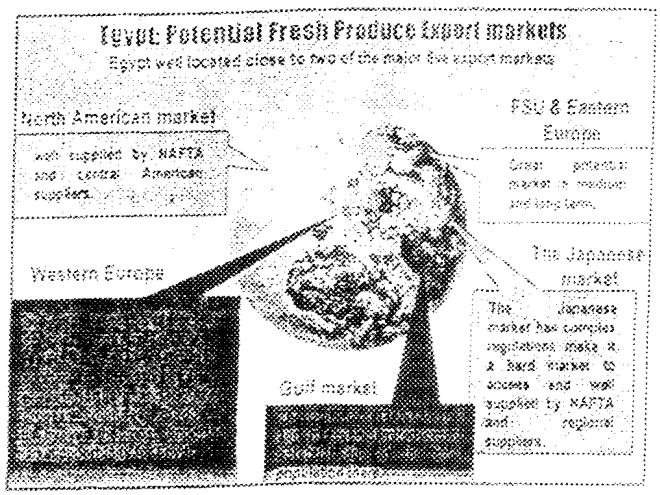
**Table 1. Summary of the ranking process**

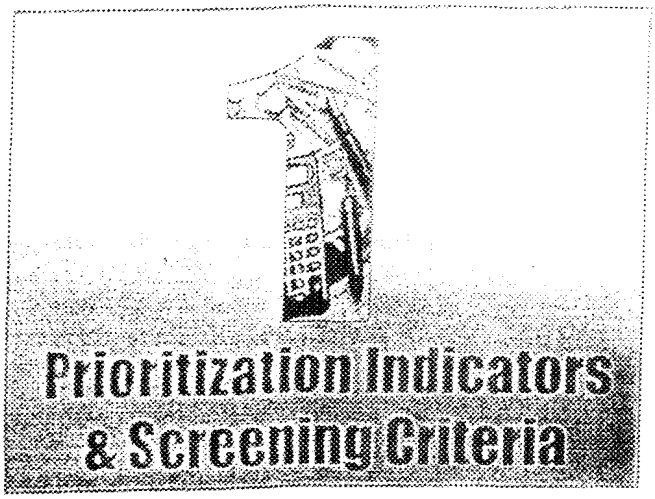
| Criteria | Quantitative Indicator | Unit of Measurement | Ranking Process |
|---|---|---|---|
| Potential market Size | Total market size | MT | Bigger size →higher rank |
| | Import Market size | MT | Bigger size →higher rank |
| | Profitable demand size | MT | Bigger size →higher rank |
| Potential Profitability | Profit per metric ton | US$/Ton | Higher profit →higher rank |
| | Total profits | US$ | Higher profit →higher rank |
| Competitive Position | Seasonal Position | | |
| | EU competition | Yes or No | No →higher rank |
| | Non-EU competition | Yes or No | No →higher rank |
| | Transport cost | US$/Ton | Lower cost →higher rank |
| | Wage rate | US$/Ton | Lower cost →higher rank |
| | Landed cost | US$/Ton | Lower cost →higher rank |
| Country Potential | Production season | Fit the window or needs modifications | Yes →higher rank |
| | Historical exports | MT/Year | Higher volume →higher rank |

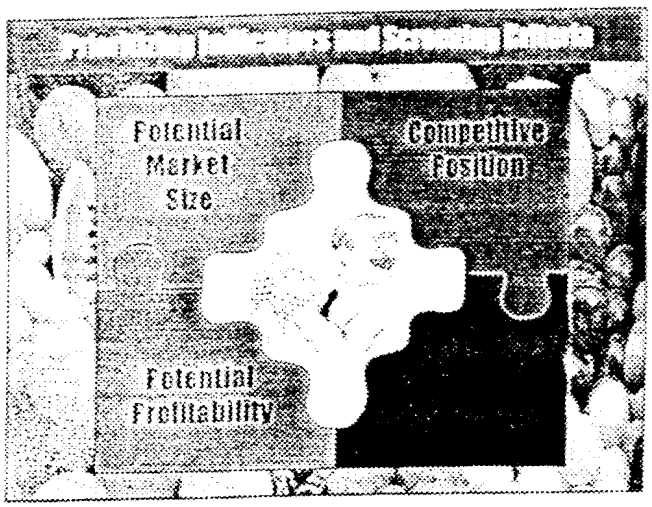
Figure 5. Steps of the Ranking Process

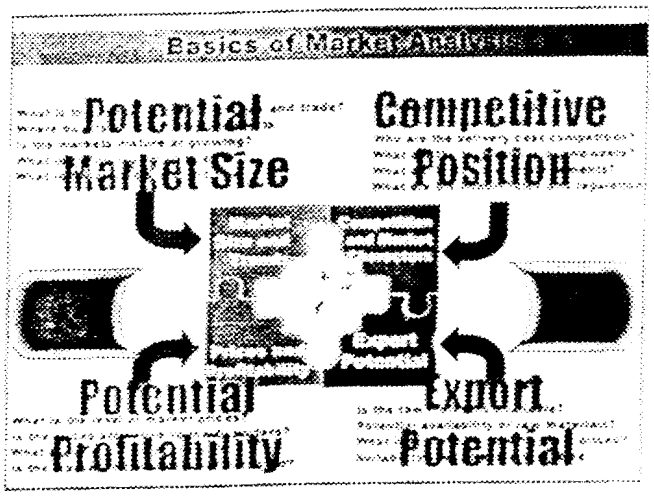


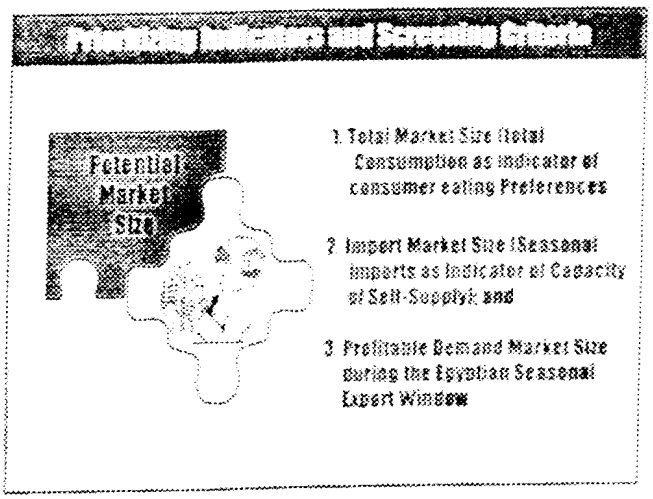

Fresh Produce World: Overall Production and Trade
Egypt as Seasonal Supplier to Fruits Markets


Egypt: Potential Fresh Produce export markets
Egypt well located close to two of the major five export markets
North American market
well supplied by NAFTA and Central American suppliers
FSU & Eastern Europe
Great potential market in medium and long term.
Western Europe
The Japanese market
The Japanese market has complex regulations make it a hard market to access and well supplied by NAFTA and regional suppliers.
Gulf market


Prioritization Indicators
& Screening Criteria

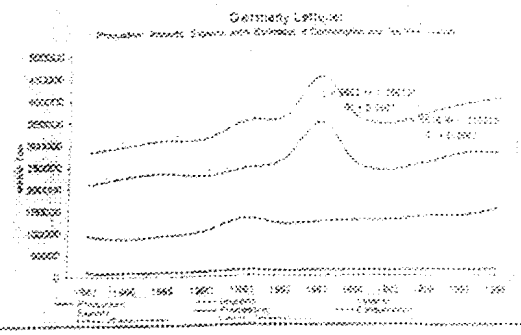

Potential
Market
Size
Competitive
Position
Potential
Profitability


Basics of Market Analysis
Potential
Market Size
Competitive
Position
Potential
Profitability
Export
Potential


Potential
Market
Size
1. Total Market Size (total consumption as indicator of consumer eating Preferences
2. Import Market Size (Seasonal imports as indicator of Capacity of Self-Supply); and
3. Profitable Demand Market Size during the Egyptian Seasonal Export Window

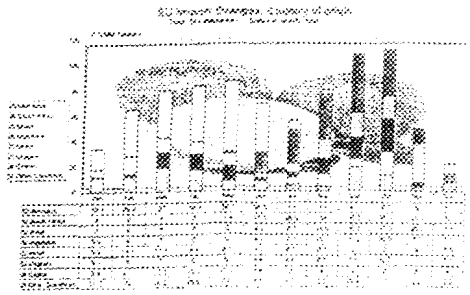
## A. Potential Market Size

1. Total Market Size (Retail Consumption as Indicator of consumer eating Preferences



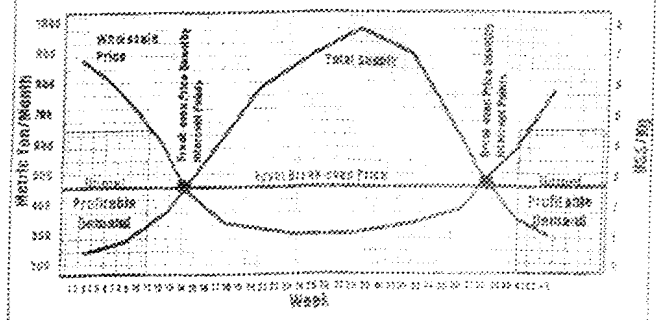
## A. Potential Market Size

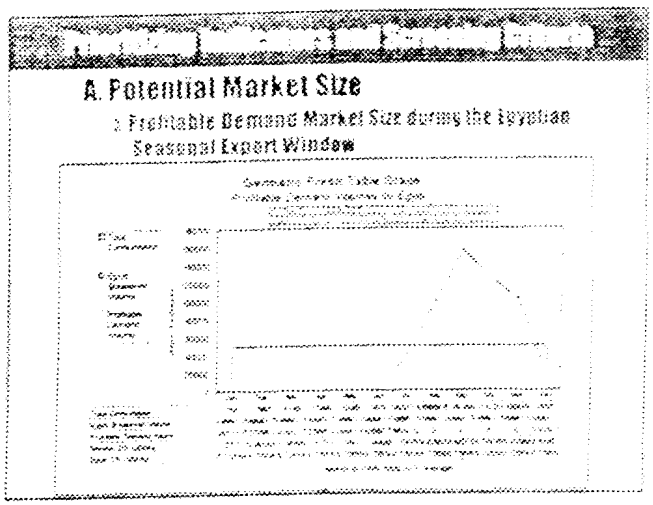
2. Import Market Size (Seasonal Imports as Indicator of Capacity of Self-Supply); and

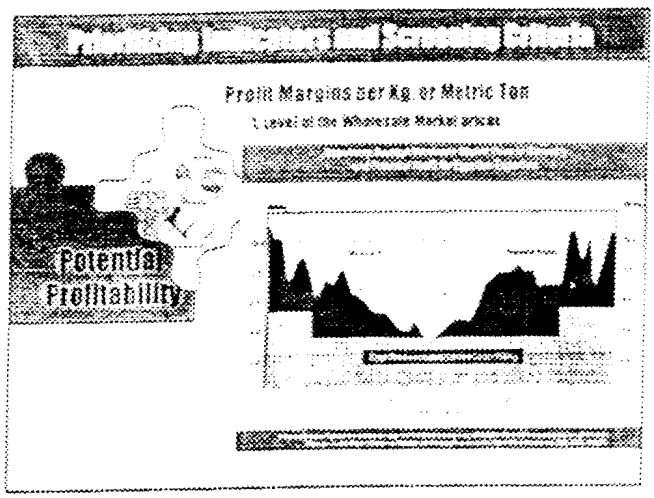


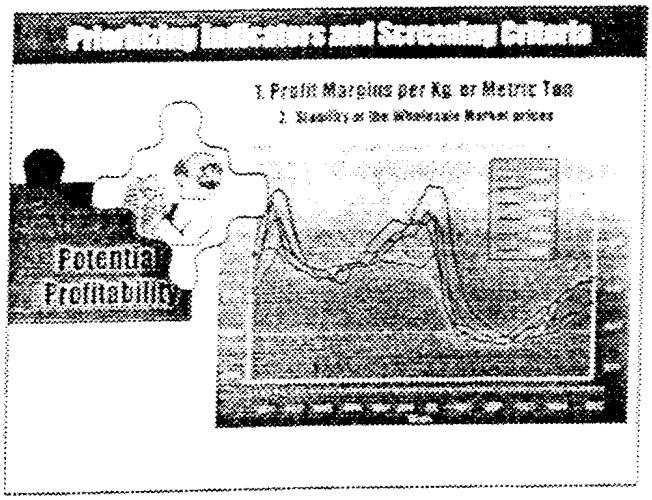
## A. Potential Market Size

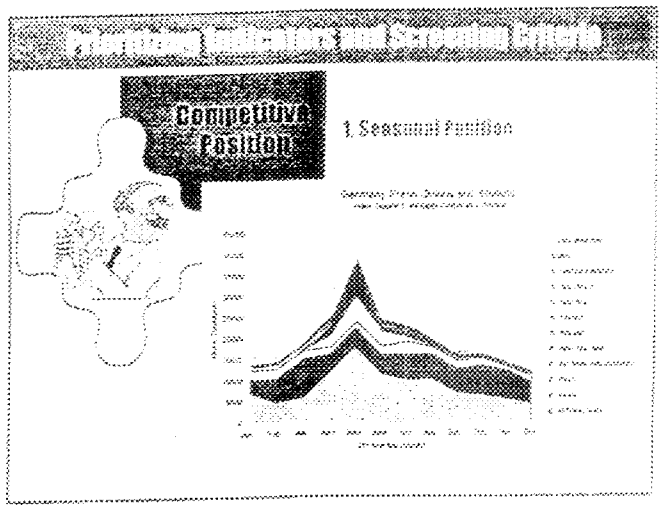
Market Profitable Demand, Concept and Estimation Methodology

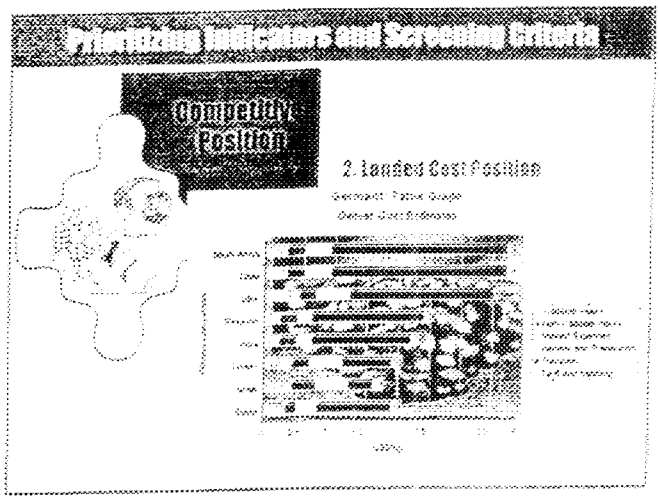


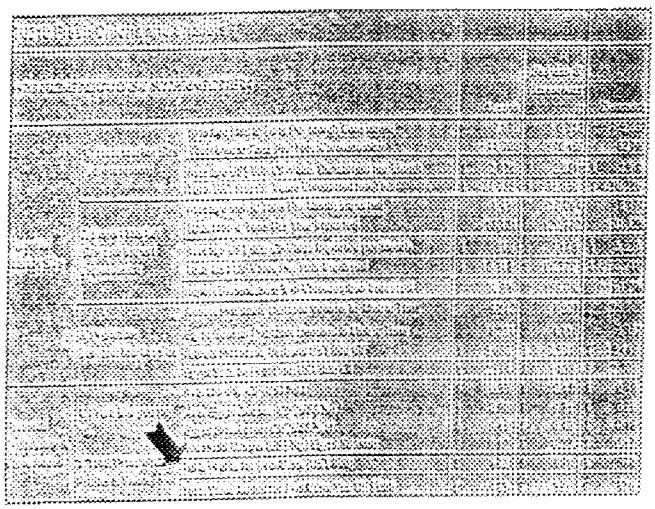

A. Potential Market Size
1. Profitable Demand Market Size during the Egyptian
Seasonal Export Window


Profit Margins per Kg. or Metric Ton
Potential
Profitability

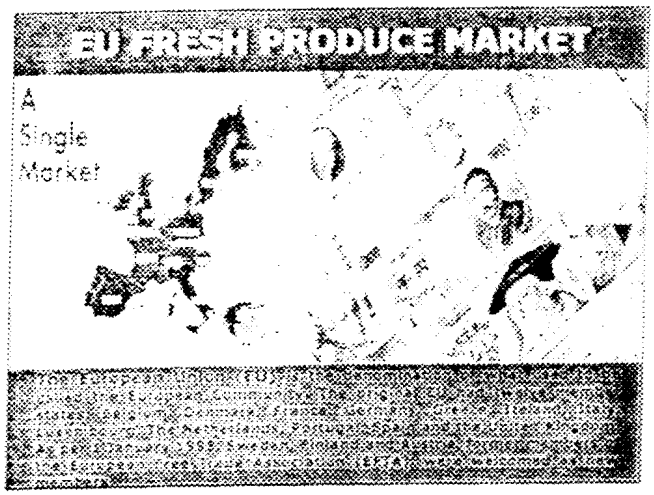

1. Profit Margins per Kg. or Metric Ton
Potential
Profitability

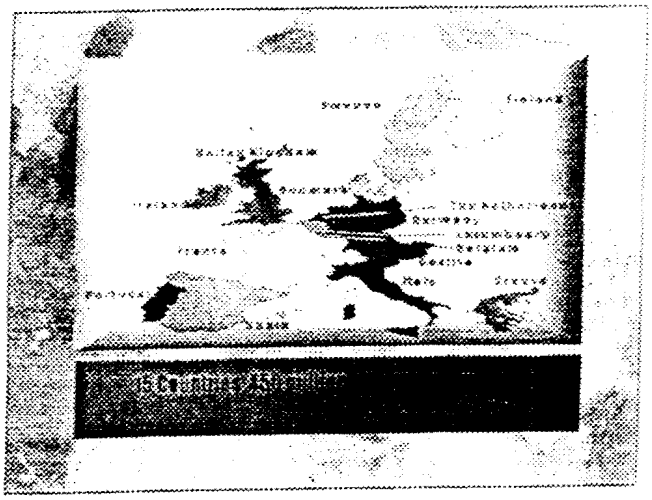

Competitive Position
1. Seasonal Position

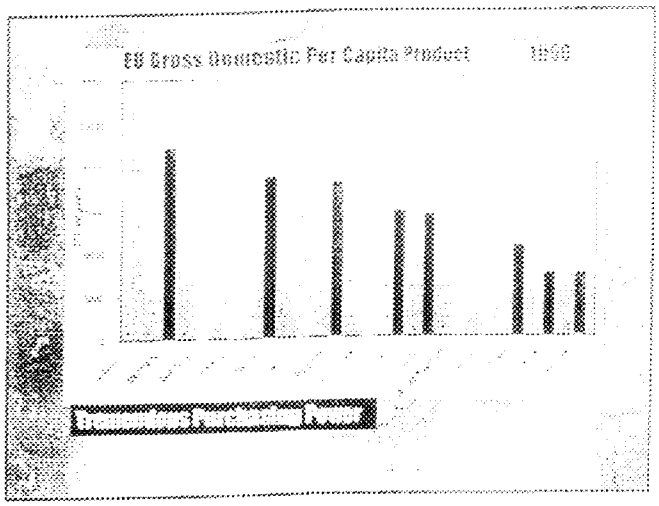

Competitive Position
2. Landed Cost Position

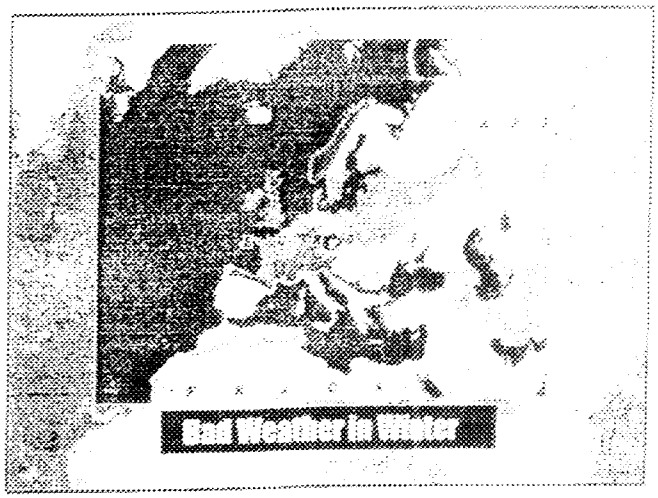


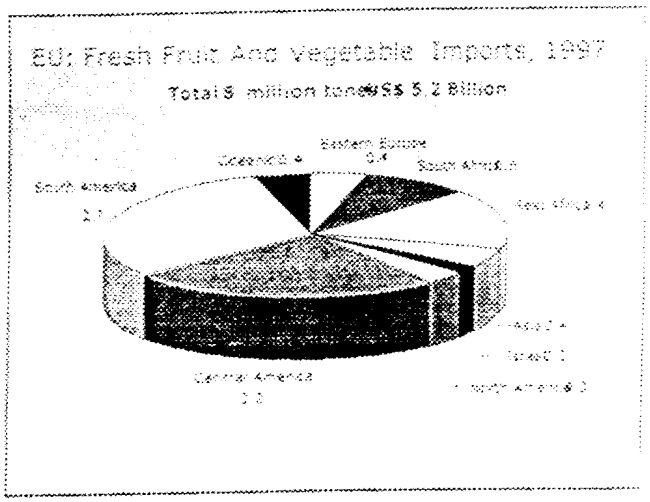

EU Market

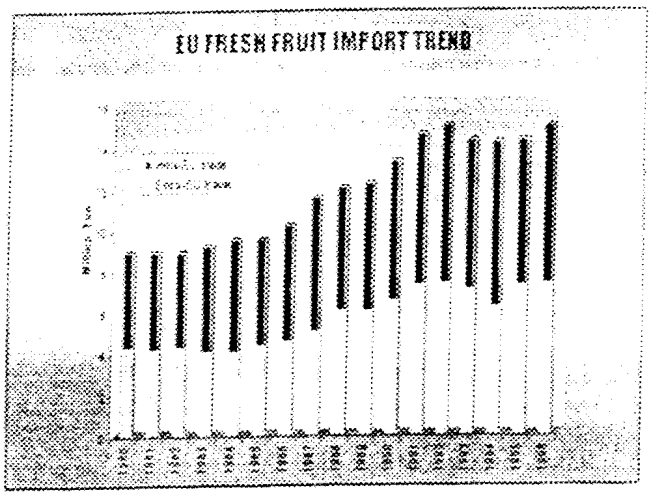

EU FRESH PRODUCE MARKET
A
Single
Market

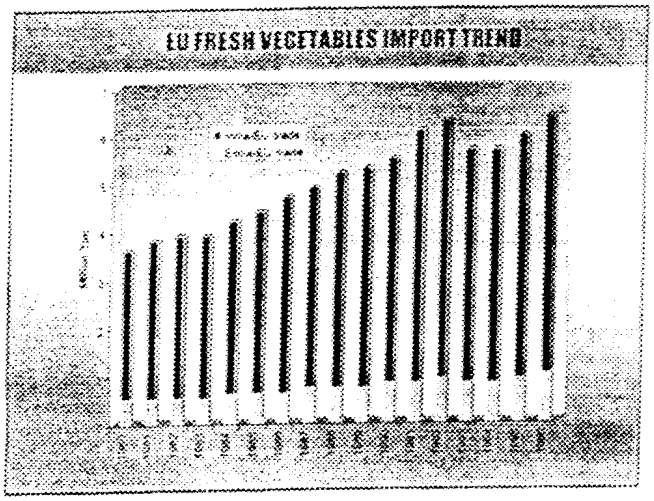


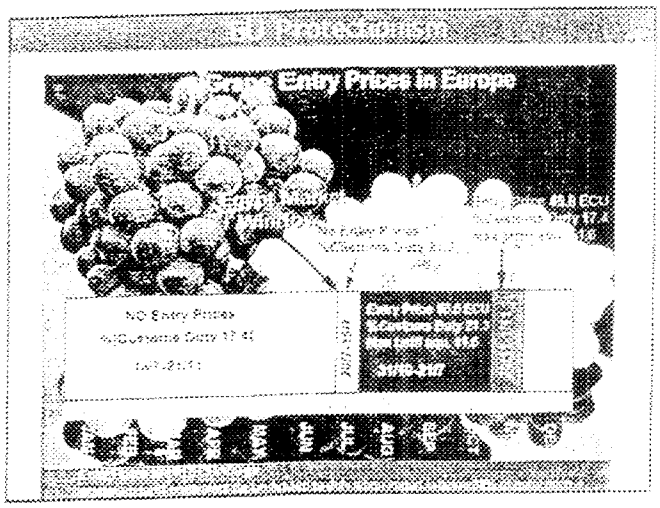

US Gross Domestic Per Capita Product

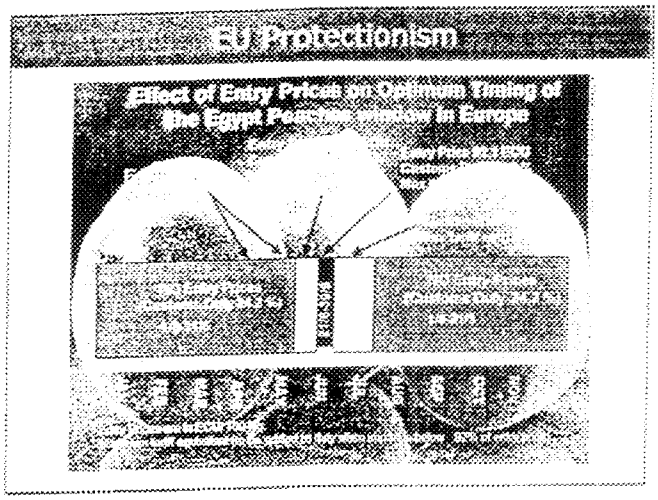



EU: Fresh Fruit And Vegetable Imports, 1997
Total 8 million tons US$ 5.2 Billion
Eastern Europe
0.4
Oceania 0.
South America
2.1
Central America
2.2


EU FRESH FRUIT IMPORT TREND


EU FRESH VEGETABLES IMPORT TREND




Trade Policy:

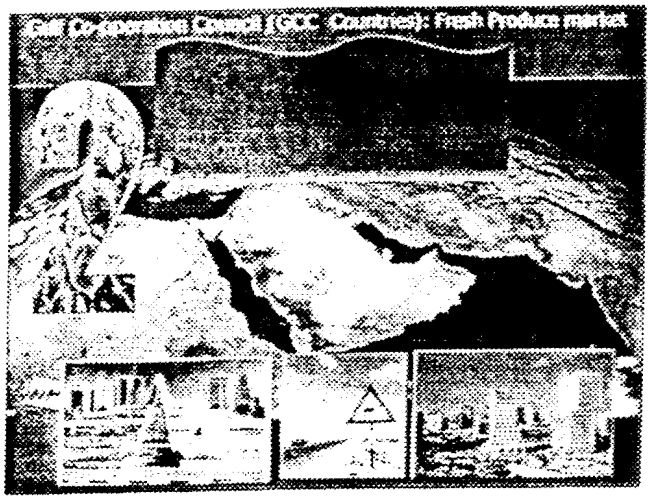
- The market access for fruit and vegetables is regulated through the EU basic regulation 3529/92, which comes from the CAP to protect EU producers. The regulation covers the quality standards, phytosanitary, reference price system as well as duties and licenses.
- Following the GATT agreement entry price system was introduced to replace the reference price system now applied to Switzerland.
- Quantum duties
- Non tariff barriers: following the GATT agreements the EU has waived all of them except whereby any importer needs a license to import fruit.

Product Characteristics:

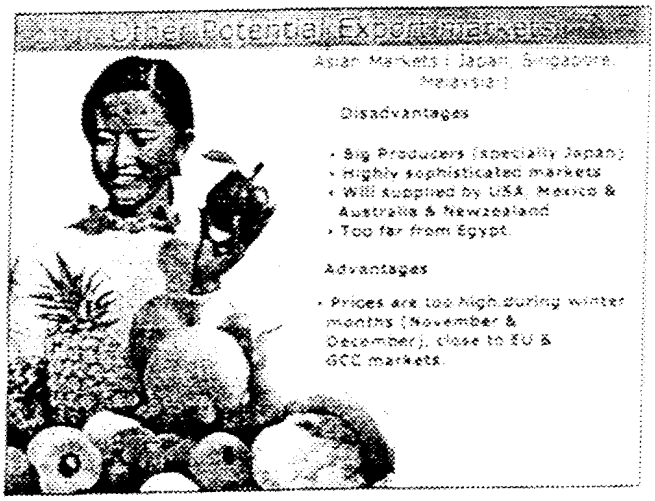
Quality: The quality regulations for fruit and vegetables are laid down in basic regulation EC 3529/92. The quality of the product is the key to a successful penetration of the European market.

Packing, marking, and labeling (Materials, Size, Sorting, Packing weight, Labeling and Marking): Directive 94/62/EC emphasizes the obligation of packing materials.

Phytosanitary certificate: The regulations related to the phytosanitary control are laid down in Council directive 77/93/EEC of 21 December 1976, last amended in 1991/92.


Gulf Co-operation Council (GCC Countries): Fresh Produce market


Other Potential Export markets
FS
Eastern
Europe


Other Potential Export markets
Asian Markets : Japan, Singapore, Malaysia)
Disadvantages
• Big Producers (specially Japan)
• Highly sophisticated markets
• Well supplied by USA, Mexico & Australia & Newzealand
• Too far from Egypt.
Advantages
• Prices are too high during winter months (November & December), close to EU & GCC markets.

# Market Window Analysis
## (Unmet Profitable Demand)

# Software Manual

CD Contents

- Fresh Produce Market Analyzer: State of the art in fresh produce market analysis using personal computers. Easy and fast way to identify export opportunities and export market windows.

- Detailed background information of the production, postharvest and transport fresh produce.

- Detailed training on how to build a business plan and software to perform the business plan

- The most comprehensive fresh produce database. From production, costs, competition, prices, to crop budgets and more.

- Integrated database to help you to Access Markets more effeciently

- Essential information to help to understand the fresh produce export markets and uses this software and the databases efficiently.

Marketing

# Fruits and Vegetables Export Business

Market Information and Export Management

Unique and easy to use spreadsheet menu driven based computer system to analyze fresh produce export markets and identify export opportunities (countries and commodities).

Software has been developed utilizing the state of the art in Business Information Technology. A world class product that gives Egyptian exporters the opportunity to beat any other competitor.

The software needs minimal hardware configuration and minimal computer knowledge, however it will make your work much easier, faster, and complete which maximize your chances to success.

**What you need to run CD-Market Analyzer:**

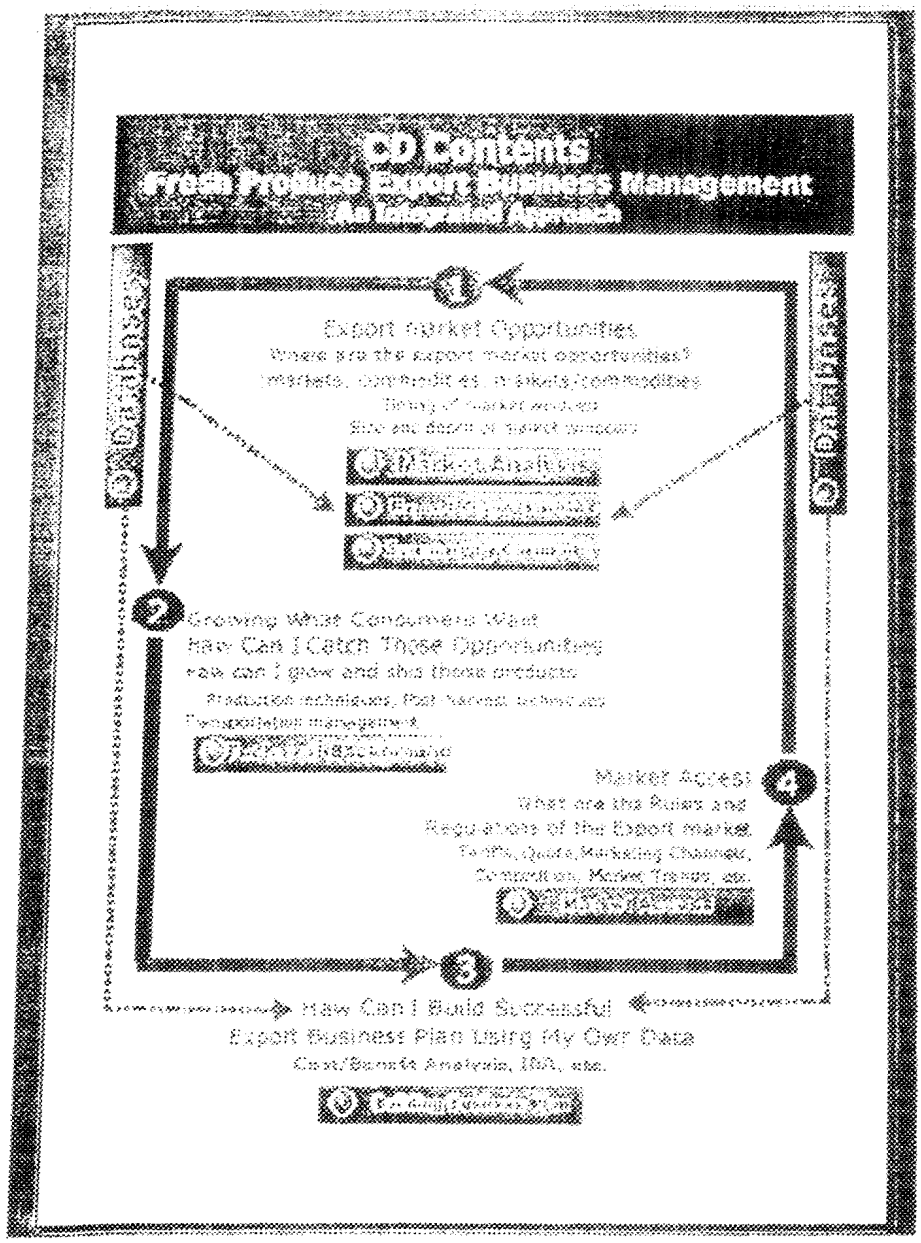
- CD-ROM drive
- 8 MB RAM or Higher
- 15 MB free HD Space
- MS-Office version 97
- Adobe Acrobat Reader (Included on the CD)

As you insert the CD-ROM in your CD-ROM drive, it will run itself and give you instructions to move forward with the system without any troubles. It has been built to run automatically on any IBM-based platform.


CD- Main user interface

basics of fresh produce export market analysis (how to identify export

opportunities and windows). How to update data used, how to interpret results, data sources, and essential background documents.

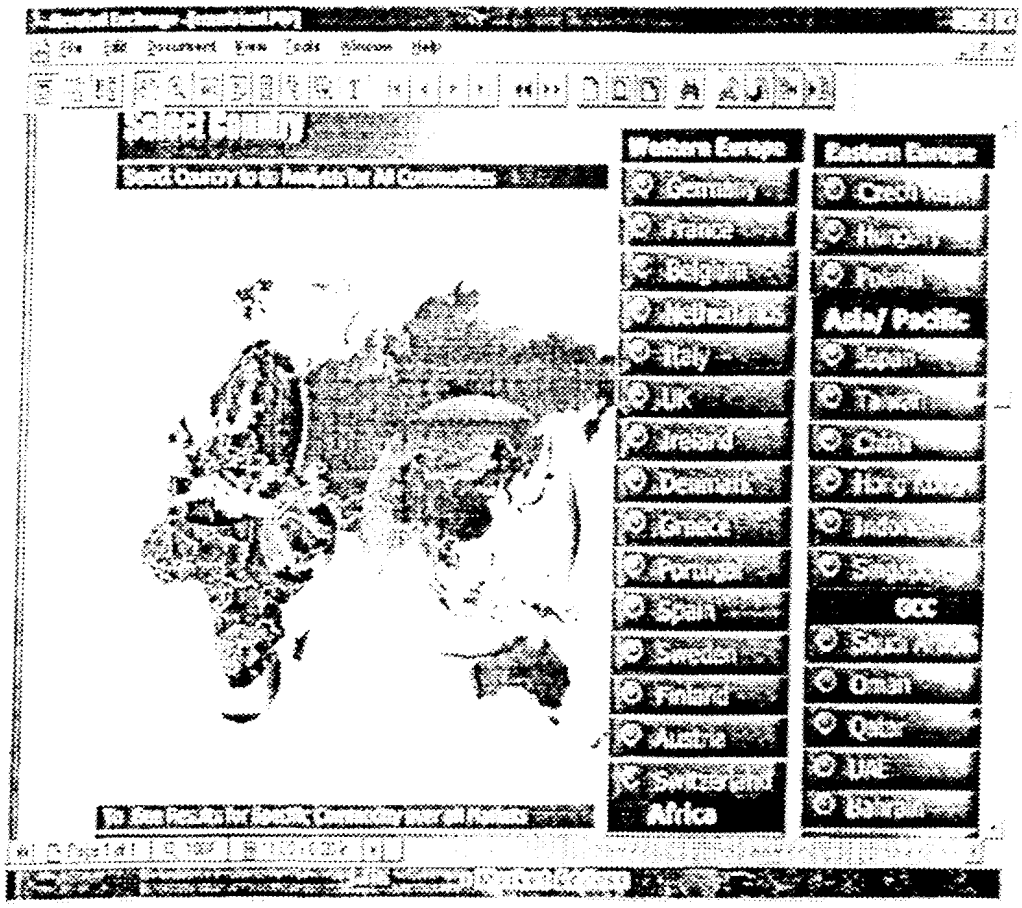



All what you need is to click on the relevant button and the software will lead you automatically to the needed information.

Some documents need the Adobe Acrobat software. So, it is highly recommended to install this software on your computer if you interested in this part of the CD. The Software is already included on the CD-ROM, and installation is very easy and straightforward.

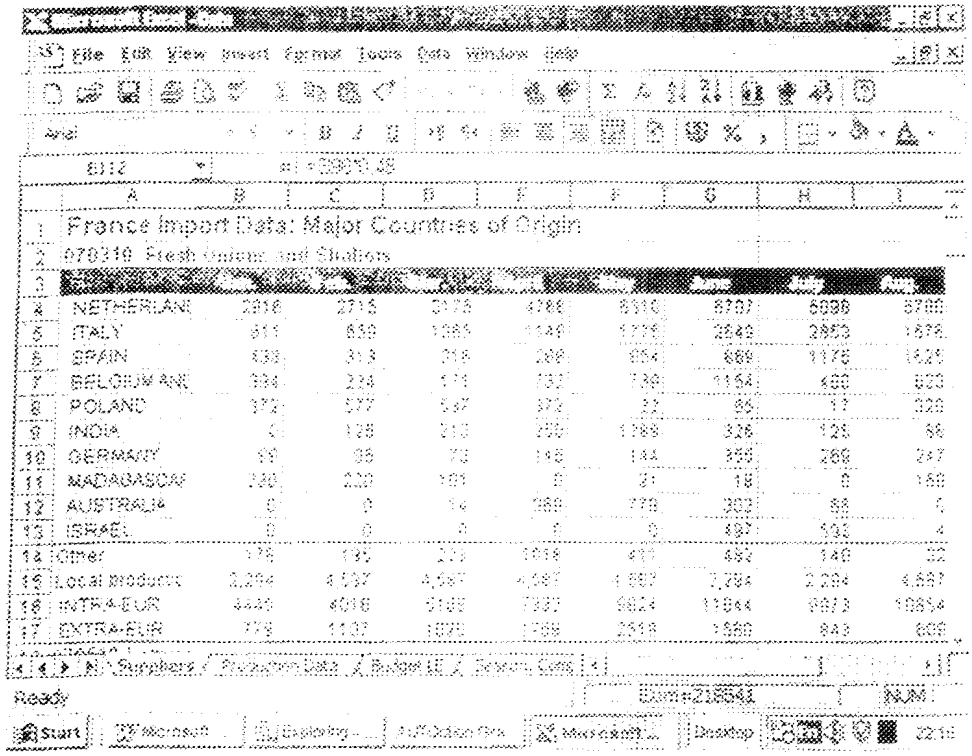
Some other files are in Microsoft PowerPoint. The purpose is to give the reader the opportunity to understand basics of the export market analysis using some of the very powerful animation techniques and slides. This will help dramatically to improve the understanding and ease the use of the CD-ROM and attached materials.

takes you step by step to analyze your market including, trend analysis, competition analysis, window analysis and overall summary of products and countries and more.

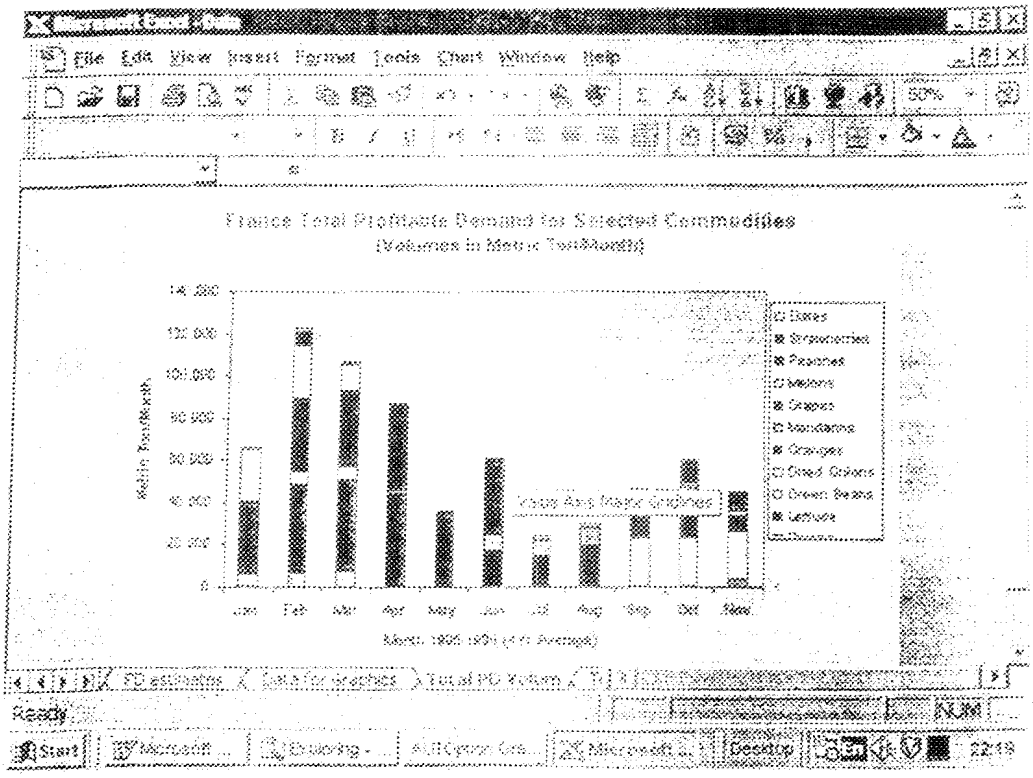



You could select between over 32

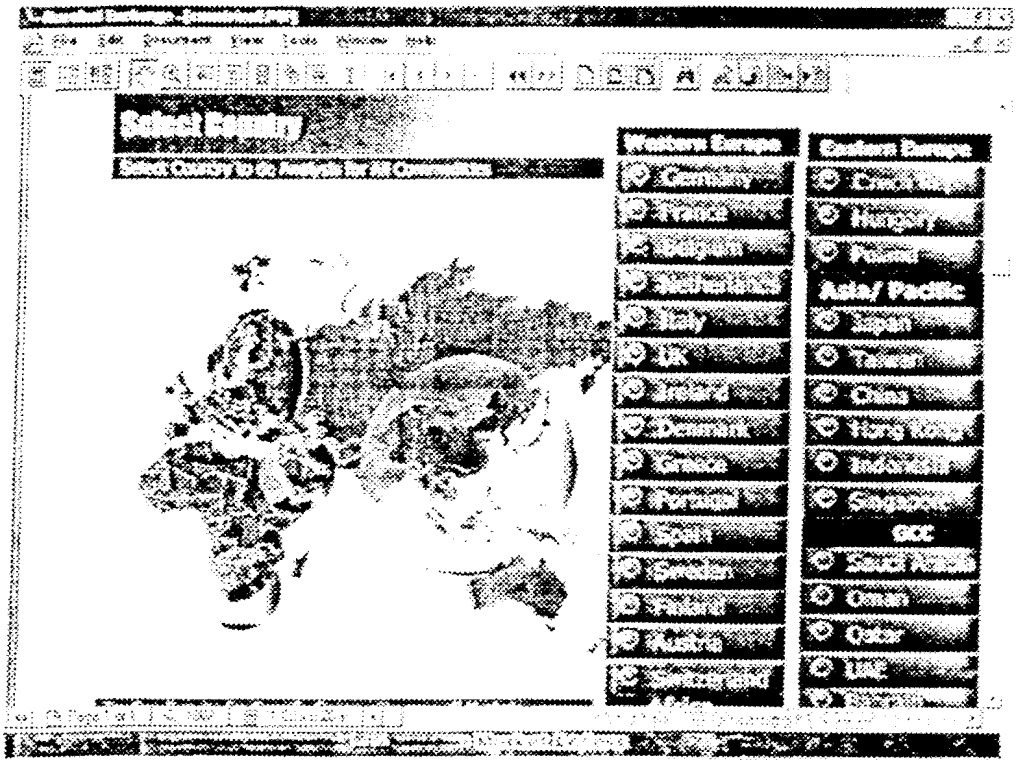
Click on any country will take you to the country data (running the spreadsheet you will use to manipulate the data).




Workbook of 13 worksheets will gives the complete picture and ended up with easy to understand summary graphs



you to a comprehensive summary of the results summarizes in the following screen



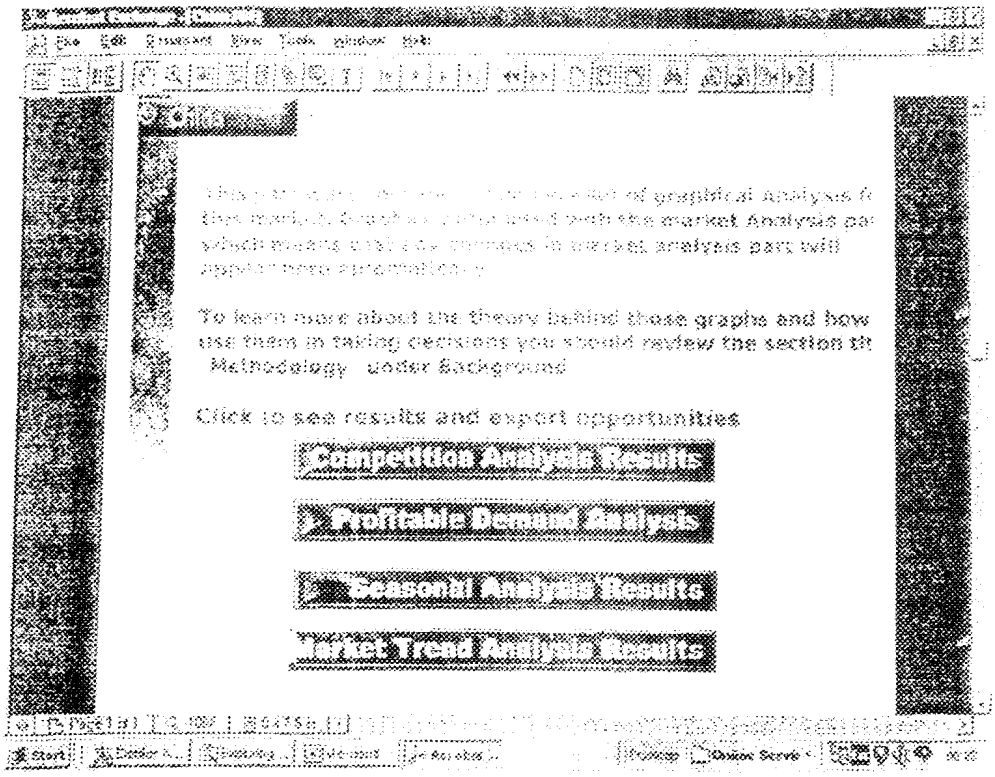

This menu gives you summary of the following results, competition analysis, profitable demand analysis, seasonal analysis, trend analysis as well as summary by product and product- Market combination summary.

**Competition Analysis graphs** give a comprehensive analysis of competition facing Egyptian exporters for the targeted commodity in the target market.

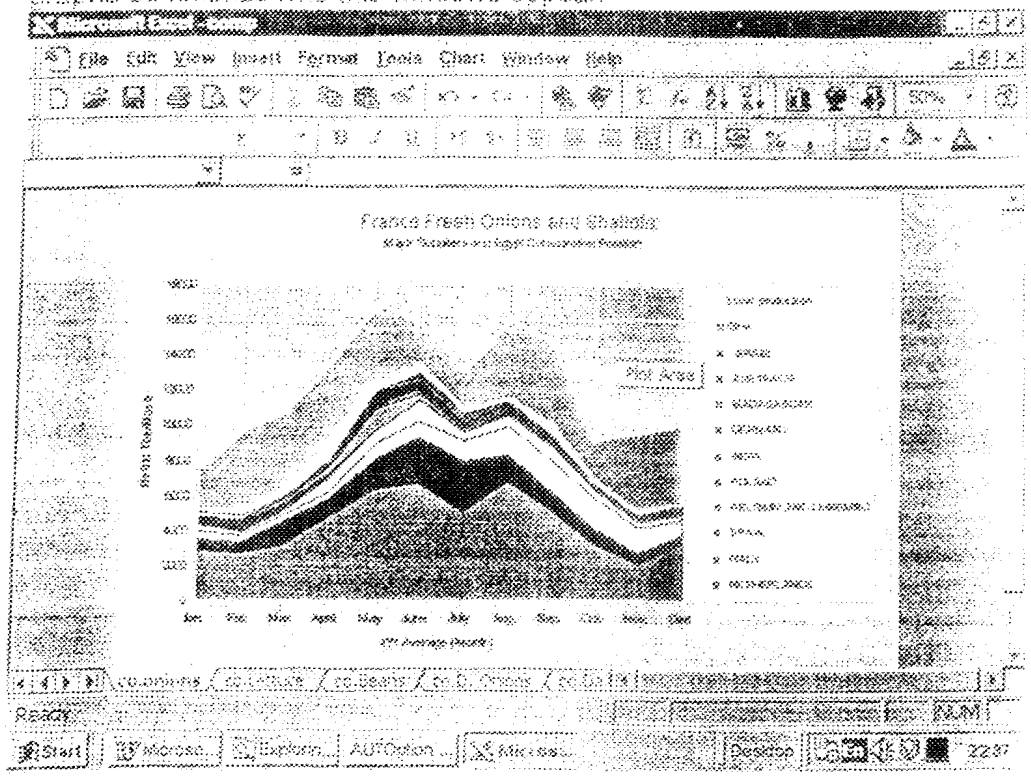
**Profitable Demand Graphs** give total analysis of the size (depth and length) of the market window for target commodity in the target market as well as CIF versus wholesale market prices.

**Seasonal Analysis graphs** give a whole picture of the target commodity in the target market, production, imports, exports, processing, etc.

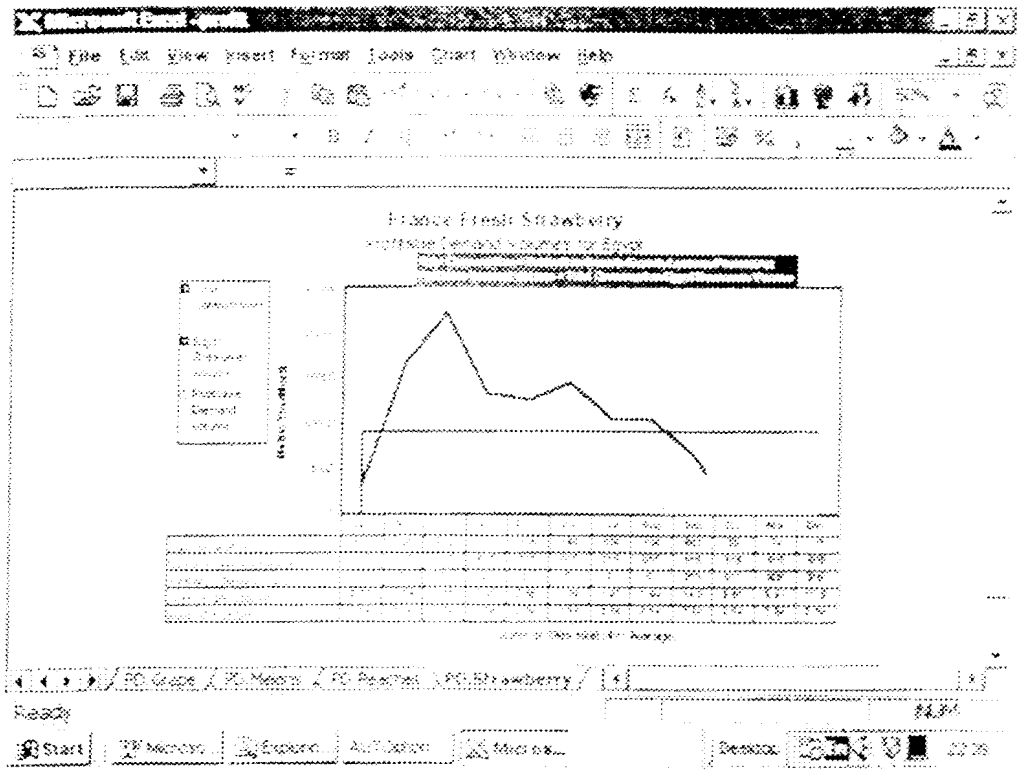
**Trend Analysis graphs** give longer period picture of the main variables (local production, imports, exports, processing, etc.). This long period view give an over all picture of the consumption trends of the target commodity in the target market. This analysis is very useful to identify if the demand for this commodity in this market is growing.



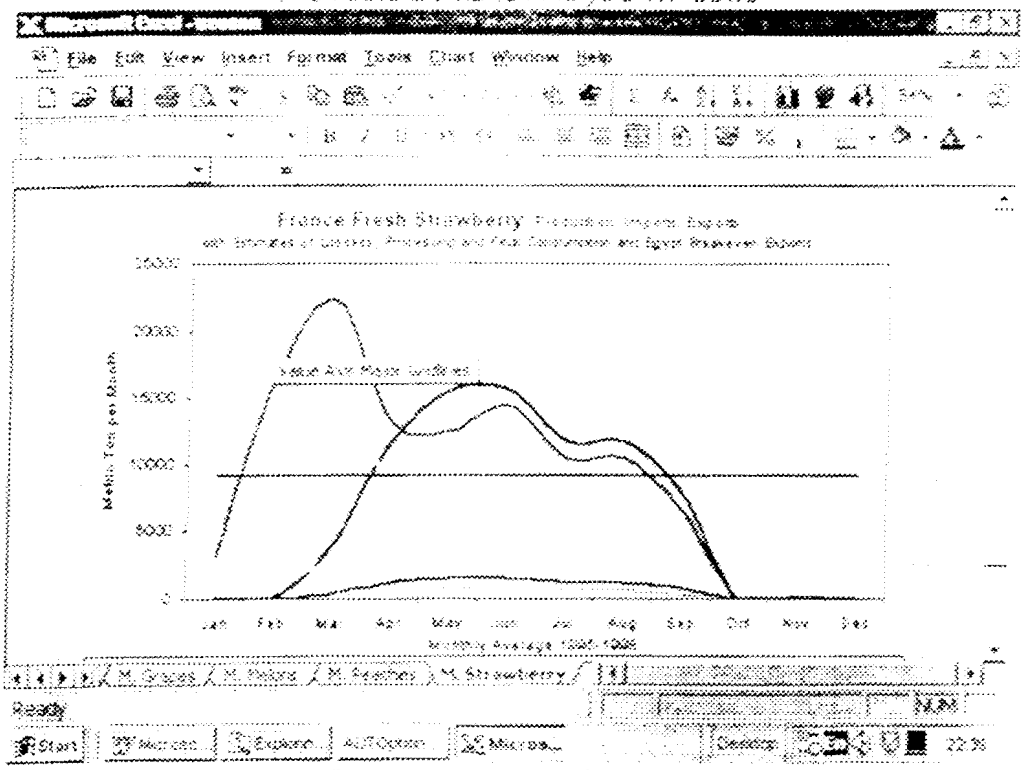

All graphs are linked automatically in the way that any change in any figure will lead automatically to adjust all components of the system. The following graphs summarize who this windows appear.



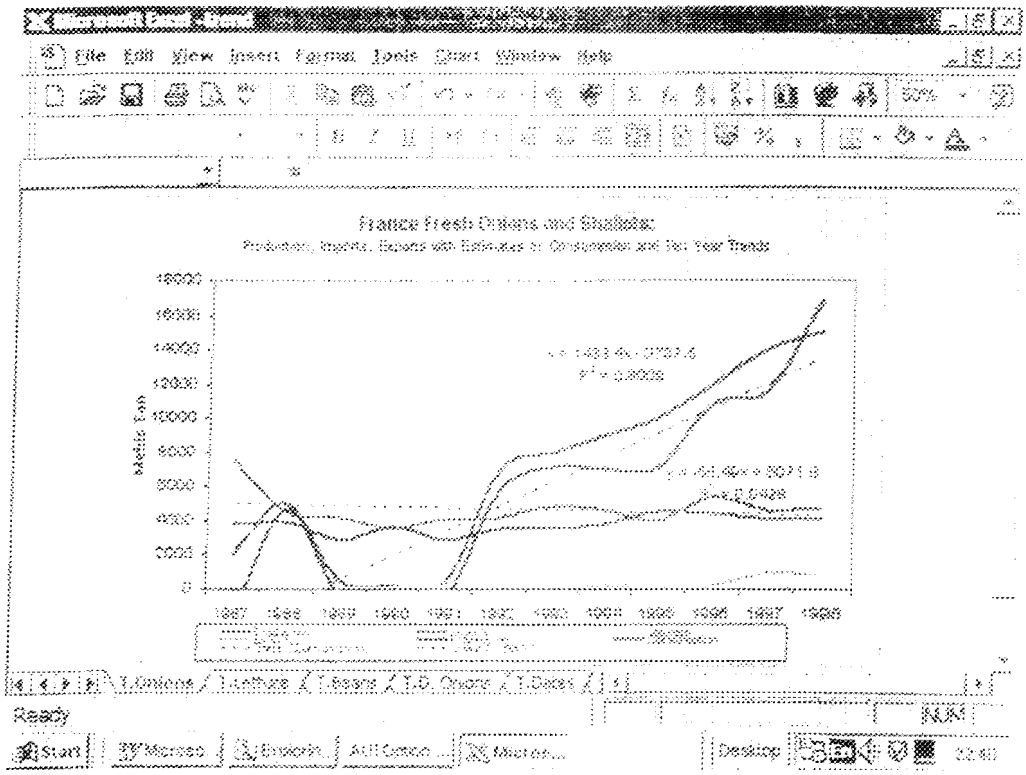

Competition Analysis windows



Profitable Demand Analysis Windows



Seasonal Analysis Window




Trend Analysis Window

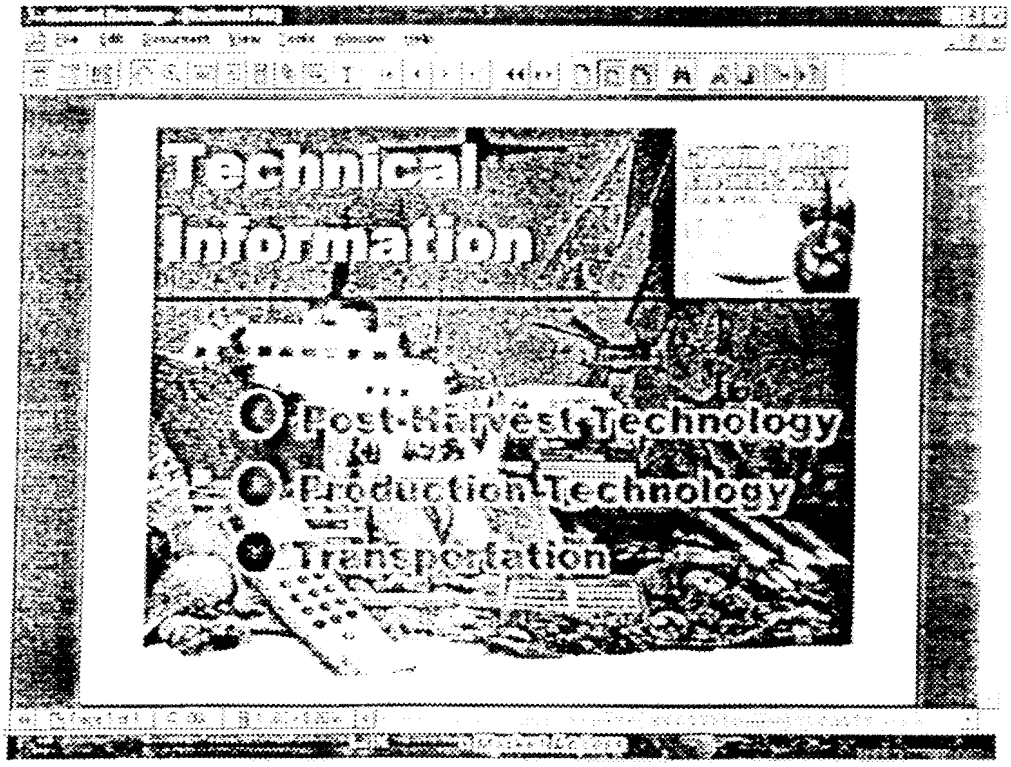
**Summary by commodity**

This button gives you a complete analysis of the market opportunities by commodity across all markets, and/or commodity/markets comminations

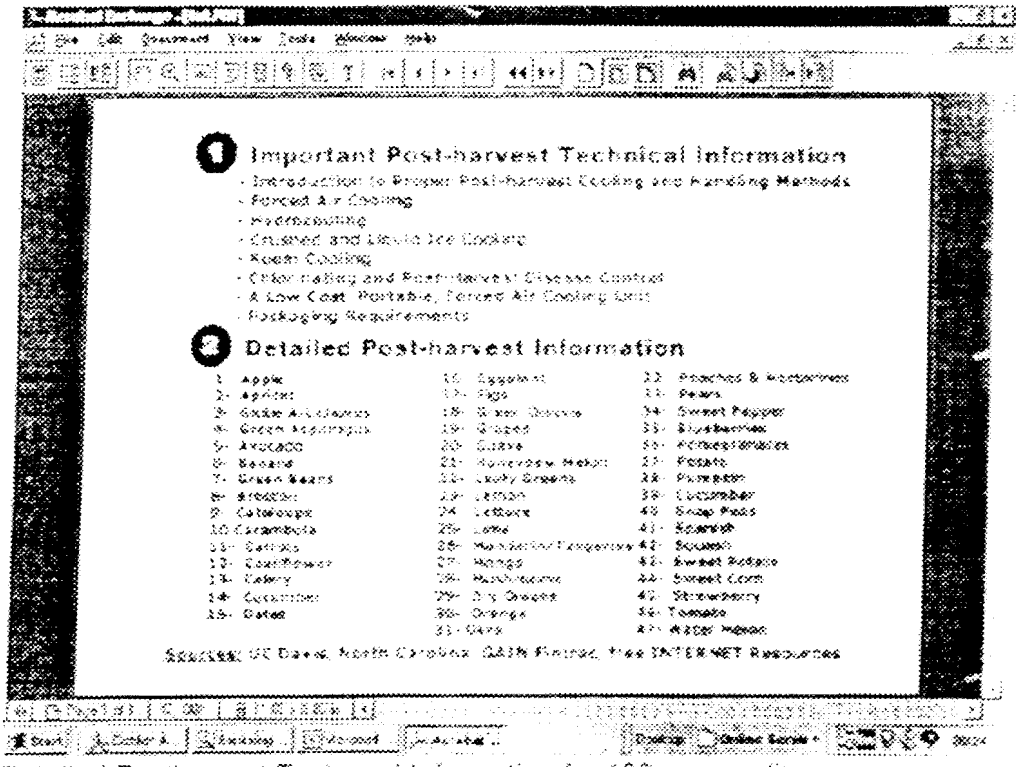
## Technical Background:

This part provides the state of the art in production, postharvest and transportation information. Information included in this part have been collected from the most reliable data sources and customized to be easy to

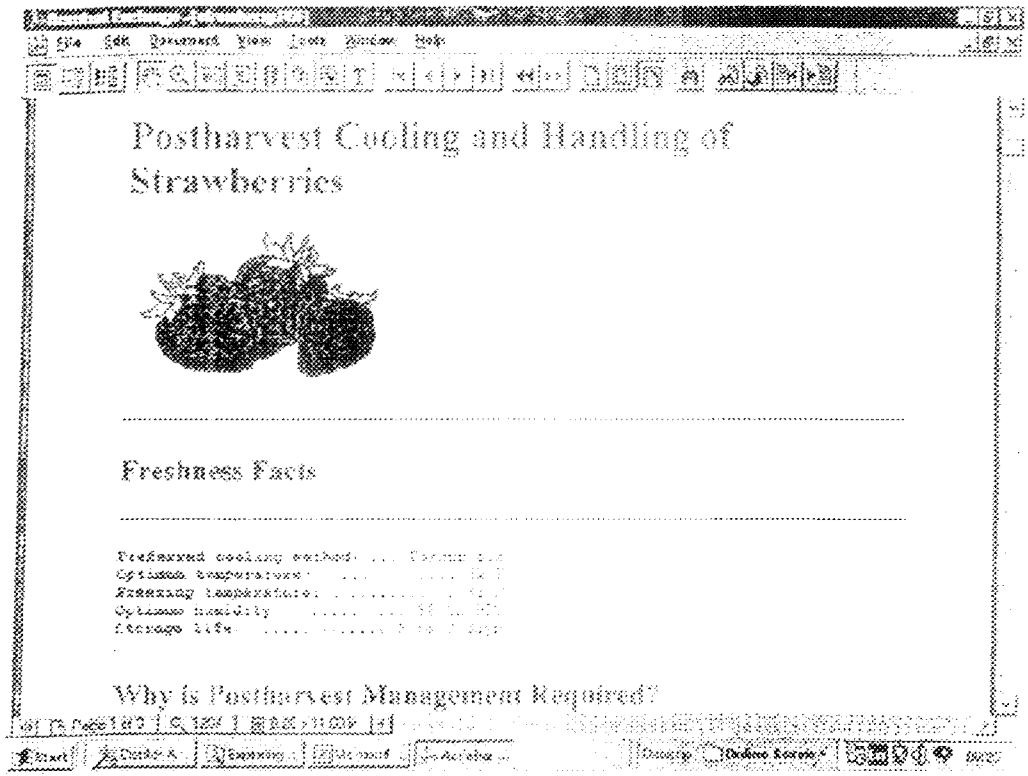
you every where. Now you have a complete encyclopedia.



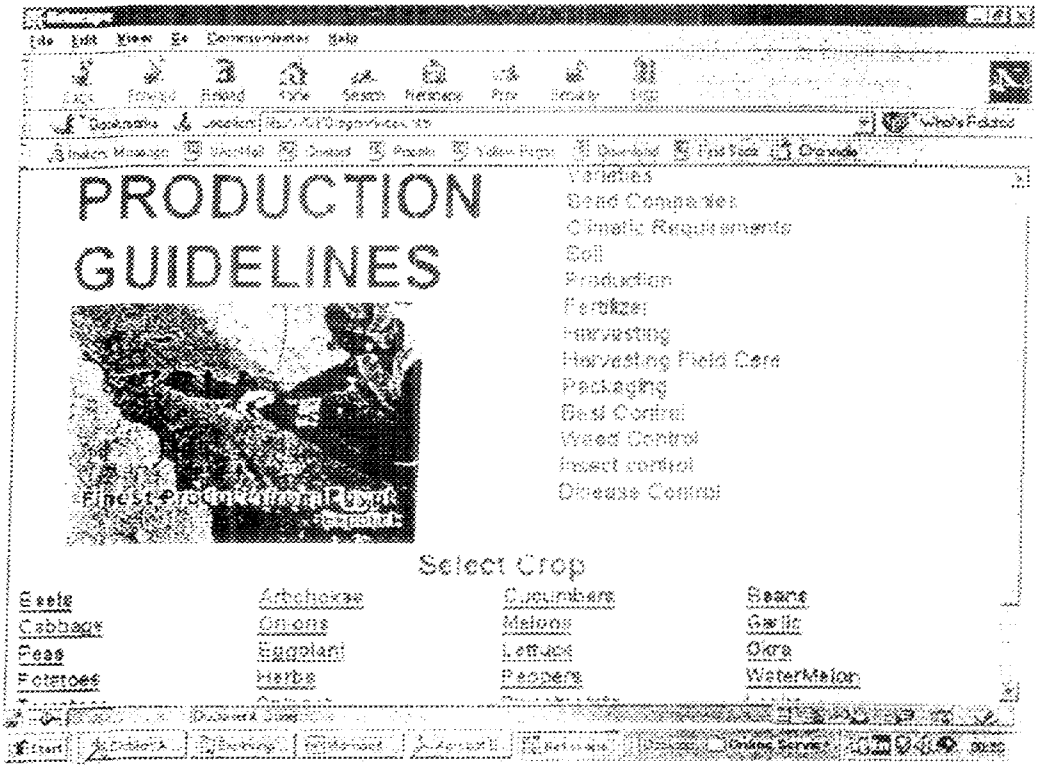

Technical Information main menu



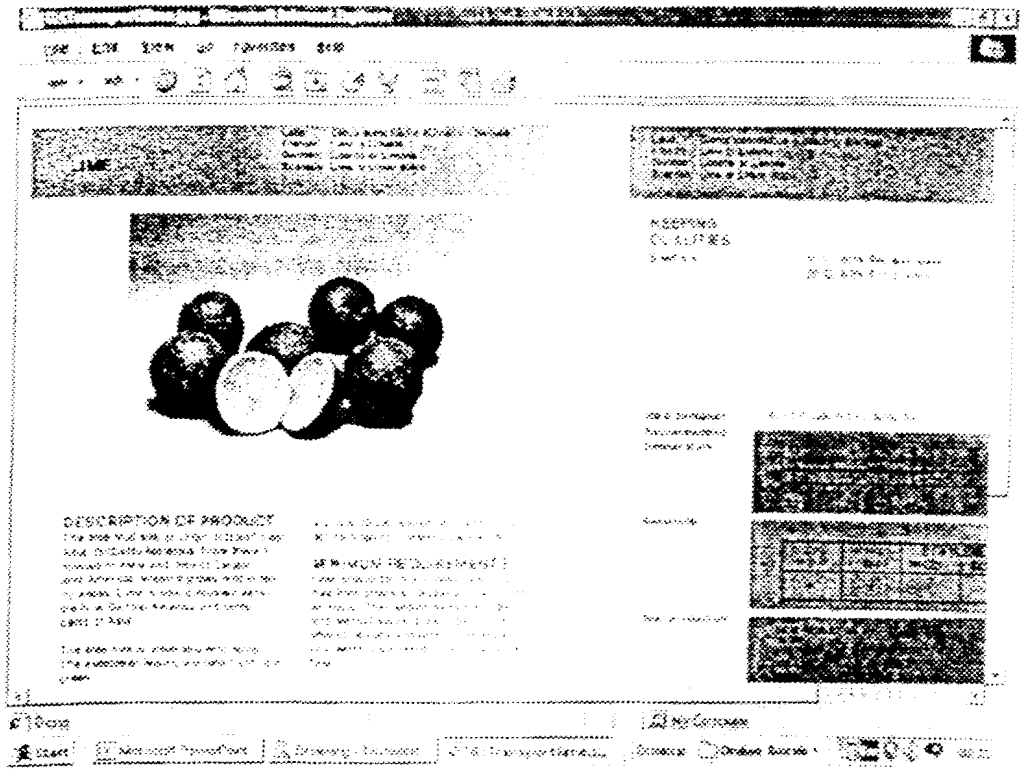

Detailed Postharvest Technical Information for 100 commodity




Sample of the post harvest information window



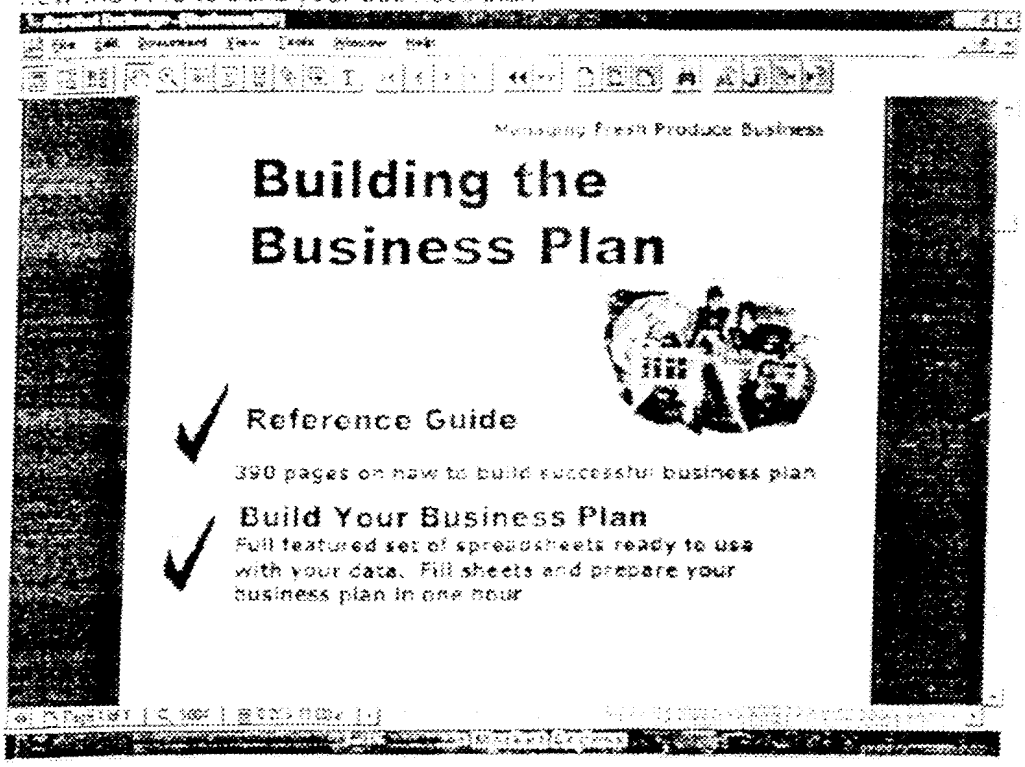

Production information main menu



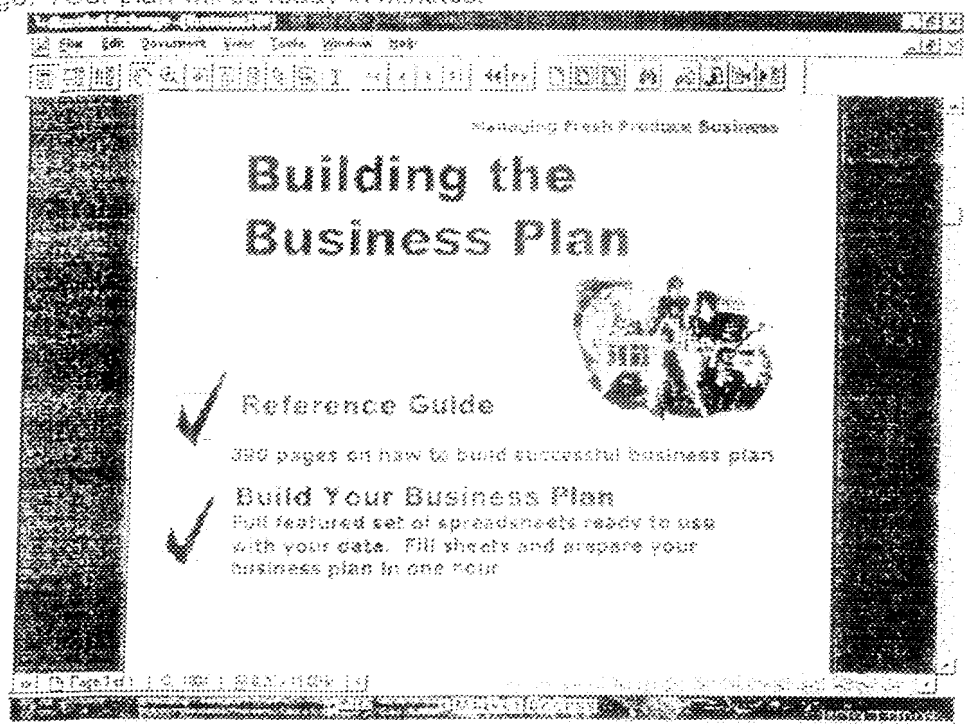

Sample of the transportation guide (available for 100 commodity)

## Building the Business Plan:

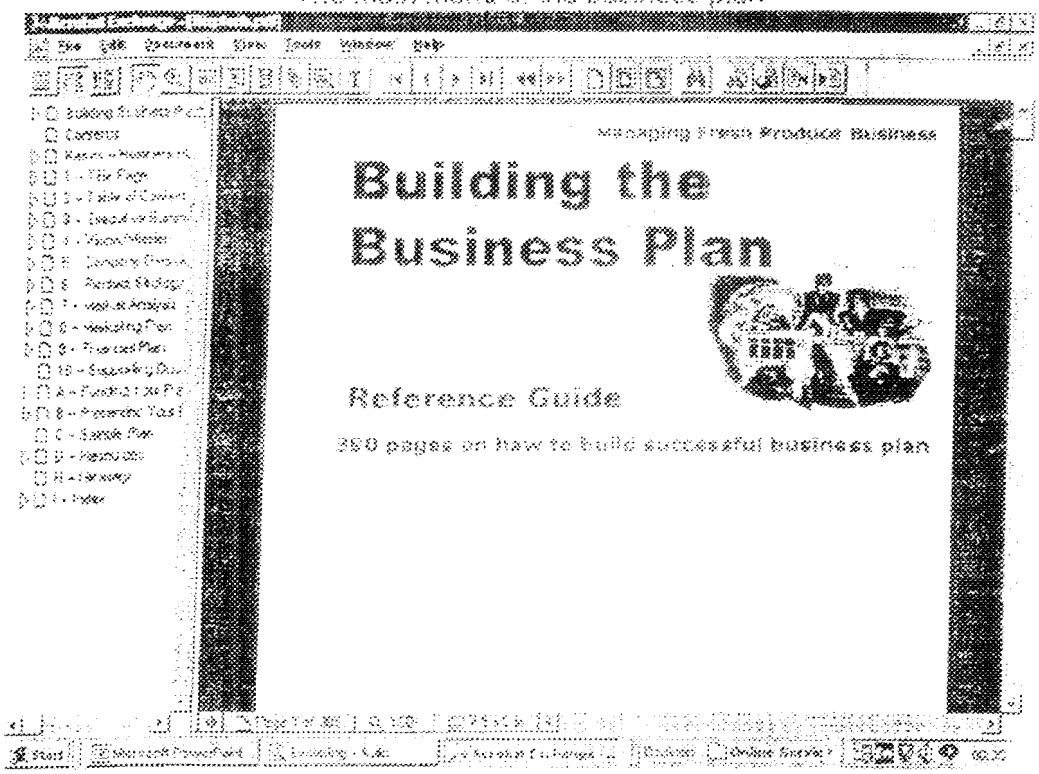
Once you decided to select specific commodity(ies) and specific markets, it is now the time to build your business plan



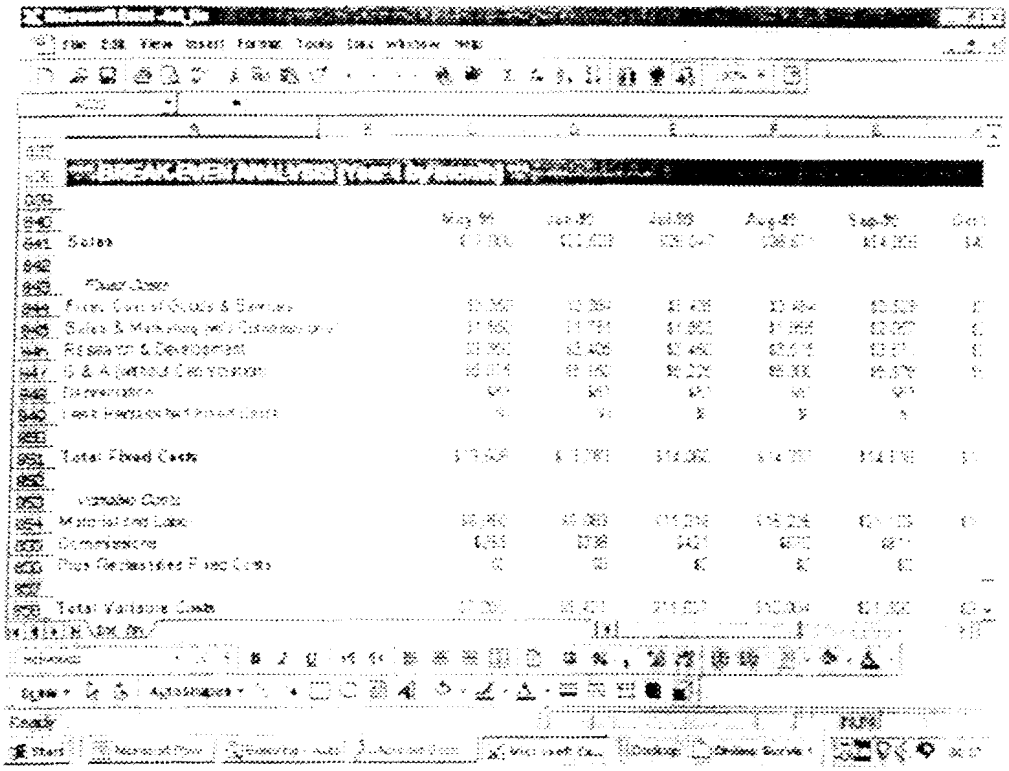
The CD includes a complete system to build a business plan, 390 Pages detailed Manuel to help you to build the business plan successfully, and integrated set of spreadsheets to build the business plan. Insert your data and go. Your plan will be ready in minutes.




The main menu of the business plan

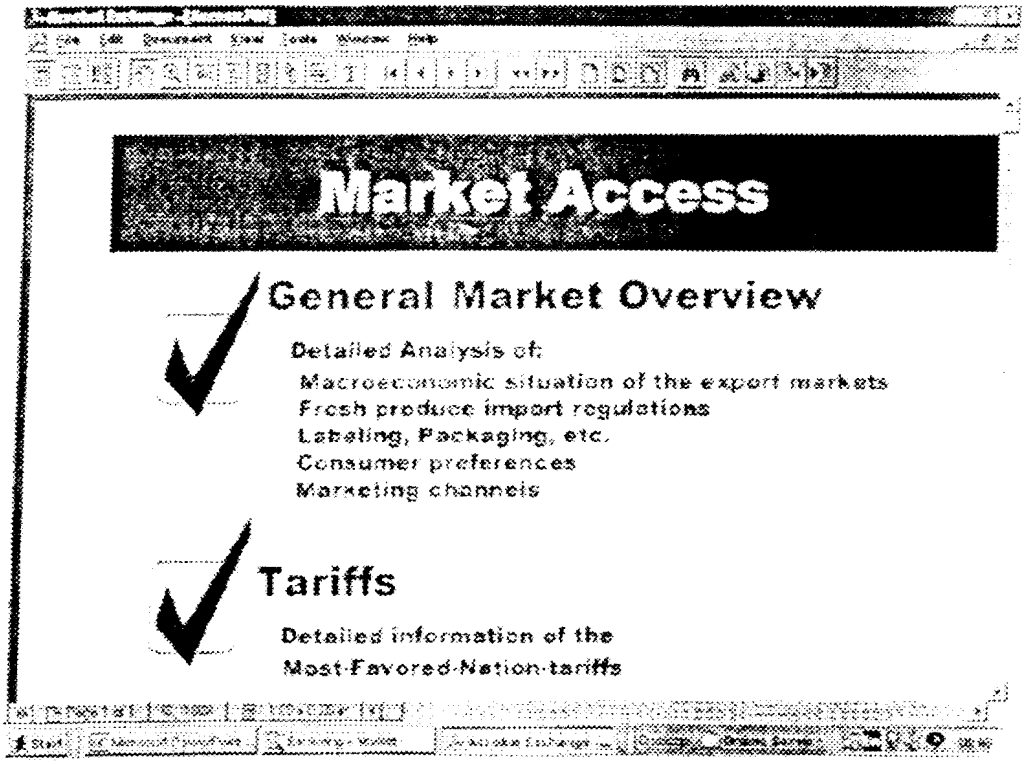


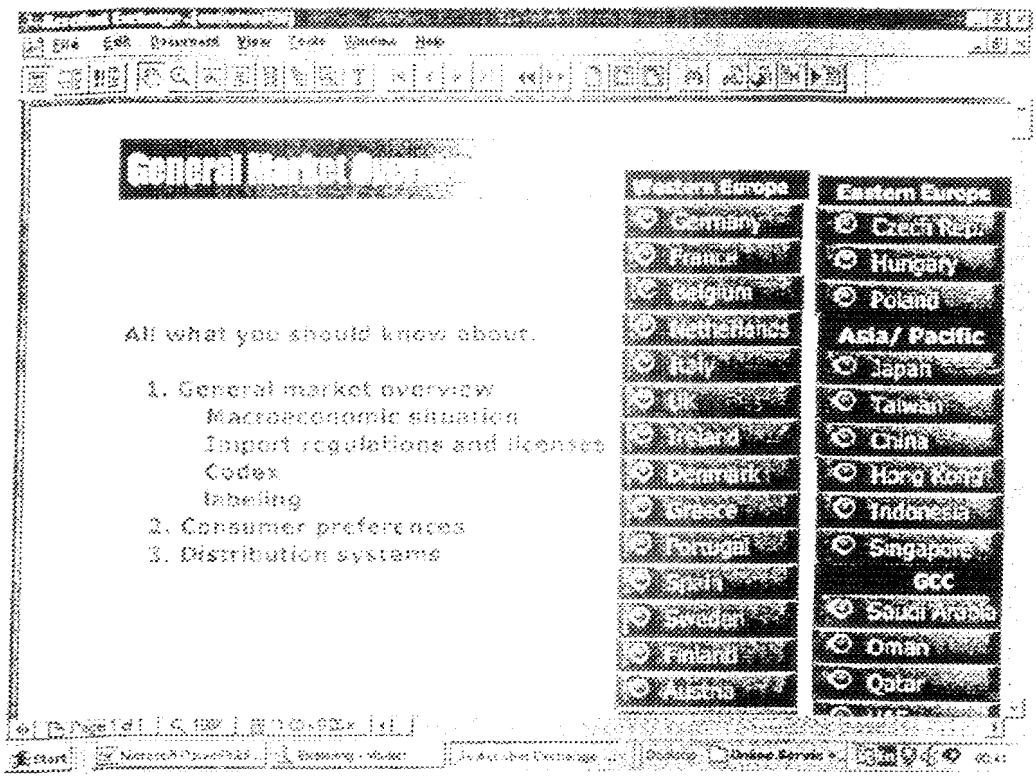

Detailed Business plan building Manuel



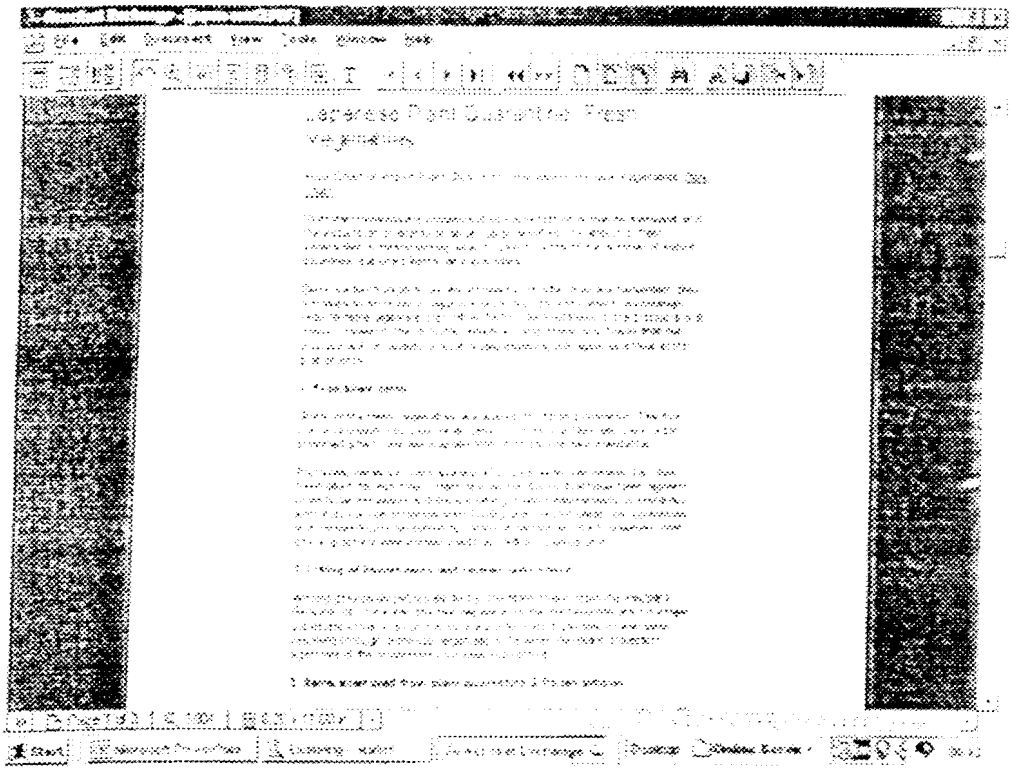
Now building the business plan is easy and straight forward operation with the incorporated spreadsheets

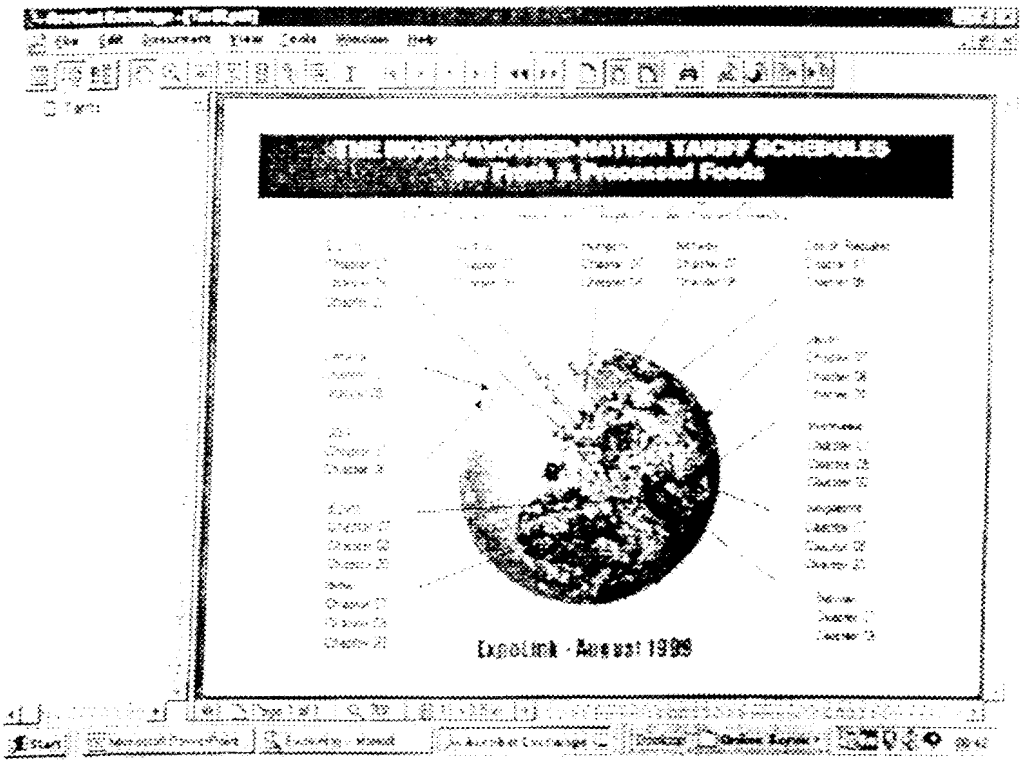
## Market Access Information:

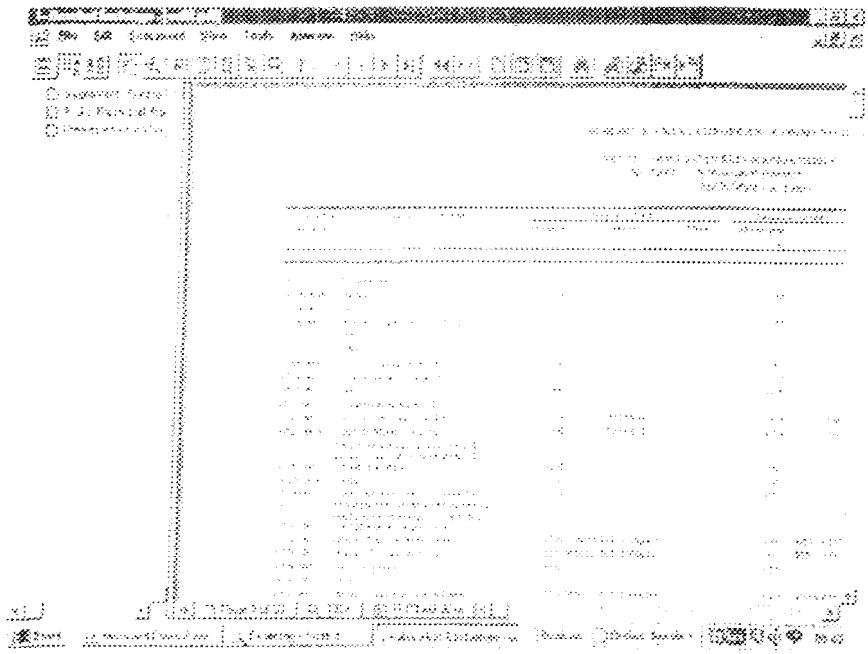



All what you should know about:
1. General market overview
Macroeconomic situation
Import regulations and licenses
Codex
labeling
2. Consumer preferences
3. Distribution systems
Eastern Europe
Czech Rep.
Hungary
Poland
Asia/ Pacific
Japan
Taiwan
China
Hong Kong
Indonesia
Singapore
GCC
Saudi Arabia
Oman
Qatar


JAPAN
Fresh Produce Market Overview
1. Overall market characteristics
2. Phytosanitary regulations
3. List of Ban-Lifted Plant Items and key conditions
4. Japanese Plant Quarantine: Fresh Vegetables
5. Japanese Plant Quarantine: Fresh Fruits
6. Key fresh produce importers/wholesalers

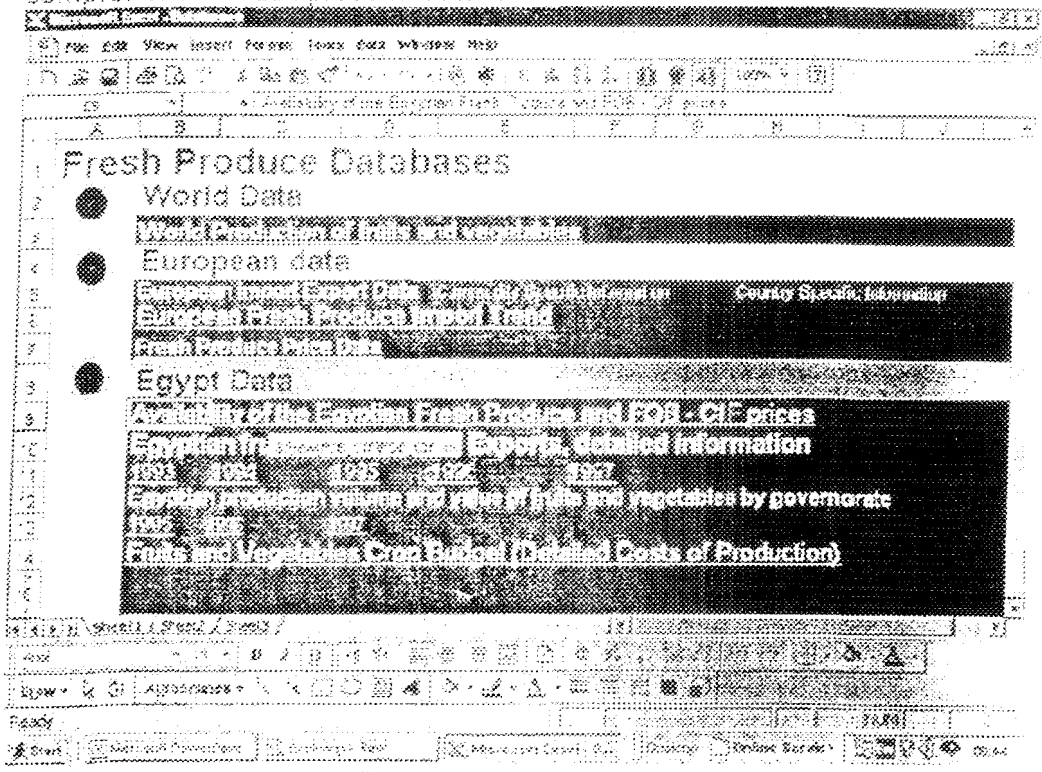



Export Link - August 1999



## Database:

CD-ROM not only limited to the powerful software but also includes comprehensive fresh produce database.

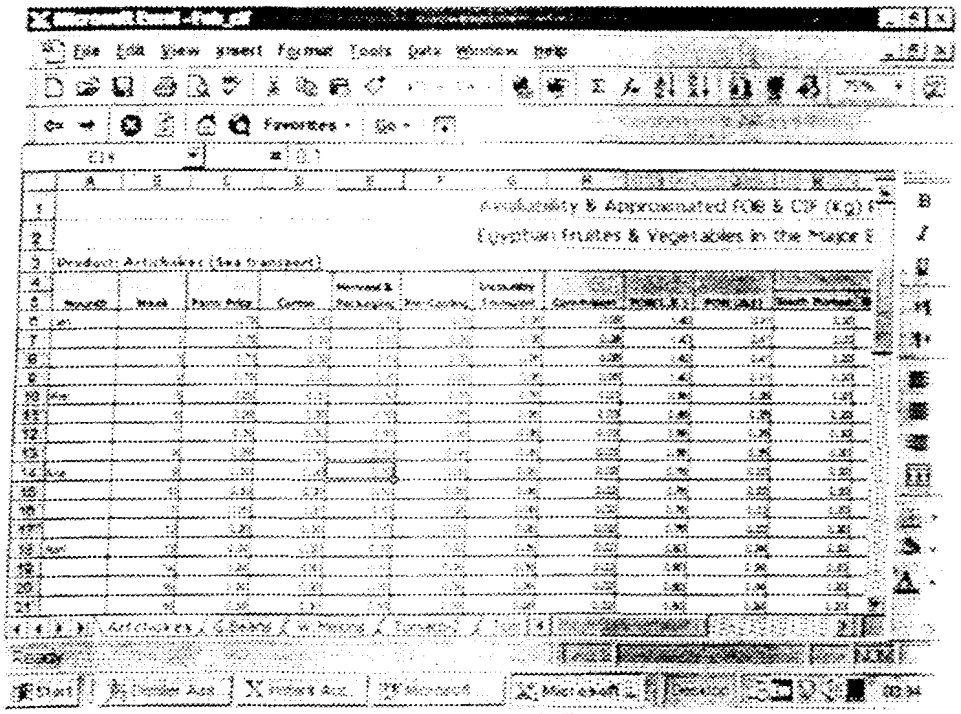



Databases main menu

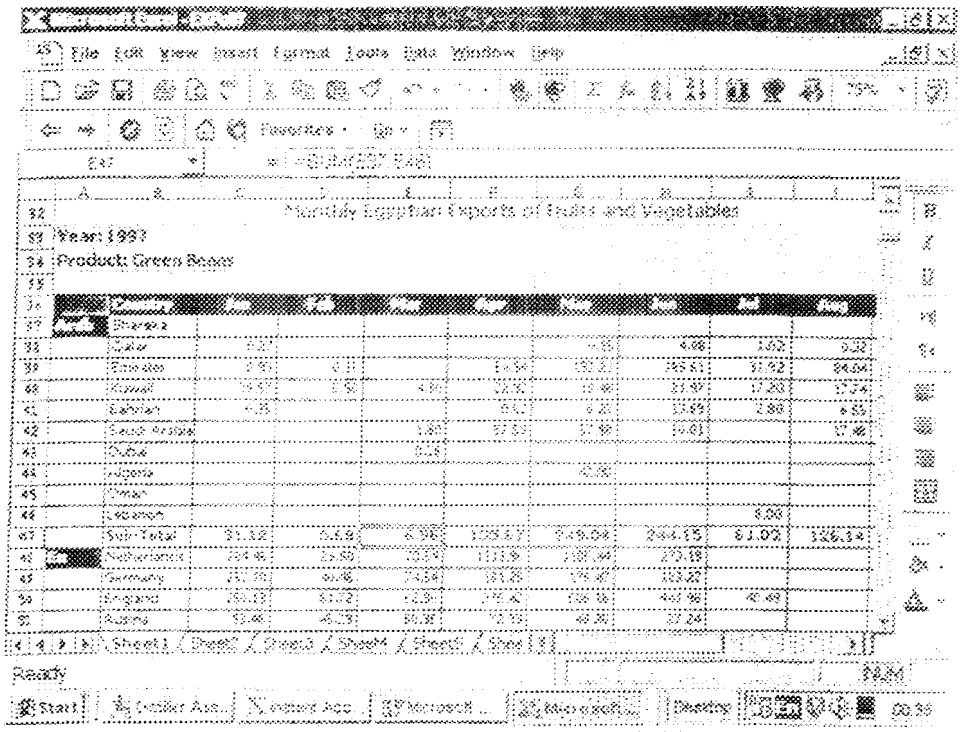
If you go back to the Market Analyzer main menu and click the button marketing. The following menu will appear

Each item is linked to specific part of the database. The database includes:

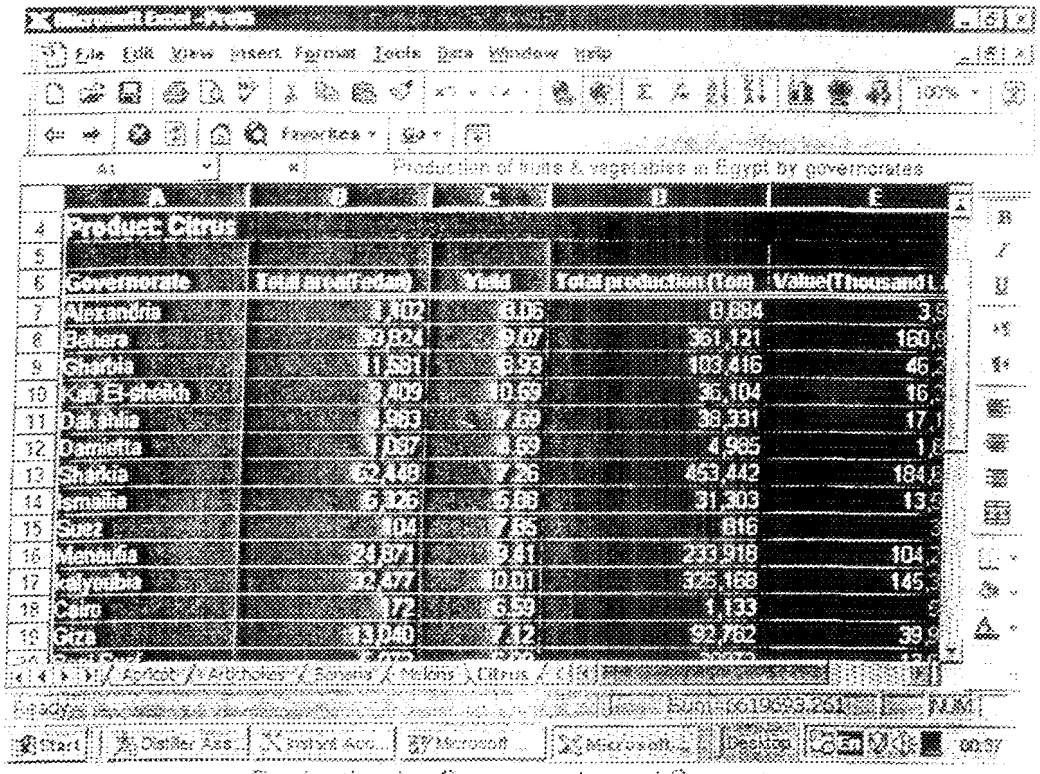
- Availability of the Egyptian fruits and vegetables (seasons), FOB prices and CIF prices to the major export markets (Western Europe, Eastern Europe, CIS, South East Asian Countries, etc.) by week and detailed cost items.
- Egyptian fresh fruits and vegetable exports by month and countries of destination for the last 6 years.
- Detailed Egyptian production statistics of different fruits and vegetables for over 50 items, by governorate, season, and volume for the last five years.
- Detailed crop budgets of fruits and vegetables.
- Monthly European & other markets import and export data by month, countries of destination, country of origin in volume and values.
- World production of fruits and vegetables by product and major producing countries over the last 20 years.
- 5 years detailed wholesale market prices for different fruits and vegetables in the different export markets (EU-15, GCC) as well as daily local market prices.
- including most of the above.
- And much more..



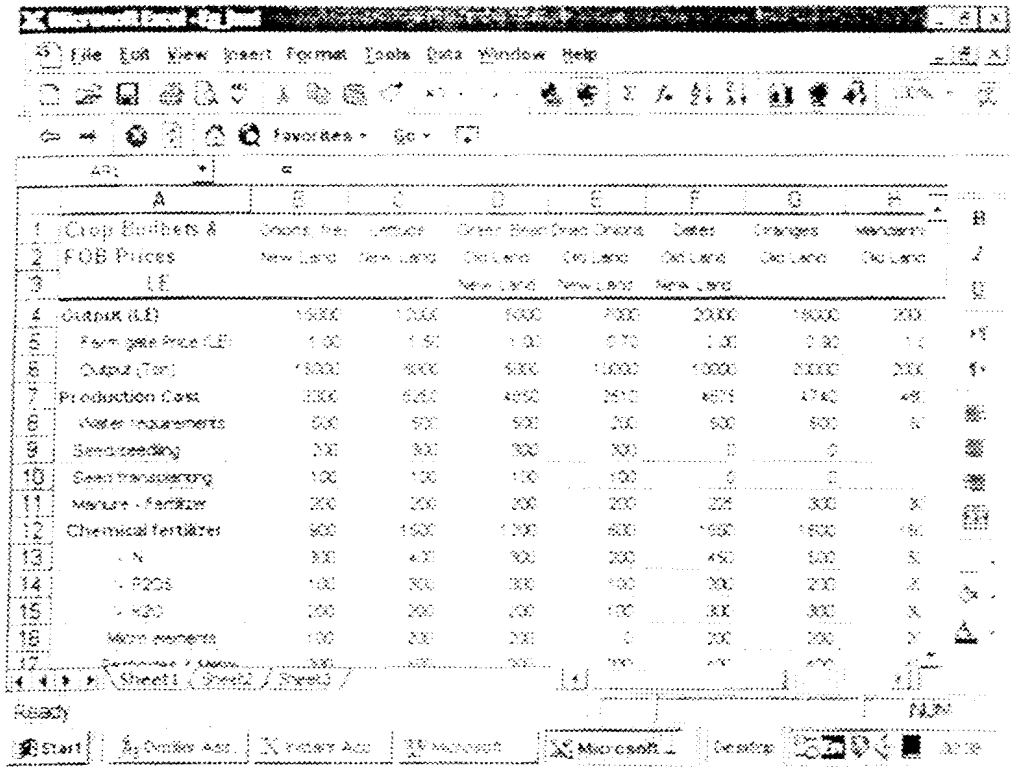
Availability, FOB & CIF prices



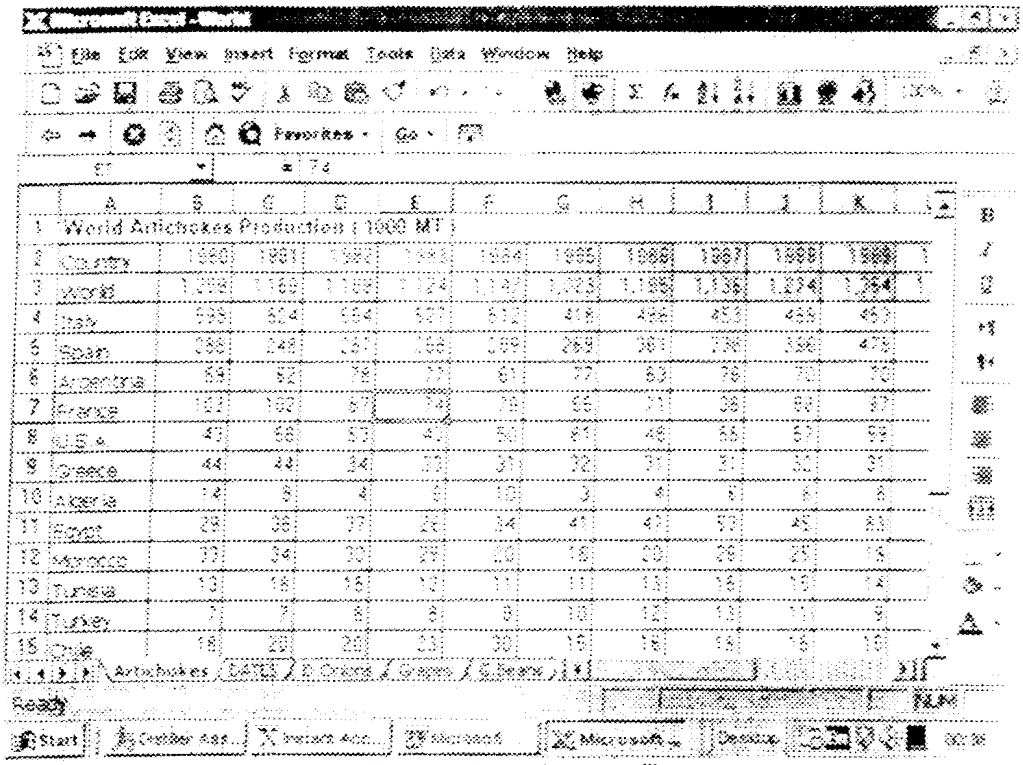

Export by Country of Destination & Month



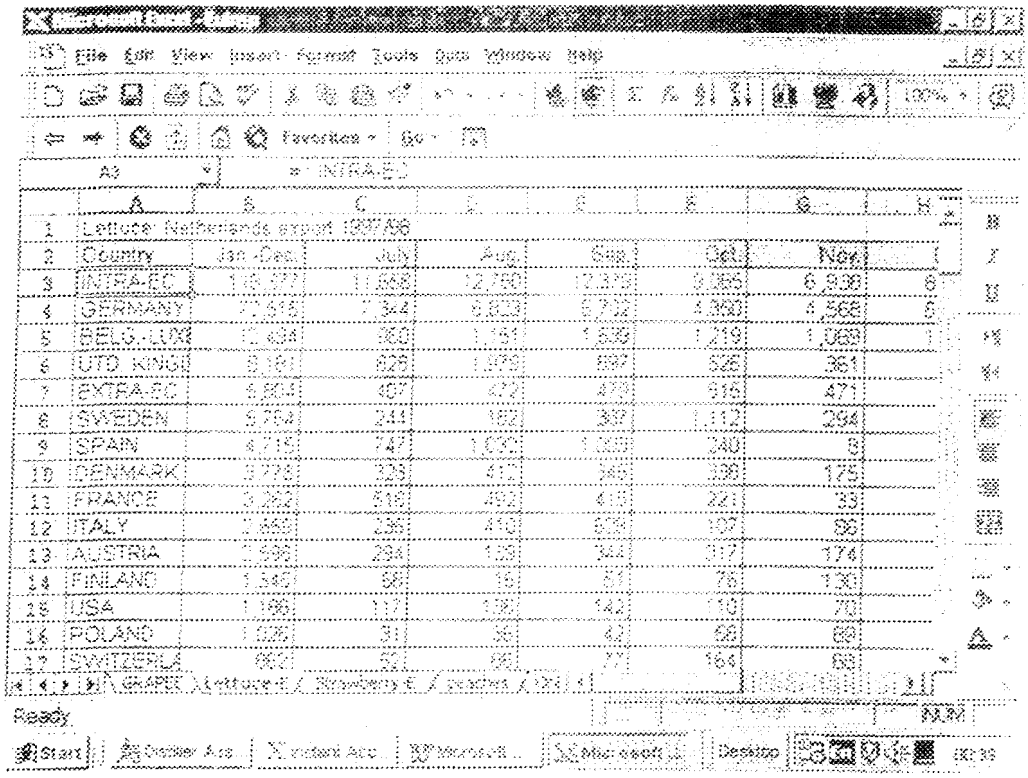

Production by Governorate and Season



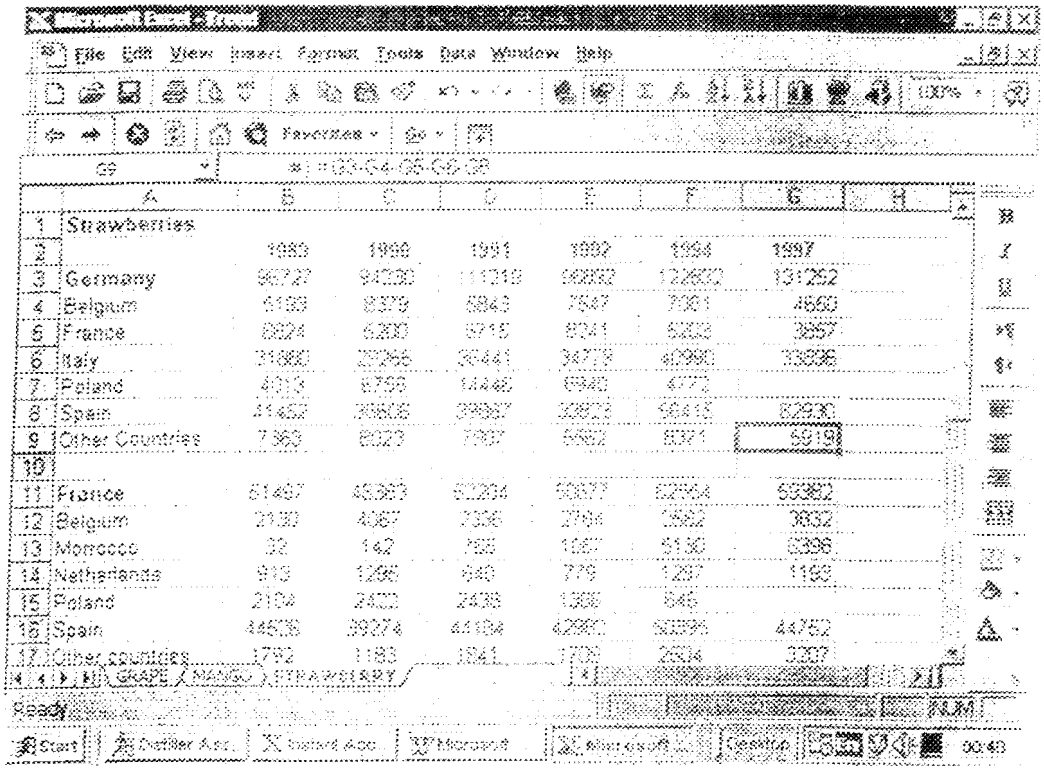
Detailed Crop Budgets



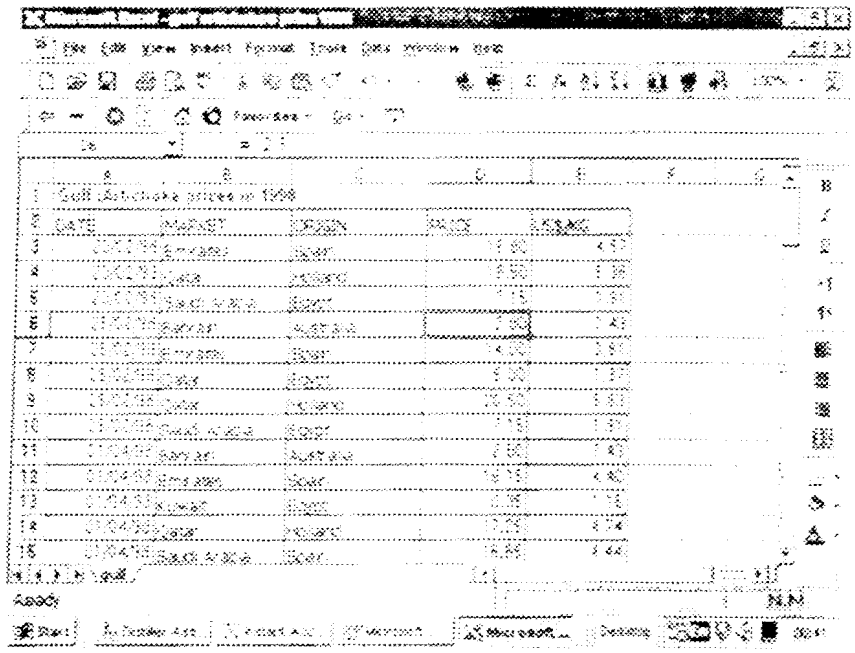
World Production 20 years Trend



Target Markets Import/Export Data

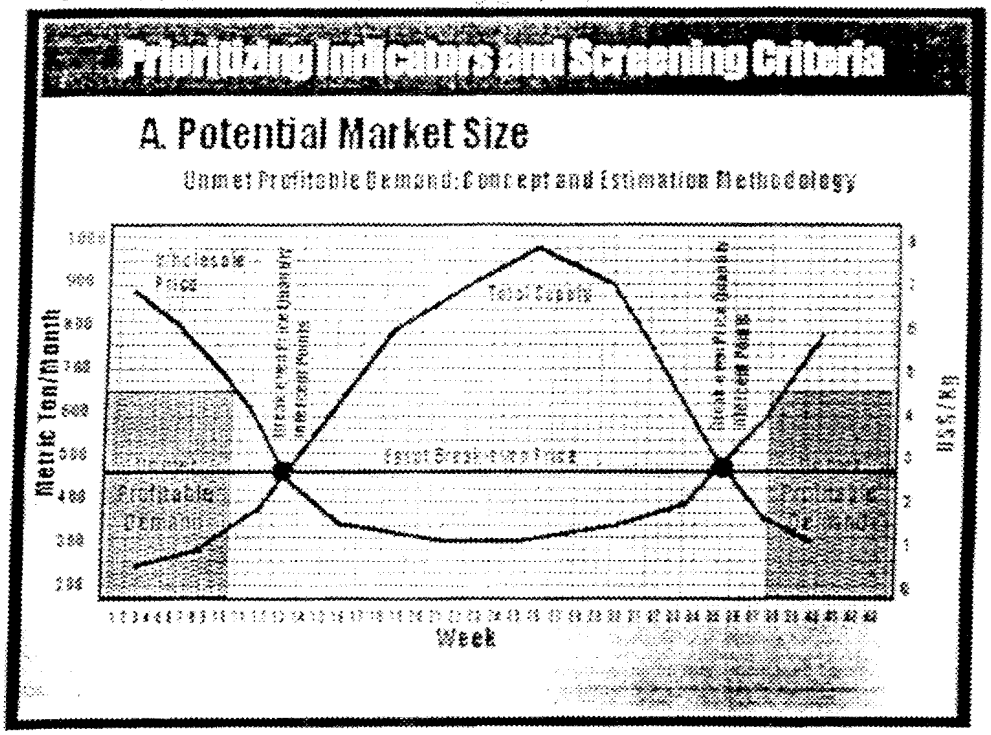


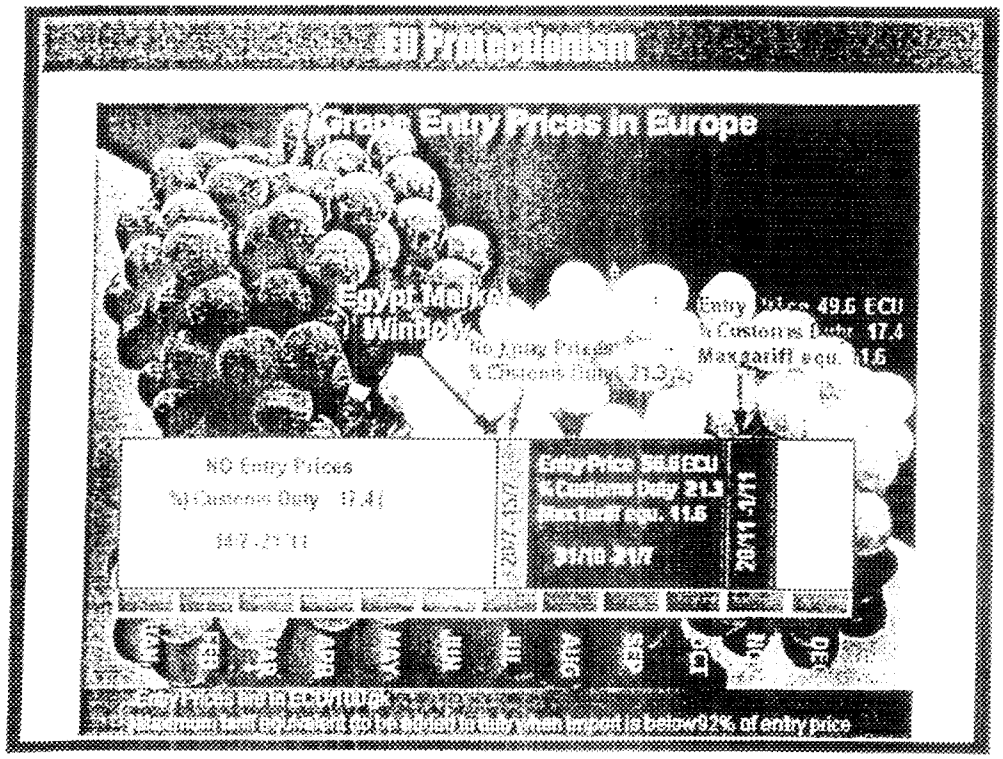
Target markets Import Trends



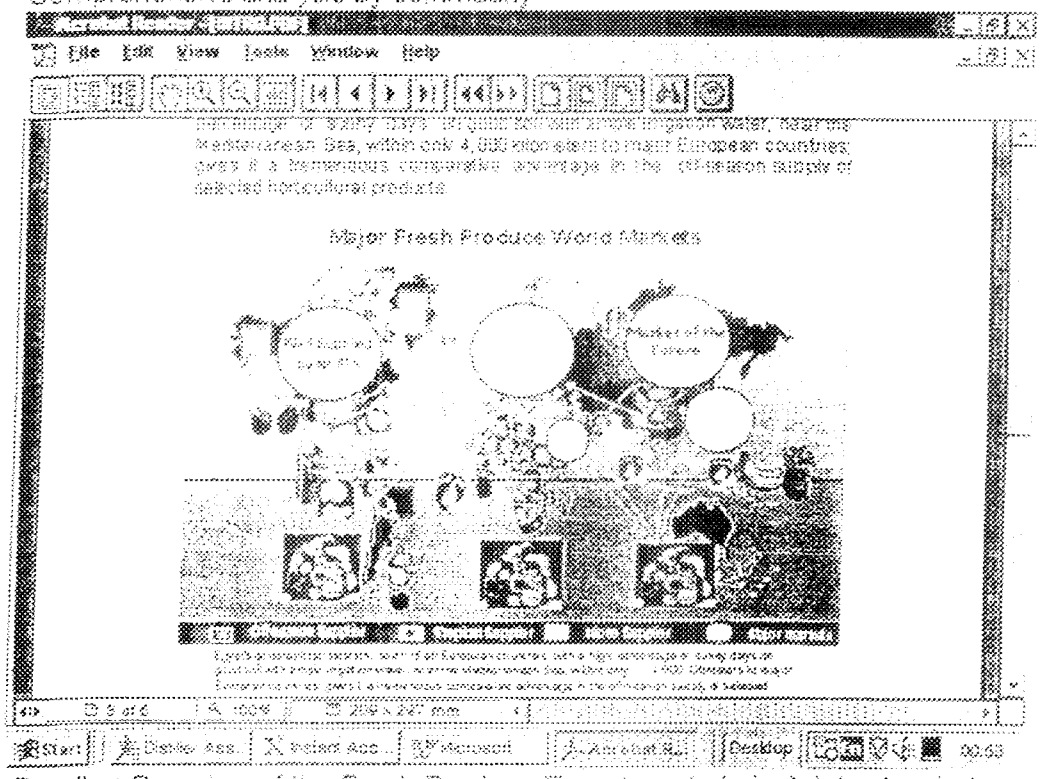
Detailed Weekly Wholesale Market prices including over 40 potential export markets for the last three years

As mentioned before, the CD-ROM includes also
Market Analysis criteria
Crop summary documents
Basics of Markets Analysis
And more (as shown in the following graphs)






Comprehensive analysis by commodity




Detailed Overview of the Fresh Produce Export markets in Adobe Acrobat Format as well as Word Format

# Market Window Analysis
## (Unmet Profitable Demand)

# Results Interpretation

## Germany Import Data: Major Countries of Origin

### 070310 Fresh Onions and Shallots

| | Jan | Feb | Mar | April | May | June | July | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NETHERLAN | 7171 | 4679 | 6010 | 11789 | 17528 | 11306 | 9860 | 10179 | 7016 | 6317 | 5418 | 4312 |
| SPAIN | 3077 | 5694 | 9125 | 4285 | 4817 | 4709 | 6111 | 5986 | 5478 | 6901 | 6688 | 4969 |
| ITALY | 1920 | 2167 | 1720 | 1670 | 1402 | 1876 | 3011 | 1517 | 1857 | 1671 | 624 | 1457 |
| BELGIUM AI | 127 | 39 | 259 | 2670 | 5858 | 3492 | 1111 | 420 | 11 | 89 | 36 | 74 |
| NEW ZEALA | 0 | 0 | 362 | 2363 | 5438 | 156 | 318 | 0 | 8 | 0 | 0 | 0 |
| POLAND | 586 | 1054 | 927 | 413 | 484 | 187 | 372 | 566 | 748 | 305 | 591 | 553 |
| FRANCE | 617 | 658 | 443 | 223 | 336 | 524 | 1400 | 700 | 576 | 563 | 278 | 328 |
| AUSTRIA | 2141 | 1065 | 411 | 495 | 356 | 673 | 109 | 260 | 740 | 847 | 368 | 420 |
| AUSTRALIA | 0 | 0 | 110 | 1087 | 1945 | 1313 | 221 | 0 | 61 | 0 | 0 | 0 |
| UNITED KIN | 91 | 68 | 0 | 38 | 425 | 0 | 151 | 12 | 0 | 29 | 0 | 354 |
| Other | 160 | 155 | 180 | 501 | 739 | 344 | 597 | 4 | 251 | 192 | 2 | 2 |
| Local productio | 20 | 40 | 40 | 40 | 40 | 60 | 80 | 40 | 40 | 20 | 0 | 0 |
| INTRA-EUR | 15144 | 14373 | 18096 | 21136 | 31406 | 22574 | 21753 | 19126 | 15700 | 15417 | 13612 | 11824 |
| EXTRA-EUR | 745 | 1166 | 1404 | 4343 | 8953 | 1399 | 1506 | 558 | 1046 | 528 | 533 | 554 |

### 070519 Lettuce

| | Jan | Feb | Mar | April | May | June | July | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPAIN | 12628 | 11085 | 13965 | 18800 | 14411 | 11056 | 2060 | 973 | 731 | 2323 | 5891 | 7243 |
| ITALY | 9070 | 18565 | 10222 | 7754 | 4909 | 2501 | 689 | 426 | 550 | 536 | 3268 | 6182 |
| NETHERLAN | 4826 | 4480 | 4490 | 4604 | 5269 | 3410 | 4344 | 5872 | 5854 | 4362 | 3710 | 3285 |
| BELGIUM AI | 3481 | 3166 | 2969 | 5223 | 4700 | 2965 | 1653 | 1198 | 1281 | 1311 | 2563 | 3474 |
| FRANCE | 7682 | 3931 | 5179 | 4427 | 4027 | 2519 | 1625 | 642 | 924 | 915 | 2252 | 5550 |
| UNITED KIN | 152 | 145 | 196 | 180 | 70 | 56 | 24 | 0 | 91 | 23 | 125 | 65 |
| AUSTRIA | 4 | 16 | 12 | 40 | 403 | 65 | 17 | 58 | 58 | 50 | 18 | 1 |
| CROATIA | 16 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 111 |
| ISRAEL | 0 | 24 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| TURKEY | 4 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 9 |
| Other | 3 | 5 | 10 | 6 | 4 | 3 | 1 | 3 | 2 | 3 | 0 | 0 |
| Local Producti | 7,051 | 0 | 0 | 0 | 4,535 | 28,082 | 39,925 | 38,624 | 33,019 | 27,813 | 20,082 | 16,979 |
| INTRA-EUR | 37356 | 33696 | 36945 | 41306 | 33799 | 22137 | 9819 | 9144 | 9310 | 9507 | 17647 | 23809 |
| EXTRA-EUR | 22 | 30 | 6 | 30 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 133 |

## 070820 Green Beans

| | Jan. | Feb. | Mar. | April | May | June | July | Augs. | Sept. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPAIN | 350 | 145 | 174 | 1091 | 429 | 1258 | 736 | 90 | 132 | 469 | 590 | 354 |
| NETHERLAN | 394 | 212 | 230 | 199 | 260 | 257 | 309 | 586 | 918 | 1151 | 344 | 753 |
| ITALY | 11 | 35 | 6 | 23 | 115 | 563 | 891 | 347 | 270 | 265 | 194 | 57 |
| EGYPT | 199 | 32 | 43 | 74 | 65 | 38 | 0 | 0 | 0 | 53 | 235 | 178 |
| KENYA | 34 | 40 | 65 | 72 | 51 | 51 | 24 | 21 | 34 | 34 | 43 | 43 |
| FRANCE | 25 | 18 | 28 | 55 | 57 | 64 | 44 | 30 | 14 | 27 | 50 | 42 |
| ETHIOPIA | 126 | 120 | 108 | 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 103 |
| BELGIUM AN | 17 | 17 | 27 | 16 | 24 | 31 | 42 | 33 | 27 | 130 | 15 | 35 |
| TURKEY | 1 | 0 | 7 | 16 | 12 | 26 | 33 | 26 | 37 | 17 | 8 | 7 |
| JORDAN | 26 | 33 | 17 | 4 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 |
| Other | 43 | 51 | 46 | 16 | 9 | 36 | 51 | 27 | 15 | 10 | 8 | 10 |
| Local products | 4,617 | 4,617 | 2,303 | 0 | 0 | 0 | 4,617 | 6,906 | 6,906 | 6,906 | 4,617 | 4,617 |
| INTRA-EUR | 811 | 427 | 485 | 1387 | 887 | 2121 | 2003 | 1076 | 1361 | 2045 | 1135 | 1046 |
| EXTRA-EUR | 415 | 285 | 266 | 293 | 125 | 143 | 107 | 74 | 87 | 112 | 295 | 353 |

## 071220 Dried Onions

| | Jan. | Feb. | Mar. | April | May | June | July | Augs. | Sept. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UNITED STA | 2510 | 3330 | 3110 | 3370 | 3740 | 3840 | 3880 | 5700 | 3420 | 2740 | 1490 | 2550 |
| EGYPT | 110 | 8010 | 2520 | 1390 | 2070 | 4400 | 1890 | 1340 | 1040 | 1460 | 2580 | 1060 |
| FRANCE | 3000 | 1960 | 1300 | 1630 | 1250 | 1364 | 1450 | 910 | 2050 | 1970 | 3560 | 2620 |
| INDIA | 1210 | 770 | 670 | 910 | 1130 | 1860 | 2180 | 2510 | 1170 | 1070 | 930 | 770 |
| HUNGARY | 1130 | 1590 | 1340 | 1280 | 1910 | 980 | 1100 | 810 | 1220 | 1210 | 1240 | 1450 |
| CHINA | 250 | 250 | 370 | 1290 | 150 | 500 | 170 | 1560 | 450 | 730 | 130 | 410 |
| SYRIA | 330 | 720 | 1440 | 40 | 690 | 0 | 700 | 840 | 820 | 380 | 370 | 140 |
| ITALY | 0 | 20 | 30 | 10 | 3650 | 20 | 10 | 10 | 10 | 280 | 0 | 10 |
| NETHERLAN | 540 | 60 | 510 | 530 | 320 | 700 | 400 | 360 | 180 | 350 | 220 | 100 |
| BELGIUM AN | 370 | 210 | 140 | 210 | 30 | 70 | 90 | 160 | 160 | 110 | 100 | 50 |
| Other | 340 | 350 | 910 | 270 | 160 | 410 | 410 | 550 | 560 | 810 | 150 | 370 |
| Local products | 25,061 | 25,061 | 25,061 | 37,591 | 37,591 | 37,591 | 37,591 | 25,061 | 0 | 0 | 0 | 0 |
| INTRA-EUR | 4180 | 2010 | 2190 | 2440 | 5270 | 2940 | 1680 | 1570 | 2570 | 3020 | 2910 | 3920 |
| EXTRA-EUR | 5670 | 14880 | 10150 | 8400 | 9830 | 11130 | 10240 | 13110 | 8470 | 8050 | 6870 | 6850 |

## 080410 Dates, Fresh or Dried

| | Jan. | Feb. | Mar. | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TUNISIA | 204 | 81 | 17 | 56 | 3 | 33 | 2 | 53 | 203 | 212 | 499 | 470 |
| FRANCE | 196 | 40 | 21 | 3 | 12 | 0 | 0 | 60 | 218 | 127 | 430 | 202 |
| IRAN | 94 | 246 | 23 | 48 | 43 | 7 | 7 | 32 | 38 | 36 | 52 | 49 |
| PAKISTAN | 74 | 70 | 40 | 47 | 64 | 30 | 70 | 17 | 24 | 27 | 11 | 27 |
| UNITED STA | 8 | 13 | 12 | 18 | 5 | 10 | 7 | 5 | 17 | 36 | 21 | 3 |
| NETHERLAN | 23 | 14 | 9 | 11 | 6 | 2 | 6 | 4 | 6 | 14 | 33 | 32 |
| ISRAEL | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 13 | 50 | 9 | 13 |
| ALGERIA | 23 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TURKEY | 6 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 17 | 4 | 2 | 0 |
| EGYPT | 17 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 1 | 0 | 1 | 10 |
| Other | 23 | 6 | 1 | 0 | 2 | 1 | 0 | 0 | 0 | 5 | 25 | 33 |
| Local Producti | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| INTRA-EUR | 236 | 55 | 30 | 14 | 19 | 3 | 6 | 64 | 224 | 146 | 467 | 283 |
| EXTRA-EUR | 432 | 436 | 94 | 170 | 127 | 80 | 86 | 107 | 313 | 374 | 590 | 575 |

## 080510 Oranges

| | Jan. | Feb. | Mar. | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPAIN | 61923 | 51419 | 48217 | 37727 | 25754 | 12639 | 4180 | 1657 | 1502 | 2086 | 20572 | 44963 |
| ITALY | 11037 | 11532 | 8130 | 6267 | 3477 | 1271 | 908 | 266 | 523 | 687 | 3023 | 5727 |
| MOROCCO | 6487 | 13721 | 6053 | 7062 | 4385 | 2222 | 279 | 0 | 0 | 0 | 0 | 3022 |
| NETHERLAN | 1894 | 2361 | 1277 | 1054 | 1024 | 978 | 1092 | 2851 | 3697 | 5058 | 8905 | 2531 |
| SOUTH AFRI | 0 | 0 | 0 | 0 | 0 | 0 | 1811 | 5480 | 8280 | 10911 | 34 | 484 |
| GREECE | 5326 | 8080 | 2585 | 4662 | 1904 | 1333 | 339 | 0 | 0 | 18 | 1178 | 5161 |
| BELGIUM AP | 83 | 119 | 169 | 229 | 1496 | 107 | 1282 | 708 | 1946 | 90 | 2680 | 2164 |
| FRANCE | 1134 | 521 | 672 | 1317 | 1735 | 663 | 786 | 345 | 240 | 130 | 381 | 277 |
| CYPRUS | 45 | 108 | 770 | 659 | 264 | 1349 | 0 | 0 | 0 | 0 | 0 | 0 |
| AUSTRIA | 0 | 497 | 402 | 813 | 47 | 50 | 0 | 0 | 0 | 0 | 2 | 0 |
| Other | 366 | 559 | 163 | 178 | 31 | 40 | 14 | 33 | 183 | 842 | 56 | 732 |
| Local Producti | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| INTRA-EUR | 81473 | 73187 | 56407 | 52310 | 35420 | 17117 | 6487 | 5766 | 7910 | 8060 | 29951 | 59486 |
| EXTRA-EUR | 5894 | 14361 | 6993 | 7896 | 4567 | 3595 | 2101 | 5529 | 6463 | 11752 | 60 | 3721 |

## 080520 Mandarines, Tangarines & Climintin

| | Jan. | Feb. | Mar. | April | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPAIN | 30962 | 25709 | 21609 | 18864 | 12877 | 6320 | 3090 | 829 | 751 | 1043 | 16336 | 22492 |
| ITALY | 5549 | 5766 | 4065 | 3134 | 1739 | 636 | 404 | 103 | 262 | 344 | 1012 | 2864 |
| MOROCCO | 2719 | 6861 | 3032 | 3581 | 2193 | 1111 | 138 | 0 | 0 | 0 | 0 | 1511 |
| NETHERLAN | 947 | 1491 | 639 | 697 | 512 | 489 | 546 | 1426 | 1849 | 2518 | 1533 | 1206 |
| SOUTH AFRI | 0 | 0 | 0 | 0 | 0 | 0 | 306 | 2745 | 3140 | 5456 | 17 | 247 |
| GREECE | 2664 | 3046 | 1293 | 2281 | 952 | 697 | 170 | 0 | 0 | 9 | 589 | 1594 |
| BELGIUM AN | 42 | 60 | 85 | 115 | 783 | 54 | 641 | 354 | 973 | 50 | 1340 | 1095 |
| FRANCE | 567 | 261 | 312 | 659 | 868 | 330 | 393 | 173 | 121 | 67 | 151 | 139 |
| CYPRUS | 23 | 54 | 385 | 330 | 142 | 675 | 0 | 0 | 0 | 0 | 0 | 0 |
| AUSTRIA | 0 | 249 | 281 | 407 | 24 | 25 | 0 | 0 | 0 | 0 | 1 | 0 |
| Other | 183 | 280 | 82 | 88 | 16 | 20 | 7 | 20 | 82 | 421 | 28 | 356 |
| Local Products | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| INTRA-EUR | 40737 | 36594 | 28204 | 26155 | 17719 | 8569 | 4244 | 2882 | 2955 | 4030 | 14975 | 23743 |
| EXTRA-EUR | 2917 | 7151 | 3497 | 5548 | 2344 | 1768 | 1051 | 2765 | 3232 | 5876 | 39 | 1851 |

## 080610 Table Grapes

| | Jan. | Feb. | Mar. | April | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ITALY | 6240 | 4091 | 630 | 103 | 118 | 100 | 5893 | 20415 | 46301 | 56281 | 46443 | 12911 |
| GREECE | 264 | 19 | 1126 | 0 | 0 | 0 | 116 | 6046 | 14312 | 6249 | 4539 | 375 |
| SPAIN | 2081 | 3931 | 847 | 427 | 137 | 138 | 1365 | 3716 | 4554 | 3079 | 3798 | 2845 |
| NETHERLAN | 1245 | 3243 | 1850 | 3526 | 4670 | 3940 | 2312 | 1700 | 2028 | 1475 | 742 | 581 |
| BELGIUM AN | 1513 | 2232 | 1323 | 11693 | 3275 | 462 | 1746 | 93 | 165 | 280 | 429 | 344 |
| SOUTH AFRI | 237 | 413 | 2353 | 4701 | 9721 | 3157 | 993 | 0 | 0 | 0 | 0 | 118 |
| TURKEY | 0 | 0 | 0 | 0 | 38 | 5 | 153 | 2844 | 5028 | 5120 | 2348 | 272 |
| FRANCE | 550 | 66 | 40 | 39 | 21 | 11 | 111 | 320 | 832 | 1011 | 1485 | 841 |
| AUSTRIA | 9 | 6 | 7 | 1 | 0 | 0 | 11 | 52 | 434 | 306 | 271 | 527 |
| UNITED KIN | 0 | 0 | 1 | 254 | 1 | 17 | 32 | 164 | 147 | 153 | 67 | 48 |
| Other | 69 | 15 | 204 | 218 | 471 | 200 | 658 | 276 | 37 | 37 | 16 | 38 |
| Local products | 0 | 0 | 0 | 0 | 0 | 0 | 32,813 | 74,219 | 98,436 | 69,531 | 49,719 | 0 |
| INTRA-EUR | 11922 | 12568 | 5708 | 16042 | 8222 | 3549 | 11547 | 34611 | 68791 | 62753 | 57464 | 18452 |
| EXTRA-EUR | 306 | 429 | 2857 | 4918 | 10230 | 2361 | 1774 | 3120 | 5947 | 5156 | 2363 | 413 |

## 080719 Galia and Other Melons

| | Jan | Feb | Mar | April | May | June | July | Aug | Sept | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPAIN | 54 | 17 | 42 | 354 | 2221 | 8218 | 13352 | 13846 | 14497 | 4960 | 990 | 273 |
| NETHERLAN | 1747 | 1371 | 1272 | 1994 | 1885 | 976 | 1127 | 814 | 1285 | 1316 | 1542 | 1290 |
| FRANCE | 1007 | 26 | 33 | 115 | 250 | 416 | 604 | 681 | 697 | 371 | 202 | 579 |
| TURKEY | 0 | 0 | 1 | 0 | 1 | 44 | 316 | 1064 | 1405 | 577 | 18 | 0 |
| ITALY | 4 | 17 | 75 | 65 | 67 | 208 | 482 | 310 | 327 | 122 | 69 | 87 |
| BELGIUM AN | 38 | 26 | 58 | 319 | 230 | 182 | 66 | 18 | 11 | 4 | 11 | 24 |
| COSTA RICA | 1 | 69 | 91 | 169 | 259 | 2 | 0 | 0 | 0 | 0 | 0 | 4 |
| ISRAEL | 0 | 2 | 41 | 16 | 0 | 2 | 0 | 1 | 69 | 0 | 72 | 0 |
| SOUTH AFRI | 17 | 48 | 61 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| IRAN | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 4 | 45 | 72 | 40 | 17 |
| Other | 52 | 32 | 28 | 12 | 12 | 17 | 40 | 45 | 9 | 34 | 1 | 44 |
| Local Producti | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| INTRA EU | 2851 | 1460 | 1491 | 2848 | 4679 | 10014 | 15687 | 15099 | 10830 | 6837 | 2834 | 2276 |
| EXTRA EU | 70 | 148 | 211 | 220 | 285 | 51 | 325 | 1090 | 1524 | 649 | 131 | 58 |

## 080930 Peaches and Nectarins

| | Jan | Feb | Mar | April | May | June | July | Aug | Sept | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ITALY | 878 | 3616 | 118 | 21 | 111 | 8575 | 29324 | 41401 | 48114 | 19044 | 17124 | 391 |
| SPAIN | 81 | 112 | 0 | 183 | 5780 | 12123 | 12185 | 6109 | 7081 | 3882 | 593 | 204 |
| FRANCE | 1620 | 596 | 104 | 67 | 277 | 1858 | 5072 | 7562 | 9174 | 3585 | 1580 | 304 |
| NETHERLAN | 214 | 303 | 133 | 616 | 310 | 383 | 639 | 540 | 375 | 212 | 55 | 54 |
| GREECE | 0 | 0 | 57 | 0 | 0 | 363 | 606 | 1213 | 534 | 14 | 0 | 0 |
| BELGIUM AN | 8 | 106 | 169 | 437 | 15 | 13 | 25 | 59 | 46 | 56 | 25 | 25 |
| AUSTRIA | 0 | 0 | 19 | 0 | 72 | 0 | 1 | 262 | 0 | 320 | 0 | 62 |
| TURKEY | 0 | 0 | 0 | 0 | 0 | 1 | 16 | 75 | 506 | 89 | 0 | 0 |
| SOUTH AFRI | 9 | 41 | 22 | 47 | 0 | 0 | 0 | 0 | 0 | 6 | 24 | 2 |
| UNITED KING | 0 | 0 | 0 | 0 | 0 | 50 | 66 | 0 | 21 | 0 | 0 | 0 |
| Other | 0 | 1 | 0 | 3 | 0 | 0 | 11 | 7 | 0 | 13 | 4 | 4 |
| Local productio | 0 | 0 | 0 | 0 | 0 | 517 | 1,552 | 2,069 | 1,552 | 0 | 0 | 0 |
| INTRA-EUR | 2801 | 4731 | 900 | 1324 | 6565 | 23265 | 48509 | 57148 | 65607 | 27022 | 19390 | 1000 |
| EXTRA-EUR | 9 | 42 | 22 | 50 | 0 | 1 | 37 | 75 | 506 | 104 | 28 | 0 |

081010 Strawberries

| | Jan. | Feb. | Mar. | April | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPAIN | 38 | 1607 | 6773 | 20323 | 23920 | 18650 | 7210 | 3589 | 813 | 31 | 8 | 32 |
| ITALY | 12 | 170 | 326 | 5481 | 14169 | 8459 | 3825 | 498 | 340 | 360 | 153 | 72 |
| POLAND | 0 | 0 | 0 | 0 | 22 | 684 | 4170 | 805 | 1137 | 364 | 0 | 0 |
| BELGIUM AN | 80 | 107 | 222 | 46 | 191 | 621 | 874 | 742 | 1074 | 394 | 192 | 141 |
| FRANCE | 22 | 134 | 350 | 679 | 1086 | 995 | 602 | 197 | 49 | 10 | 52 | 9 |
| NETHERLAN | 151 | 101 | 227 | 372 | 279 | 186 | 624 | 729 | 648 | 146 | 209 | 113 |
| UNITED KIN | 1 | 0 | 1 | 331 | 311 | 293 | 1 | 0 | 0 | 0 | 0 | 0 |
| UNITED STA | 51 | 38 | 0 | 0 | 0 | 0 | 96 | 65 | 78 | 94 | 54 | 3 |
| AUSTRIA | 0 | 1 | 2 | 69 | 13 | 24 | 78 | 0 | 197 | 26 | 0 | 10 |
| MOROCCO | 15 | 78 | 144 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Other | 36 | 12 | 3 | 0 | 17 | 3 | 10 | 5 | 0 | 0 | 9 | 81 |
| Local productic | 0 | 0 | 3,797 | 11,391 | 15,188 | 15,188 | 11,391 | 11,391 | 7,594 | 0 | 0 | 0 |
| INTRA-EUR | 304 | 2120 | 7901 | 27301 | 39986 | 28828 | 13214 | 5666 | 3101 | 967 | 614 | 397 |
| EXTRA-EUR | 92 | 128 | 147 | 0 | 22 | 687 | 4276 | 875 | 1215 | 358 | 63 | 87 |

Seasonal Competition Analysis

**070310 Fresh Onions and Shallots**

| | Jan | Feb | Mar | April | May | June | July | Aug | Sept | Oct | Nov | Dec | Supply Period | Seasonal Competition Index | Overlap Seasonal Index |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NETHERLANDS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| SPAIN | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| ITALY | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| BELGIUM AND LUX | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| NEW ZEALAND | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 6 | 5 | 3 |
| POLAND | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| FRANCE | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| AUSTRIA | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| AUSTRALIA | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 6 | 6 | 3 |
| UNITED KINGDOM | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 8 | 4 | 3 |
| Germany | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 7 | 5 | 3 |
| Egypt | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |

Overlap Analysis

| | Jan | Feb | Mar | April | May | June | July | Aug | Sept | Oct | Nov | Dec | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NETHERLANDS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| SPAIN | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| ITALY | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| BELGIUM AND LUX | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| NEW ZEALAND | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 9 |
| POLAND | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| FRANCE | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| AUSTRIA | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| AUSTRALIA | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 9 |
| UNITED KINGDOM | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 8 |

Seasonal Competition Analysis

**070519 Lettuce**

| | Jan | Feb | Mar | April | May | June | July | Aug | Sept | Oct | Nov | Dec | Supply Period | Seasonal Competition Index | Overlap Seasonal Index |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPAIN | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| ITALY | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| NETHERLANDS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| BELGIUM AND LUX | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| FRANCE | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| UNITED KINGDOM | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 11 | 1 | 0 |
| AUSTRIA | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| CANADA | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 9 | 3 |
| ISRAEL | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 5 | 8 | 3 |
| TURKEY | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 5 | 7 | 3 |
| Germany | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 9 | 3 | 3 |
| Egypt | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |

Overlap Analysis

| | Jan | Feb | Mar | April | May | June | July | Aug | Sept | Oct | Nov | Dec | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPAIN | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| ITALY | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| NETHERLANDS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| BELGIUM AND LUX | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| FRANCE | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| UNITED KINGDOM | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 11 |
| AUSTRIA | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| CROATIA | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 |
| ISRAEL | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 5 |
| TURKEY | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 9 |

Seasonal Competition Analysis

070829 Green Beans

| | Jan. | Feb. | Mar. | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Supply Period | Seasonal Competition Index | Calendar Seasonal Index |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPAIN | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| NETHERLANDS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| ITALY | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| EGYPT | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 9 | 3 | 0 |
| KENYA | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| FRANCE | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| ETHIOPIA | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 7 | 2 |
| BELGIUM AND LUX | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| TURKEY | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 11 | 1 | 0 |
| JORDAN | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 8 | 4 | 2 |
| Germany | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 9 | 3 | |
| Egypt | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | | |
| Overlap Analysis | | | | | | | | | | | | | | | |
| SPAIN | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | | |
| NETHERLANDS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | | |
| ITALY | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | | |
| EGYPT | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | | |
| KENYA | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | | |
| FRANCE | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | | |
| ETHIOPIA | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 10 | | |
| BELGIUM AND LUX | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | | |
| TURKEY | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | | |
| JORDAN | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 10 | | |

Seasonal Competition Analysis

071220 Dried Onions

| | Jan. | Feb. | Mar. | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Supply Period | Seasonal Competition Index | Calendar Seasonal Index |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UNITED STATES | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| EGYPT | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| FRANCE | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| INDIA | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| HUNGARY | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| CHINA | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| SYRIA | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 11 | 1 | 1 |
| ITALY | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 10 | 2 | 1 |
| NETHERLANDS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| BELGIUM AND LUX | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| Germany | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 7 | 5 | |
| Egypt | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | | |
| Overlap Analysis | | | | | | | | | | | | | | | |
| UNITED STATES | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | | |
| EGYPT | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | | |
| FRANCE | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | | |
| INDIA | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | | |
| HUNGARY | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | | |
| CHINA | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | | |
| SYRIA | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 11 | | |
| ITALY | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 11 | | |
| NETHERLANDS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | | |
| BELGIUM AND LUX | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | | |

Seasonal Competition Analysis

080410 Dates, Fresh or Dried

| | Jan | Feb | Mar | April | May | June | July | Aug | Sep | Oct | Nov | Dec | Supply Period | Seasonal Competition Index | Overlap Seasonal Index |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TUNISIA | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| FRANCE | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 10 | 2 | 2 |
| IRAN | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| PAKISTAN | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| UNITED STATES | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| NETHERLANDS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| ISRAEL | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 5 | 7 | 7 |
| ALGERIA | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 10 | 10 |
| TURKEY | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 6 | 6 | 6 |
| EGYPT | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 6 | 8 | 8 |
| Germany | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | |
| Spain | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | | |

Overlap Analysis

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TUNISIA | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | |
| FRANCE | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 10 | |
| IRAN | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | |
| PAKISTAN | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | |
| UNITED STATES | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | |
| NETHERLANDS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | |
| ISRAEL | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 5 | |
| ALGERIA | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | |
| TURKEY | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 6 | |
| EGYPT | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 6 | |

Seasonal Competition Analysis

080510 Oranges

| | Jan | Feb | Mar | April | May | June | July | Aug | Sep | Oct | Nov | Dec | Supply Period | Seasonal Competition Index | Overlap Seasonal Index |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPAIN | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| ITALY | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| MOROCCO | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 8 | 4 | 4 |
| NETHERLANDS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| SOUTH AFRICA | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 8 | 4 | 4 |
| GREECE | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 8 | 4 | 4 |
| BELGIUM AND LUX | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 8 | 4 | 4 |
| FRANCE | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 8 | 4 | 4 |
| CYPRUS | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 9 | 3 | 3 |
| AUSTRIA | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 8 | 4 | 4 |
| Germany | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | |
| Spain | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 6 | | |

Overlap Analysis

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPAIN | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 6 | |
| ITALY | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 6 | |
| MOROCCO | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 8 | |
| NETHERLANDS | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 6 | |
| SOUTH AFRICA | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 4 | |
| GREECE | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 6 | |
| BELGIUM AND LUX | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 6 | |
| FRANCE | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 6 | |
| CYPRUS | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 6 | |
| AUSTRIA | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 6 | |

Seasonal Competition Analysis

**080520 Mandarines, Tangerines & Clementin**

| | Jan | Feb | Mar | April | May | June | July | Aug | Sept | Oct | Nov | Dec | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPAIN | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 10 | 0 | 5 |
| ITALY | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 6 |
| MOROCCO | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 8 | 4 | 4 |
| NETHERLANDS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 6 |
| SOUTH AFRICA | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 6 | 6 | 3 |
| GREECE | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 10 | 2 | 5 |
| BELGIUM AND LUX | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 6 |
| FRANCE | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 6 |
| CYPRUS | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 6 | 3 |
| AUSTRIA | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 6 | 6 | 3 |
| Germany | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | |
| Egypt | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 6 | | |

Overlap Analysis

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPAIN | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 6 |
| ITALY | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 6 |
| MOROCCO | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 8 |
| NETHERLANDS | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 6 |
| SOUTH AFRICA | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 4 |
| GREECE | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 6 |
| BELGIUM AND LUX | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 6 |
| FRANCE | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 6 |
| CYPRUS | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 8 |
| AUSTRIA | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 8 |

Seasonal Competition Analysis

**080610 Table Grapes**

| | Jan | Feb | Mar | April | May | June | July | Aug | Sept | Oct | Nov | Dec | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ITALY | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 6 |
| GREECE | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 8 | 8 | 4 |
| SPAIN | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 6 |
| NETHERLANDS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 6 |
| BELGIUM AND LUX | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 6 |
| SOUTH AFRICA | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 8 | 8 | 4 |
| TURKEY | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 8 | 8 | 4 |
| FRANCE | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 6 |
| AUSTRIA | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 10 | 2 | 5 |
| UNITED KINGDOM | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 10 | 2 | 5 |
| Germany | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 6 | 7 | |
| Egypt | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 7 | | |

Overlap Analysis

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ITALY | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 7 |
| GREECE | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 6 |
| SPAIN | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 7 |
| NETHERLANDS | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 7 |
| BELGIUM AND LUX | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 7 |
| SOUTH AFRICA | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 7 |
| TURKEY | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 11 |
| FRANCE | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 7 |
| AUSTRIA | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 5 |
| UNITED KINGDOM | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 9 |

Seasonal Competition Analysis

0R0719 Galia and Other Melons

| | Jan | Feb | Mar | Apr | May | June | July | Aug | Sept | Oct | Nov | Dec | Supply Period | Seasonal Competition Index | Level-up Seasonal Index |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPAIN | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| NETHERLANDS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| FRANCE | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| TURKEY | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 8 | 4 | 4 |
| ITALY | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| BELGIUM AND LUX | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| COSTA RICA | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 7 | 5 | 5 |
| ISRAEL | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 7 | 6 | 6 |
| SOUTH AFRICA | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 6 | 7 | 7 |
| IRAN | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 5 | 5 |
| Germany | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | |
| Grand | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | | |
| Overlap Analysis | | | | | | | | | | | | | | | |
| SPAIN | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | | |
| NETHERLANDS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 12 | | |
| FRANCE | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | | |
| TURKEY | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 8 | | |
| ITALY | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | | |
| BELGIUM AND LUX | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | | |
| COSTA RICA | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 7 | | |
| ISRAEL | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 7 | | |
| SOUTH AFRICA | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 6 | | |
| IRAN | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | | |

Seasonal Competition Analysis

0R0930 Peaches and Nectarines

| | Jan | Feb | Mar | Apr | May | June | July | Aug | Sept | Oct | Nov | Dec | Supply Period | Seasonal Competition Index | Level-up Seasonal Index |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ITALY | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| SPAIN | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 11 | 1 | 1 |
| FRANCE | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| NETHERLANDS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| GREECE | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 6 | 6 | 6 |
| BELGIUM AND LUX | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| AUSTRIA | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 6 | 6 | 6 |
| TURKEY | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 5 | 7 | 7 |
| SOUTH AFRICA | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 9 | 9 |
| UNITED KINGDOM | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 5 | 7 | 7 |
| Germany | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 3 | 9 | 9 |
| Grand | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 4 | | |
| Overlap Analysis | | | | | | | | | | | | | | | |
| ITALY | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 5 | | |
| SPAIN | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 5 | | |
| FRANCE | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 4 | | |
| NETHERLANDS | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 10 | | |
| GREECE | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 4 | | |
| BELGIUM AND LUX | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 5 | | |
| AUSTRIA | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 11 | | |
| TURKEY | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 3 | | |
| SOUTH AFRICA | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | | |
| UNITED KINGDOM | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 5 | | |

**Seasonal Competition Analysis**

**081010 Strawberries**

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Supply Period | Seasonal Competition Index | Overlap Seasonal Index |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | 12 | | |
| SPAIN | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| ITALY | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| POLAND | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 6 | 6 | 4 |
| BELGIUM AND LUX | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| FRANCE | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| NETHERLANDS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 0 | 0 |
| UNITED KINGDOM | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 6 | 6 | 4 |
| UNITED STATES | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 8 | 4 | 1 |
| AUSTRIA | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 9 | 3 | 2 |
| MOROCCO | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 8 | 3 |
| Germany | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 6 | 6 | |
| Egypt | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | | |
| Overlap Analysis | | | | | | | | | | | | | | | |
| SPAIN | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | | |
| ITALY | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | | |
| POLAND | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 8 | | |
| BELGIUM AND LUX | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | | |
| FRANCE | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | | |
| NETHERLANDS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | | |
| UNITED KINGDOM | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 8 | | |
| UNITED STATES | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 11 | | |
| AUSTRIA | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 10 | | |
| MOROCCO | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 9 | | |

## Seasonal Competition Analysis

**Germany**

| Product | Competitors | Egypt Seasonal Position Comparison: Seasonal Competition Index* | Egypt Seasonal Position Comparison: Overlap Seasonal Index** | Deliver Cost Comparison: Wage Rate | Deliver Cost Comparison: Transport Cost | Deliver Cost Comparison: Landed Cost | Advantages/Dis advantages against Egypt: + advantage - Disadvantage |
|---|---|---|---|---|---|---|---|
| Onions, fresh | | | | | | | |
| | NETHERLANDS | 0 | 0 | 10 | 5 | 15 | -15 |
| | SPAIN | 0 | 0 | 4 | 4 | 8 | -8 |
| | ITALY | 0 | 0 | 6 | 3 | 8 | -8 |
| | BELGIUM AND LI | 0 | 0 | 9 | 2 | 11 | -11 |
| | NEW ZEALAND | 6 | 3 | 3 | 9 | 12 | -12 |
| | POLAND | 0 | 0 | 2 | 8 | 10 | -10 |
| | FRANCE | 0 | 0 | 7 | 7 | 14 | -14 |
| | AUSTRIA | 0 | 0 | 6 | 6 | 12 | -12 |
| | AUSTRALIA | 6 | 3 | 1 | 10 | 11 | -11 |
| | UNITED KINGDO | 4 | 3 | 8 | 1 | 9 | -9 |
| Lettuce | | | | | | | |
| | SPAIN | 0 | 0 | | | | 0 |
| | ITALY | 0 | 0 | | | | 0 |
| | NETHERLANDS | 0 | 0 | | | | 0 |
| | BELGIUM AND LI | 0 | 0 | | | | 0 |
| | FRANCE | 0 | 0 | | | | 0 |
| | UNITED KINGDO | 1 | 0 | | | | 0 |
| | AUSTRIA | 0 | 0 | | | | 0 |
| | CROATIA | 9 | 3 | | | | 0 |
| | ISRAEL | 9 | 2 | | | | 0 |
| | TURKEY | 7 | 3 | | | | 0 |
| Green Beans | | | | | | | |
| | SPAIN | 0 | 0 | | | | 0 |
| | NETHERLANDS | 0 | 0 | | | | 0 |
| | ITALY | 0 | 0 | | | | 0 |
| | EGYPT | 3 | 0 | | | | 0 |
| | KENYA | 0 | 0 | | | | 0 |
| | FRANCE | 0 | 0 | | | | 0 |
| | ETHIOPIA | 7 | 2 | | | | 0 |
| | BELGIUM AND LI | 0 | 0 | | | | 0 |
| | TURKEY | 1 | 0 | | | | 0 |
| | JORDAN | 4 | 2 | | | | 0 |
| Dried Onions | | | | | | | |
| | UNITED STATES | 0 | 0 | | | | 0 |
| | EGYPT | 0 | 0 | | | | 0 |
| | FRANCE | 0 | 0 | | | | 0 |
| | INDIA | 0 | 0 | | | | 0 |
| | HUNGARY | 0 | 0 | | | | 0 |
| | CHINA | 0 | 0 | | | | 0 |
| | SYRIA | 1 | 1 | | | | 0 |
| | ITALY | 2 | 1 | | | | 0 |
| | NETHERLANDS | 0 | 0 | | | | 0 |
| | BELGIUM AND LI | 0 | 0 | | | | 0 |

* General Seasonal Competition Index (GSCI) = number of months of non-domestic season cover

** Window Overlap Seasonal Competition Index (WOSCI) = Number of Egypt window months without competition

| | Competitors | Egypt Seasonal Position Comparison: General Seasonal Competition Index | Egypt Seasonal Position Comparison: Overlap Seasonal Index | Current Cost Comparisons: Wage Rate | Current Cost Comparisons: Transport Cost | Current Cost Comparisons: Landed Cost | Advantages/Disadvantages against Egypt: + advantage - Disadvantage |
|---|---|---|---|---|---|---|---|
| Dates: | | | | | | | |
| | TUNISIA | 0 | 0 | | | | 0 |
| | FRANCE | 2 | 2 | | | | 0 |
| | IRAN | 0 | 0 | | | | 0 |
| | PAKISTAN | 0 | 0 | | | | 0 |
| | UNITED STATES | 0 | 0 | | | | 0 |
| | NETHERLANDS | 0 | 0 | | | | 0 |
| | ISRAEL | 7 | 7 | | | | 0 |
| | ALGERIA | 10 | 10 | | | | 0 |
| | TURKEY | 6 | 6 | | | | 0 |
| | EGYPT | 6 | 6 | | | | 0 |
| Oranges | | | | | | | |
| | SPAIN | 0 | 6 | | | | 0 |
| | ITALY | 0 | 6 | | | | 0 |
| | MOROCCO | 4 | 4 | | | | 0 |
| | NETHERLANDS | 0 | 6 | | | | 0 |
| | SOUTH AFRICA | 6 | 6 | | | | 0 |
| | GREECE | 2 | 4 | | | | 0 |
| | BELGIUM AND LI | 0 | 6 | | | | 0 |
| | FRANCE | 0 | 6 | | | | 0 |
| | CYPRUS | 6 | 4 | | | | 0 |
| | AUSTRIA | 6 | 4 | | | | 0 |
| Mandarins | | | | | | | |
| | SPAIN | 0 | 6 | | | | 0 |
| | ITALY | 0 | 6 | | | | 0 |
| | MOROCCO | 4 | 4 | | | | 0 |
| | NETHERLANDS | 0 | 6 | | | | 0 |
| | SOUTH AFRICA | 6 | 6 | | | | 0 |
| | GREECE | 2 | 4 | | | | 0 |
| | BELGIUM AND LI | 0 | 6 | | | | 0 |
| | FRANCE | 0 | 6 | | | | 0 |
| | CYPRUS | 6 | 4 | | | | 0 |
| | AUSTRIA | 6 | 4 | | | | 0 |
| Grapes | | | | | | | |
| | ITALY | 0 | 5 | | | | 0 |
| | GREECE | 3 | 6 | | | | 0 |
| | SPAIN | 0 | 5 | | | | 0 |
| | NETHERLANDS | 0 | 5 | | | | 0 |
| | BELGIUM AND LI | 0 | 5 | | | | 0 |
| | SOUTH AFRICA | 3 | 5 | | | | 0 |
| | TURKEY | 4 | 1 | | | | 0 |
| | FRANCE | 0 | 6 | | | | 0 |
| | AUSTRIA | 2 | 7 | | | | 0 |
| | UNITED KINGDO | 2 | 3 | | | | 0 |

* General Seasonal Competition Index (GSCI) = number of months of non-domestic season cover

** Window Overlap Seasonal Competition Index (WOSCI) = Number of Egypt window months without competition

| | Competitors | Egypt Seasonal Position Comparison: General Seasonal Competition Index | Egypt Seasonal Position Comparison: Window Overlap Seasonal Index | Deliver Cost Comparison: Wage Rate | Deliver Cost Comparison: Transport Cost | Deliver Cost Comparison: Landed Cost | Advantages/Disadvantages against Egypt: + advantage - Disadvantage |
|---|---|---|---|---|---|---|---|
| Melons | | | | | | | |
| | SPAIN | 0 | 0 | | | | 0 |
| | NETHERLANDS | 0 | 0 | | | | 0 |
| | FRANCE | 0 | 0 | | | | 0 |
| | TURKEY | 4 | 4 | | | | 0 |
| | ITALY | 0 | 0 | | | | 0 |
| | BELGIUM AND LU | 0 | 0 | | | | 0 |
| | COSTA RICA | 5 | 5 | | | | 0 |
| | ISRAEL | 5 | 5 | | | | 0 |
| | SOUTH AFRICA | 7 | 7 | | | | 0 |
| | IRAN | 5 | 5 | | | | 0 |
| Peaches | | | | | | | |
| | ITALY | 0 | 8 | | | | 0 |
| | SPAIN | 1 | 7 | | | | 0 |
| | FRANCE | 0 | 8 | | | | 0 |
| | NETHERLANDS | 0 | 8 | | | | 0 |
| | GREECE | 6 | 2 | | | | 0 |
| | BELGIUM AND LU | 0 | 8 | | | | 0 |
| | AUSTRIA | 6 | 6 | | | | 0 |
| | TURKEY | 7 | 1 | | | | 0 |
| | SOUTH AFRICA | 5 | 5 | | | | 0 |
| | UNITED KINGDO | 8 | 0 | | | | 0 |
| Strawberries | | | | | | | |
| | SPAIN | 0 | 0 | | | | 0 |
| | ITALY | 0 | 0 | | | | 0 |
| | POLAND | 5 | 4 | | | | 0 |
| | BELGIUM AND LI | 0 | 0 | | | | 0 |
| | FRANCE | 0 | 0 | | | | 0 |
| | NETHERLANDS | 0 | 0 | | | | 0 |
| | UNITED KINGDO | 6 | 4 | | | | 0 |
| | UNITED STATES | 4 | 1 | | | | 0 |
| | AUSTRIA | 3 | 2 | | | | 0 |
| | MOROCCO | 8 | 3 | | | | 0 |

* General Seasonal Competition Index (GSCI) = number of months of non-Mediterranean season cover

** Window Overlap Seasonal Competition Index (WOSCI)= Number of Egypt window months without competition

# Production, Import and Export data

| Commodity | Cheese & Substitutes | | | | Lettuce | | | | Cream Based | | | | Dried Onions | | | | Onions, Fresh or Dried | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Production | Import | Value | Export | Production | Import | Value | Export | Production | Import | Value | Export | Production | Import | Value | Export | Production | Import | Value | Export |
| 1987 | 85 | 7951 | $ 7,869 | 57 | 904725 | 209883 | $ 305,000 | 3926 | 89967 | 14926 | $ 20,000 | 7535 | 2928146 | 371095 | $ 99,000 | 63117 | 0 | 2804 | $ 1,917 | 60 |
| 1988 | 64 | 8517 | $ 4,907 | 28 | 863692 | 245500 | $ 344,000 | 2560 | 75648 | 19834 | $ 19,122 | 5726 | 2410286 | 363907 | $ 94,000 | 51874 | 0 | 2991 | $ 2,018 | 153 |
| 1989 | 65 | 8144 | $ 4,672 | 24 | 813807 | 233042 | $ 288,000 | 2501 | 89682 | 15607 | $ 18,000 | 6457 | 2258328 | 2146093 | $ 39,000 | 18097 | 0 | 3618 | $ 2,175 | 172 |
| 1990 | 65 | 8965 | $ 4,870 | 111 | 1009862 | 227884 | $ 297,000 | 2128 | 47460 | 15000 | $ 22,000 | 8635 | 2122368 | 3402117 | $ 94,000 | 20245 | 0 | 4183 | $ 10,000 | 381 |
| 1991 | 80 | 8884 | $ 5,295 | 142 | 1309080 | 2403185 | $ 386,000 | 2705 | 47782 | 15000 | $ 20,000 | 10127 | 1955330 | 3610976 | $ 97,000 | 24098 | 0 | 4319 | $ 10,021 | 405 |
| 1992 | 526 | 4198 | $ 7,911 | 1705 | 1186862 | 2635271 | $ 389,344 | 2799 | 59173 | 15000 | $ 19,000 | 8636 | 2050893 | 3061361 | $ 99,000 | 18250 | 0 | 4417 | $ 12,000 | 475 |
| 1993 | 207 | 4781 | $ 5,209 | 80 | 1226000 | 3486095 | $ 387,000 | 2136 | 46761 | 13721 | $ 20,000 | 574 | 2189022 | 2754000 | $ 99,000 | 8400 | 0 | 5175 | $ 12,000 | 200 |
| 1994 | 358 | 8548 | $ 5,303 | 146 | 1268000 | 2572111 | $ 388,000 | 2563 | 58127 | 16187 | $ 20,000 | 540 | 2169945 | 2911762 | $ 103,000 | 15087 | 0 | 4640 | $ 11,000 | 385 |
| 1995 | 350 | 8086 | $ 4,956 | 88 | 1288000 | 2337236 | $ 374,000 | 2218 | 45803 | 17134 | $ 20,000 | 563 | 2364402 | 3038024 | $ 104,000 | 19000 | 0 | 4251 | $ 13,000 | 445 |
| 1996 | 435 | 8421 | $ 5,850 | 188 | 1365078 | 2586273 | $ 383,000 | 2552 | 48698 | 16888 | $ 22,000 | 1800 | 2294169 | 3158877 | $ 107,000 | 19548 | 0 | 4931 | $ 12,000 | 454 |
| 1997 | 528 | 4681 | $ 4,428 | 912 | 1327000 | 2776683 | $ 389,000 | 5424 | 48087 | 17113 | $ 20,000 | 1258 | 2288815 | 2389866 | $ 99,000 | 26850 | 0 | 5180 | $ 11,000 | 700 |
| 1998 | 456 | 5601 | $ 4,031 | 816 | 1327000 | 2776683 | $ 389,000 | 5424 | 48290 | 17113 | $ 20,000 | 1258 | 2600000 | 2389860 | $ 99,000 | 26850 | 0 | 5182 | $ 11,000 | 700 |

All figures are in Metric Tons Except Values in US$

| Commodity | Oranges | | | | Manufactured Tang Class Etc | | | | Yams Grapes | | | | Melons | | | | Peaches and Nectarines | | | | Strawberry | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Production | Import | Value | Export | Production | Import | Value | Export | Production | Import | Value | Export | Production | Import | Value | Export | Production | Import | Value | Export | Production | Import | Value | Export |
| 1987 | 0 | 7047764 | $ 2000,000 | 2170508 | 0 | 3502062 | 1459400 | 1080540 | 8650000 | 2022000 | $ 2027,548 | 82015 | 0 | 54187 | $ 24,000 | 12853 | 235649 | 2727863 | $ 2301,200 | 45880 | 692843 | 1080799 | $ 2000,000 | 12004 |
| 1988 | 0 | 7044735 | $ 2001,000 | 1754277 | 0 | 3620512 | 1509380 | 1738545 | 8720000 | 2031885 | $ 2051,052 | 91388 | 0 | 52968 | $ 28,117 | 4941 | 256652 | 2253753 | $ 2036,844 | 34944 | 833888 | 1060780 | $ 2001,000 | 13349 |
| 1989 | 0 | 6813999 | $ 2002,000 | 1560727 | 0 | 3490760 | 1431548.5 | 1915.5 | 8760000 | 2002396 | $ 2054,270 | 62963 | 0 | 39818 | $ 25,486 | 4915 | 268850 | 2481195 | $ 2000,242 | 21868 | 850058 | 1007294 | $ 2007,931 | 15772 |
| 1990 | 0 | 7527150 | $ 2004,000 | 1762150 | 0 | 3276350 | 1727886.5 | 6600 | 8370000 | 2026275 | $ 2003,000 | 87952 | 0 | 46020 | $ 34,802 | 9550 | 273410 | 3027058 | $ 3015,000 | 36026 | 751270 | 1042959 | $ 2001,000 | 14883 |
| 1991 | 0 | 6965868 | $ 2000,000 | 1780390 | 0 | 3804433 | 1550030.5 | 8068 | 7150000 | 2282220 | $ 2201,000 | 78067 | 0 | 51884 | $ 46,113 | 5341 | 313000 | 3600477 | $ 3000,000 | 50410 | 834886 | 1131512 | $ 2001,000 | 20015 |
| 1992 | 0 | 6155021 | $ 2001,000 | 1901790 | 0 | 3839461 | 1520610.0 | 5039.5 | 8875000 | 2031183 | $ 1999,721 | 48432 | 0 | 48165 | $ 37,965 | 6116 | 320041 | 3250388 | $ 3021,644 | 23804 | 854136 | 1060463 | $ 2004,000 | 13954 |
| 1993 | 0 | 6413785 | $ 2001,000 | 1208314 | 0 | 3529668 | 1393850.5 | 6467 | 8850000 | 2006274 | $ 2001,000 | 99149 | 0 | 52855 | $ 40,654 | 10941 | 350000 | 3600214 | $ 3000,000 | 58005 | 852000 | 1074000 | $ 2001,000 | 21139 |
| 1994 | 0 | 5200379 | $ 2001,000 | 1902784 | 0 | 3803940 | 1534021.5 | 9841 | 7602000 | 1980000 | $ 2001,000 | 111221 | 0 | 59020 | $ 51,000 | 12468 | 330000 | 3610000 | $ 3004,000 | 54000 | 840000 | 1090000 | $ 2001,000 | 19511 |
| 1995 | 0 | 4882785 | $ 2001,000 | 1902790 | 0 | 3803953 | 1455000 | 8000.5 | 7400000 | 1990000 | $ 1995,000 | 70119 | 0 | 75218 | $ 64,000 | 13958 | 340000 | 3600000 | $ 3000,000 | 54000 | 850000 | 1080000 | $ 2001,000 | 19700 |
| 1996 | 0 | 5510054 | $ 2001,000 | 1806000 | 0 | 3726517 | 1741154 | 15401.5 | 6705000 | 1750000 | $ 1800,000 | 15000 | 0 | 72000 | $ 58,000 | 15500 | 298000 | 3200000 | $ 2800,000 | 41000 | 772000 | 1250000 | $ 2000,000 | 21000 |
| 1997 | 0 | 4980000 | $ 2000,000 | 2000000 | 0 | 3400000 | 1410000.5 | 11245.5 | 6000000 | 1500000 | $ 1600,000 | 12000 | 0 | 60000 | $ 47,000 | 11000 | 240000 | 2500000 | $ 2200,000 | 31000 | 680000 | 1100000 | $ 1800,000 | 17000 |
| 1998 | 0 | 4890000 | $ 2000,000 | 2000000 | 0 | 3400000 | 1410000.5 | 11245.5 | 6000000 | 1500000 | $ 1600,000 | 12000 | 0 | 60000 | $ 47,000 | 11000 | 240000 | 2500000 | $ 2200,000 | 31000 | 680000 | 1100000 | $ 1800,000 | 17000 |

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| | 070510 Onions & Shallots | | | | 070520 Leeks | | | | 070530 Green Beans | | | | 071220 Dried Beans | | | | 080510 Dates, Fresh or Dried | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Import | | | Export | | Import | | Export | | Import | | Export | | Import | | Export | | Import | | Export | |
| | Quantity | Value | | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value |
| 1995 Jan | 12142 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| Feb | 15020 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| Mar | 19509 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| Apr | 25498 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| May | 35468 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| Jun | 34577 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| Jul | 28964 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| Aug | 19034 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| Sep | 16745 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| Oct | 16545 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| Nov | 14145 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| Dec | 10378 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 1996 Jan | 12142 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| Feb | 15020 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| Mar | 19509 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| Apr | 25498 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| May | 35468 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| Jun | 34577 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| Jul | 28964 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| Aug | 19034 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| Sep | 16745 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| Oct | 16545 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| Nov | 14145 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| Dec | 10378 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

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| | | 080510 Oranges | | | | 080520 Mandarines Tang Clem | | | | 080610 Table Grapes | | | | 080719 Melons | | | | 080930 Peaches and Nectarines | | | | 10 Strawberry | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Import | | Export | | Import | | Export | | Import | | Export | | Import | | Export | | Import | | Export | | Import | | Export | |
| | | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value |
| 1995 | Jan | 90584 | ECU 93,000.00 | 1456 | | 68221 | ECU 40,000.00 | 2700 | | 300 | ECU 400.00 | 50 | | 1300 | ECU 1,300.00 | 60 | | 3660 | ECU 3,366.00 | 30 | | 1305 | ######## | 30 | |
| | Feb | 87548 | ECU 42,500.00 | 1488 | | 86326 | ECU 50,000.00 | 2556 | | 13917 | ######## | 415 | | 1606 | ECU 1,300.00 | 94 | | 4271 | ECU 3,233.00 | 42 | | 2248 | ######## | 35 | |
| | Mar | 83400 | ECU 30,454.00 | 3012 | | 99806 | ECU 41,780.00 | 5054 | | 8285 | ######## | 116 | | 1702 | ECU 1,341.00 | 43 | | 922 | ECU 2,000.00 | 3 | | 8048 | ######## | 275 | |
| | Apr | 60296 | ECU 36,954.00 | 2512 | | 29815 | ECU 10,172.00 | 2458 | | 20961 | ######## | 3085 | | 3068 | ECU 2,603.00 | 102 | | 1374 | ECU 1,000.00 | 25 | | 27301 | ######## | 138 | |
| | May | 40107 | ECU 21,007.00 | 1212 | | 8463 | ECU 8,540.00 | 326 | | 18452 | ######## | 2872 | | 4044 | ECU 4,119.00 | 86 | | 8565 | ECU 25,000.00 | 237 | | 40408 | ######## | 660 | |
| | Jun | 20712 | ECU 10,544.00 | 944 | | 3654 | ECU 2,872.00 | 998 | | 6510 | ######## | 1132 | | 10065 | ECU 7,507.00 | 175 | | 23266 | ECU 36,398.00 | 1024 | | 29515 | ######## | 722 | |
| | Jul | 10588 | ECU 5,220.00 | 1242 | | 1718 | ECU 1,398.00 | 579 | | 13421 | ######## | 984 | | 15062 | ECU 8,160.00 | 490 | | 48536 | ECU 60,200.00 | 926 | | 17490 | ######## | 249 | |
| | Aug | 11295 | ECU 5,120.00 | 1173 | | 2219 | ECU 2,136.00 | 644 | | 37231 | ######## | 1126 | | 16783 | ECU 8,242.00 | 154 | | 57221 | ECU 85,482.00 | 1607 | | 6541 | ######## | 270 | |
| | Sep | 14373 | ECU 8,766.00 | 2080 | | 3864 | ECU 3,027.00 | 256 | | 74736 | ######## | 2241 | | 18344 | ECU 10,908.00 | 258 | | 66193 | ECU 28,862.00 | 1039 | | 4136 | ######## | 322 | |
| | Oct | 19812 | ECU 10,527.00 | 3410 | | 21658 | ECU 10,126.00 | 2557 | | 67011 | ######## | 2288 | | 7476 | ECU 4,467.00 | 536 | | 27126 | ECU 17,606.00 | 406 | | 1325 | ######## | 23 | |
| | Nov | 30011 | ECU 14,900.00 | 3187 | | 65119 | ECU 38,700.00 | 4473 | | 59827 | ######## | 614 | | 2565 | ECU 1,866.00 | 97 | | 10418 | ECU 28,190.57 | 595 | | 677 | ######## | 13 | |
| | Dec | 83207 | ECU 28,861.00 | 3113 | | 81434 | ECU 42,760.00 | 6063 | | 16865 | ######## | 340 | | 2334 | ECU 2,000.00 | 156 | | 1066 | ECU 2,000.00 | 352 | | 454 | ######## | 44 | |
| 1996 | Jan | 90584 | ECU 93,000.00 | 1456 | | 68221 | ECU 40,000.00 | 2700 | | 300 | ECU 400.00 | 50 | | 1300 | ECU 1,300.00 | 60 | | 3660 | ECU 3,366.00 | 30 | | 1305 | ######## | 30 | |
| | Feb | 87548 | ECU 42,500.00 | 1488 | | 86326 | ECU 50,000.00 | 2556 | | 13917 | ######## | 415 | | 1606 | ECU 1,300.00 | 94 | | 4271 | ECU 3,233.00 | 42 | | 2248 | ######## | 35 | |
| | Mar | 83400 | ECU 30,454.00 | 3012 | | 99806 | ECU 41,780.00 | 5054 | | 8285 | ######## | 116 | | 1702 | ECU 1,341.00 | 43 | | 922 | ECU 2,000.00 | 3 | | 8048 | ######## | 275 | |
| | Apr | 60296 | ECU 36,954.00 | 2512 | | 29815 | ECU 10,172.00 | 2458 | | 20961 | ######## | 3085 | | 3068 | ECU 2,603.00 | 102 | | 1374 | ECU 1,000.00 | 25 | | 27301 | ######## | 138 | |
| | May | 40107 | ECU 21,007.00 | 1212 | | 8463 | ECU 8,540.00 | 326 | | 18452 | ######## | 2872 | | 4044 | ECU 4,119.00 | 86 | | 8565 | ECU 25,000.00 | 237 | | 40408 | ######## | 660 | |
| | Jun | 20712 | ECU 10,544.00 | 944 | | 3654 | ECU 2,872.00 | 998 | | 6510 | ######## | 1132 | | 10065 | ECU 7,507.00 | 175 | | 23266 | ECU 36,398.00 | 1024 | | 29515 | ######## | 722 | |
| | Jul | 10588 | ECU 5,220.00 | 1242 | | 1718 | ECU 1,398.00 | 579 | | 13421 | ######## | 984 | | 15062 | ECU 8,160.00 | 490 | | 48536 | ECU 60,200.00 | 926 | | 17490 | ######## | 249 | |
| | Aug | 11295 | ECU 5,120.00 | 1173 | | 2219 | ECU 2,136.00 | 644 | | 37231 | ######## | 1126 | | 16783 | ECU 8,242.00 | 154 | | 57221 | ECU 85,482.00 | 1607 | | 6541 | ######## | 270 | |
| | Sep | 14373 | ECU 8,766.00 | 2080 | | 3864 | ECU 3,027.00 | 256 | | 74736 | ######## | 2241 | | 18344 | ECU 10,908.00 | 258 | | 66193 | ECU 28,862.00 | 1039 | | 4136 | ######## | 322 | |
| | Oct | 19812 | ECU 10,527.00 | 3410 | | 21658 | ECU 10,126.00 | 2557 | | 67011 | ######## | 2288 | | 7476 | ECU 4,467.00 | 536 | | 27126 | ECU 17,606.00 | 406 | | 1325 | ######## | 23 | |
| | Nov | 30011 | ECU 14,900.00 | 3187 | | 65119 | ECU 38,700.00 | 4473 | | 59827 | ######## | 614 | | 2565 | ECU 1,866.00 | 97 | | 10418 | ECU 28,190.57 | 595 | | 677 | ######## | 13 | |
| | Dec | 83207 | ECU 28,861.00 | 3113 | | 81434 | ECU 42,760.00 | 6063 | | 16865 | ######## | 340 | | 2334 | ECU 2,000.00 | 156 | | 1066 | ECU 2,000.00 | 352 | | 454 | ######## | 44 | |
| 1997 | Jan | 90584 | ECU 93,000.00 | 1456 | | 68221 | ECU 40,000.00 | 2700 | | 300 | ECU 400.00 | 50 | | 1300 | ECU 1,300.00 | 60 | | 3660 | ECU 3,366.00 | 30 | | 1305 | ######## | 30 | |
| | Feb | 87548 | ECU 42,500.00 | 1488 | | 86326 | ECU 50,000.00 | 2556 | | 13917 | ######## | 415 | | 1606 | ECU 1,300.00 | 94 | | 4271 | ECU 3,233.00 | 42 | | 2248 | ######## | 35 | |
| | Mar | 83400 | ECU 30,454.00 | 3012 | | 99806 | ECU 41,780.00 | 5054 | | 8285 | ######## | 116 | | 1702 | ECU 1,341.00 | 43 | | 922 | ECU 2,000.00 | 3 | | 8048 | ######## | 275 | |
| | Apr | 60296 | ECU 36,954.00 | 2512 | | 29815 | ECU 10,172.00 | 2458 | | 20961 | ######## | 3085 | | 3068 | ECU 2,603.00 | 102 | | 1374 | ECU 1,000.00 | 25 | | 27301 | ######## | 138 | |
| | May | 40107 | ECU 21,007.00 | 1212 | | 8463 | ECU 8,540.00 | 326 | | 18452 | ######## | 2872 | | 4044 | ECU 4,119.00 | 86 | | 8565 | ECU 25,000.00 | 237 | | 40408 | ######## | 660 | |
| | Jun | 20712 | ECU 10,544.00 | 944 | | 3654 | ECU 2,872.00 | 998 | | 6510 | ######## | 1132 | | 10065 | ECU 7,507.00 | 175 | | 23266 | ECU 36,398.00 | 1024 | | 29515 | ######## | 722 | |
| | Jul | 10588 | ECU 5,220.00 | 1242 | | 1718 | ECU 1,398.00 | 579 | | 13421 | ######## | 984 | | 15062 | ECU 8,160.00 | 490 | | 48536 | ECU 60,200.00 | 926 | | 17490 | ######## | 249 | |
| | Aug | 11295 | ECU 5,120.00 | 1173 | | 2219 | ECU 2,136.00 | 644 | | 37231 | ######## | 1126 | | 16783 | ECU 8,242.00 | 154 | | 57221 | ECU 85,482.00 | 1607 | | 6541 | ######## | 270 | |
| | Sep | 14373 | ECU 8,766.00 | 2080 | | 3864 | ECU 3,027.00 | 256 | | 74736 | ######## | 2241 | | 18344 | ECU 10,908.00 | 258 | | 66193 | ECU 28,862.00 | 1039 | | 4136 | ######## | 322 | |
| | Oct | 19812 | ECU 10,527.00 | 3410 | | 21658 | ECU 10,126.00 | 2557 | | 67011 | ######## | 2288 | | 7476 | ECU 4,467.00 | 536 | | 27126 | ECU 17,606.00 | 406 | | 1325 | ######## | 23 | |
| | Nov | 30011 | ECU 14,900.00 | 3187 | | 65119 | ECU 38,700.00 | 4473 | | 59827 | ######## | 614 | | 2565 | ECU 1,866.00 | 97 | | 10418 | ECU 28,190.57 | 595 | | 677 | ######## | 13 | |
| | Dec | 83207 | ECU 28,861.00 | 3113 | | 81434 | ECU 42,760.00 | 6063 | | 16865 | ######## | 340 | | 2334 | ECU 2,000.00 | 156 | | 1066 | ECU 2,000.00 | 352 | | 454 | ######## | 44 | |
| 1998 | Jan | 90584 | ECU 93,000.00 | 1456 | | 68221 | ECU 40,000.00 | 2700 | | 300 | ECU 400.00 | 50 | | 1300 | ECU 1,300.00 | 60 | | 3660 | ECU 3,366.00 | 30 | | 1305 | ######## | 30 | |
| | Feb | 87548 | ECU 42,500.00 | 1488 | | 86326 | ECU 50,000.00 | 2556 | | 13917 | ######## | 415 | | 1606 | ECU 1,300.00 | 94 | | 4271 | ECU 3,233.00 | 42 | | 2248 | ######## | 35 | |
| | Mar | 83400 | ECU 30,454.00 | 3012 | | 99806 | ECU 41,780.00 | 5054 | | 8285 | ######## | 116 | | 1702 | ECU 1,341.00 | 43 | | 922 | ECU 2,000.00 | 3 | | 8048 | ######## | 275 | |
| | Apr | 60296 | ECU 36,954.00 | 2512 | | 29815 | ECU 10,172.00 | 2458 | | 20961 | ######## | 3085 | | 3068 | ECU 2,603.00 | 102 | | 1374 | ECU 1,000.00 | 25 | | 27301 | ######## | 138 | |
| | May | 40107 | ECU 21,007.00 | 1212 | | 8463 | ECU 8,540.00 | 326 | | 18452 | ######## | 2872 | | 4044 | ECU 4,119.00 | 86 | | 8565 | ECU 25,000.00 | 237 | | 40408 | ######## | 660 | |
| | Jun | 20712 | ECU 10,544.00 | 944 | | 3654 | ECU 2,872.00 | 998 | | 6510 | ######## | 1132 | | 10065 | ECU 7,507.00 | 175 | | 23266 | ECU 36,398.00 | 1024 | | 29515 | ######## | 722 | |
| | Jul | 10588 | ECU 5,220.00 | 1242 | | 1718 | ECU 1,398.00 | 579 | | 13421 | ######## | 984 | | 15062 | ECU 8,160.00 | 490 | | 48536 | ECU 60,200.00 | 926 | | 17490 | ######## | 249 | |
| | Aug | 11295 | ECU 5,120.00 | 1173 | | 2219 | ECU 2,136.00 | 644 | | 37231 | ######## | 1126 | | 16783 | ECU 8,242.00 | 154 | | 57221 | ECU 85,482.00 | 1607 | | 6541 | ######## | 270 | |
| | Sep | 14373 | ECU 8,766.00 | 2080 | | 3864 | ECU 3,027.00 | 256 | | 74736 | ######## | 2241 | | 18344 | ECU 10,908.00 | 258 | | 66193 | ECU 28,862.00 | 1039 | | 4136 | ######## | 322 | |
| | Oct | 19812 | ECU 10,527.00 | 3410 | | 21658 | ECU 10,126.00 | 2557 | | 67011 | ######## | 2288 | | 7476 | ECU 4,467.00 | 536 | | 27126 | ECU 17,606.00 | 406 | | 1325 | ######## | 23 | |
| | Nov | 30011 | ECU 14,900.00 | 3187 | | 65119 | ECU 38,700.00 | 4473 | | 59827 | ######## | 614 | | 2565 | ECU 1,866.00 | 97 | | 10418 | ECU 28,190.57 | 595 | | 677 | ######## | 13 | |
| | Dec | 83207 | ECU 28,861.00 | 3113 | | 81434 | ECU 42,760.00 | 6063 | | 16865 | ######## | 340 | | 2334 | ECU 2,000.00 | 156 | | 1066 | ECU 2,000.00 | 352 | | 454 | ######## | 44 | |

| Crop Budbets & FOB Prices LE | Onions, fres New Land | Lettuce New Land | Green Bean Dried Onions Old Land New Land | Old Land New Land | Dates Old Land New Land | Oranges Old Land | Mandarins Old Land | Grapes New Land Farm | Melons New Land | Peaches Old Land New land | Strawberries New Land |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Output (LE)** | 18000 | 12000 | 8000 | 7000 | 20000 | 19000 | 20000 | 12000 | 24000 | 15000 | 20000 |
| Farm gate Price (LE) | 1.00 | 1.50 | 1.00 | 0.70 | 2.00 | 0.95 | 1.00 | 1.50 | 2.00 | 2.50 | 2.50 |
| Output (Ton) | 15000 | 8000 | 5500 | 10000 | 10000 | 20000 | 20000 | 8000 | 12000 | 6000 | 10000 |
| **Production Cost** | 3850 | 5250 | 4850 | 2510 | 4675 | 4740 | 4850 | 6178 | 12870 | 5758 | 34073 |
| Water requirements | 500 | 500 | 500 | 200 | 500 | 600 | 600 | 800 | 800 | 650 | 3000 |
| Seed/seedling | 200 | 300 | 300 | 300 | 0 | 0 | 0 | 0 | 5000 | 0 | 14000 |
| Seed transplanting | 100 | 100 | 100 | 100 | 0 | 0 | 0 | 0 | 500 | 0 | 500 |
| Manure - Fertilizer | 200 | 200 | 200 | 200 | 225 | 300 | 300 | 500 | 200 | 300 | 250 |
| **Chemical fertilizer** | 900 | 1500 | 1200 | 600 | 1650 | 1650 | 1650 | 2200 | 2800 | 2250 | 7450 |
| - N | 300 | 450 | 300 | 200 | 450 | 500 | 500 | 500 | 240 | 300 | 1600 |
| - P2O5 | 100 | 300 | 300 | 100 | 300 | 250 | 250 | 200 | 90 | 400 | 2000 |
| - K2O | 200 | 200 | 200 | 100 | 300 | 300 | 300 | 300 | 270 | 300 | 1000 |
| Micro elements | 100 | 200 | 200 | 0 | 200 | 200 | 200 | 500 | 200 | 500 | 1000 |
| Pesticides & Molly | 200 | 400 | 200 | 200 | 400 | 400 | 400 | 700 | 2000 | 500 | 3400 |
| Mulch | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 400 | 800 | 0 | 1000 |
| Costs of machinery | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 200 | 100 | 200 | 2000 |
| **Labor requirements:** | 350 | 1000 | 1600 | 300 | 400 | 400 | 400 | 700 | 950 | 600 | 2970 |
| - Land preparation | 100 | 300 | 300 | 100 | 0 | 0 | 0 | 0 | 200 | 0 | 1400 |
| - Sowing / planting | 50 | 100 | 100 | 100 | 0 | 0 | 0 | 0 | 200 | 100 | 800 |
| - Fertilizing | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 200 | 0 | 1500 |
| - Pest Management | 100 | 300 | 300 | 100 | 300 | 300 | 300 | 500 | 170 | 300 | 500 |
| Supervision | 50 | 100 | 100 | 0 | 100 | 100 | 100 | 200 | 180 | 300 | 850 |
| **Other Cost** | 950 | 1560 | 1450 | 710 | 1800 | 1740 | 1800 | 1678 | 1720 | 1803 | 3400 |
| - Land rent | 600 | 800 | 1000 | 500 | 1000 | 1000 | 1000 | 1000 | 800 | 1000 | 1000 |
| - Depreciation(plastic | 0 | 400 | 300 | 0 | 200 | 200 | 200 | 518 | 200 | 353 | 900 |
| - Interest on working c | 450 | 360 | 150 | 210 | 600 | 540 | 600 | 360 | 720 | 450 | 2100 |
| **Harvest Cost** | 350 | 600 | 600 | 200 | 800 | 600 | 600 | 700 | 700 | 1300 | 2500 |
| Packing | 200 | 300 | 300 | 100 | 500 | 400 | 400 | 500 | 500 | 1000 | 2000 |
| Supervision | 100 | 200 | 200 | 50 | 100 | 100 | 100 | 100 | 100 | 200 | 300 |
| In the field transport | 50 | 100 | 100 | 50 | 200 | 100 | 100 | 100 | 100 | 100 | 200 |
| **Post harvest** | 6750 | 4950 | 2700 | 1050 | 5650 | 5850 | 5850 | 4950 | 6950 | 4150 | 12150 |
| Pre-Sizer Post/Inform | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| Sorting & Grading | 200 | 200 | 250 | 200 | 200 | 200 | 200 | 300 | 300 | 400 | 400 |
| Packaging and Palleti | 200 | 300 | 100 | 100 | 300 | 100 | 100 | 200 | 200 | 200 | 200 |
| Packaging Materials | 4600 | 3200 | 1500 | 500 | 4000 | 4000 | 4000 | 3700 | 4800 | 2400 | 10000 |
| Fuel cooling (Energy) | 1500 | 800 | 500 | 0 | 1000 | 1200 | 1200 | 800 | 1400 | 600 | 1000 |
| Supervision | 100 | 200 | 100 | 0 | 100 | 100 | 100 | 200 | 200 | 300 | 500 |
| **Transport to port** | 900 | 500 | 300 | 450 | 650 | 1250 | 1250 | 500 | 770 | 410 | 650 |
| Transport to the port | 800 | 600 | 500 | 400 | 500 | 1100 | 1100 | 600 | 700 | 350 | 500 |
| Loading/Unloading | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 |

## Crop Summary (LE)

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Production cost** | 3500 | 5240 | 4850 | 2510 | 4675 | 4740 | 4850 | 5175 | 12870 | 1758 | 34900 |
| Land Rent/Return | 500 | 800 | 1000 | 500 | 1000 | 1000 | 1000 | 1000 | 800 | 1000 | 1000 |
| Labor | 300 | 800 | 600 | 300 | 400 | 400 | 400 | 700 | 1040 | 301 | 2052 |
| unskilled | 250 | 700 | 700 | 300 | 500 | 500 | 300 | 540 | 870 | 601 | 1752 |
| skilled | 50 | 100 | 100 | 0 | 100 | 100 | 100 | 160 | 170 | 300 | 300 |
| Materials | 1300 | 2000 | 1700 | 1100 | 1875 | 1900 | 1900 | 2850 | 8500 | 2505 | 23100 |
| Domestic | 1000 | 1400 | 1300 | 900 | 1275 | 1300 | 1300 | 1840 | 6650 | 1300 | 19750 |
| Imported | 300 | 600 | 400 | 200 | 600 | 600 | 600 | 1200 | 2200 | 1205 | 3400 |
| Other Cost | 1200 | 1660 | 1550 | 610 | 1400 | 1440 | 1600 | 1678 | 2220 | 1352 | 8818 |
| **Packing Cost** | 7100 | 8650 | 8300 | 1250 | 6450 | 6450 | 6450 | 5650 | 7650 | 5450 | 14650 |
| Facilities Rent/Return | 250 | 350 | 250 | 350 | 350 | 250 | 250 | 350 | 250 | 250 | 250 |
| Labor | 850 | 1300 | 1050 | 500 | 1250 | 1020 | 1000 | 1400 | 1450 | 2200 | 3400 |
| Unskilled (Packing) | 650 | 900 | 750 | 450 | 1000 | 800 | 800 | 1100 | 1100 | 1700 | 2600 |
| Skilled (Packing) | 200 | 400 | 500 | 50 | 250 | 200 | 200 | 300 | 300 | 500 | 800 |
| Packing Materials | 4500 | 3200 | 1500 | 500 | 4000 | 4000 | 4000 | 3000 | 4500 | 2400 | 10000 |
| Domestic | 900 | 640 | 300 | 100 | 800 | 800 | 800 | 600 | 900 | 480 | 2000 |
| Imported | 3600 | 2560 | 1200 | 400 | 3200 | 3200 | 3200 | 2400 | 3600 | 1920 | 8000 |
| Energy | 1500 | 800 | 500 | 0 | 1000 | 1200 | 1200 | 800 | 1200 | 800 | 1000 |
| Other Cost | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total Production & Pac** | 10400 | 13810 | 9150 | 3760 | 11125 | 11190 | 11250 | 11028 | 20520 | 11208 | 49550 |
| Domestic Transport | 950 | 570 | 350 | 450 | 850 | 1250 | 1250 | 850 | 770 | 410 | 1100 |

## Per Unit of Output (LE)

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Production cost** | 0.22 | 0.65 | 0.97 | 0.25 | 0.47 | 0.24 | 0.24 | 0.47 | 1.07 | 0.06 | 3.50 |
| Land Rent/Return | 0.03 | 0.10 | 0.20 | 0.05 | 0.10 | 0.05 | 0.05 | 0.10 | 0.07 | 0.10 | 0.10 |
| Labor | 0.02 | 0.10 | 0.12 | 0.03 | 0.04 | 0.02 | 0.02 | 0.07 | 0.09 | 0.15 | 0.21 |
| unskilled | 0.02 | 0.09 | 0.14 | 0.03 | 0.05 | 0.02 | 0.02 | 0.05 | 0.07 | 0.10 | 0.18 |
| skilled | 0.00 | 0.01 | 0.02 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.05 | 0.03 |
| Materials | 0.09 | 0.25 | 0.34 | 0.11 | 0.19 | 0.19 | 0.19 | 0.29 | 0.71 | 0.42 | 2.31 |
| Domestic | 0.07 | 0.18 | 0.26 | 0.09 | 0.13 | 0.13 | 0.13 | 0.19 | 0.55 | 0.22 | 1.97 |
| Imported | 0.02 | 0.08 | 0.08 | 0.02 | 0.06 | 0.06 | 0.06 | 0.10 | 0.18 | 0.20 | 0.34 |
| Other Cost | 0.08 | 0.21 | 0.27 | 0.06 | 0.14 | 0.07 | 0.08 | 0.21 | 0.19 | 0.23 | 0.88 |
| **Packing Cost** | 0.47 | 0.69 | 0.65 | 0.13 | 0.65 | 0.32 | 0.32 | 0.71 | 0.64 | 0.91 | 1.47 |
| Facilities Rent/Return | 0.02 | 0.03 | 0.05 | 0.03 | 0.03 | 0.01 | 0.01 | 0.03 | 0.02 | 0.04 | 0.03 |
| Labor | 0.05 | 0.16 | 0.21 | 0.05 | 0.12 | 0.05 | 0.05 | 0.18 | 0.12 | 0.37 | 0.34 |
| Unskilled (Packing) | 0.04 | 0.11 | 0.15 | 0.05 | 0.10 | 0.04 | 0.04 | 0.14 | 0.09 | 0.28 | 0.28 |
| Skilled (Packing) | 0.01 | 0.05 | 0.06 | 0.01 | 0.02 | 0.01 | 0.01 | 0.04 | 0.03 | 0.08 | 0.06 |
| Packing Materials | 0.30 | 0.40 | 0.30 | 0.08 | 0.40 | 0.20 | 0.20 | 0.40 | 0.40 | 0.40 | 1.00 |
| Domestic | 0.06 | 0.08 | 0.06 | 0.01 | 0.09 | 0.04 | 0.04 | 0.08 | 0.08 | 0.08 | 0.20 |
| Imported | 0.24 | 0.32 | 0.24 | 0.04 | 0.32 | 0.16 | 0.16 | 0.32 | 0.32 | 0.32 | 0.80 |
| Energy | 0.10 | 0.10 | 0.10 | 0.00 | 0.10 | 0.06 | 0.06 | 0.10 | 0.10 | 0.10 | 0.10 |
| Other Cost | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| **Total Production & Pac** | 0.69 | 1.35 | 1.63 | 0.38 | 1.11 | 0.56 | 0.56 | 1.48 | 1.71 | 1.37 | 4.97 |
| Domestic Transport | 0.06 | 0.06 | 0.07 | 0.05 | 0.09 | 0.06 | 0.06 | 0.07 | 0.06 | 0.05 | 0.11 |

| Crop Budbets & FOB Prices US$ | Onions, fres | Lettuce | Green Bean | Dried Onions | Dates | Oranges | Mandarins | Grapes | Melons | Peaches | Strawberries |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | New Land | New Land | Old Land | Old Land | Old Land | Old Land | Old Land | New Land | New Land | Old Land | New Land |
| | | | New Land | New Land | New Land | | | Parron | | New land | |
| **Output (L.E)** | 4412 | 3528 | 1471 | 2059 | 5882 | 5294 | 5882 | 3529 | 7059 | 4412 | 20588 |
| Farm gate Price (LE) | 0.29 | 0.44 | 0.29 | 0.21 | 0.59 | 0.26 | 0.29 | 0.44 | 0.59 | 0.74 | 2.06 |
| Output (Ton) | 4412 | 2353 | 1471 | 2941 | 2941 | 5882 | 5882 | 2353 | 3529 | 1765 | 2941 |
| **Production Cost** | 971 | 1947 | 1426 | 736 | 1375 | 1354 | 1412 | 1817 | 3785 | 1694 | 10285 |
| Water requirements | 147 | 147 | 147 | 59 | 147 | 176 | 176 | 235 | 235 | 191 | 882 |
| Seeds/seedling | 59 | 59 | 88 | 88 | 0 | 0 | 0 | 0 | 1471 | 0 | 4118 |
| Seed transplanting | 29 | 29 | 29 | 29 | 0 | 0 | 0 | 0 | 147 | 0 | 147 |
| Manure - Fertilizer | 59 | 59 | 59 | 59 | 59 | 88 | 88 | 88 | 59 | 88 | 206 |
| **Chemical fertilizer** | 265 | 441 | 353 | 176 | 485 | 471 | 471 | 647 | 824 | 649 | 3176 |
| - N | 88 | 118 | 88 | 59 | 132 | 147 | 147 | 147 | 71 | 88 | 294 |
| - P2O5 | 29 | 88 | 88 | 29 | 88 | 59 | 59 | 59 | 29 | 118 | 588 |
| - K2O | 59 | 59 | 59 | 29 | 88 | 88 | 88 | 88 | 59 | 88 | 294 |
| Micro elements | 29 | 59 | 59 | 0 | 59 | 59 | 59 | 147 | 59 | 147 | 294 |
| Pesticides & Methy | 59 | 118 | 59 | 59 | 118 | 118 | 118 | 206 | 588 | 177 | 706 |
| Mulch | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 88 | 235 | 0 | 294 |
| Costs of machinery | 29 | 29 | 29 | 29 | 29 | 29 | 29 | 59 | 59 | 59 | 588 |
| **Labor requirements:** | 103 | 294 | 294 | 88 | 118 | 118 | 118 | 206 | 279 | 125 | 677 |
| - land preparation | 29 | 88 | 88 | 29 | 0 | 0 | 0 | 0 | 59 | 0 | 294 |
| - sowing / planting | 15 | 29 | 29 | 29 | 0 | 0 | 0 | 0 | 88 | 59 | 29 |
| - fertilizing | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 59 | 0 | 59 |
| - Pest Management | 29 | 59 | 59 | 29 | 59 | 59 | 59 | 147 | 59 | 59 | 147 |
| - Supervision | 15 | 29 | 29 | 0 | 29 | 29 | 29 | 59 | 59 | 59 | 88 |
| Other Cost | 579 | 588 | 588 | 309 | 529 | 515 | 529 | 853 | 1588 | 838 | 1000 |
| - Land rent | 147 | 294 | 294 | 147 | 294 | 294 | 294 | 294 | 235 | 294 | 294 |
| - Depreciation/plastic | 0 | 118 | 88 | 0 | 59 | 59 | 59 | 94 | 59 | 104 | 59 |
| - interest on working c | 132 | 176 | 206 | 162 | 176 | 162 | 176 | 159 | 412 | 162 | 176 |
| **Harvest Cost** | 162 | 176 | 176 | 59 | 235 | 176 | 176 | 206 | 235 | 882 | 735 |
| Picking | 88 | 88 | 88 | 29 | 147 | 118 | 118 | 147 | 147 | 294 | 588 |
| Supervision | 29 | 59 | 59 | 15 | 29 | 29 | 29 | 29 | 59 | 59 | 88 |
| In the field transport | 15 | 29 | 29 | 15 | 59 | 29 | 29 | 29 | 29 | 29 | 59 |
| **Post harvest** | 1985 | 1456 | 794 | 309 | 1662 | 1721 | 1721 | 1456 | 2944 | 1821 | 3674 |
| Facilities Rent/Return | 74 | 74 | 74 | 74 | 74 | 74 | 74 | 74 | 74 | 74 | 74 |
| Sorting & Grading | 59 | 59 | 74 | 59 | 59 | 59 | 59 | 88 | 88 | 118 | 118 |
| Packaging and Palletiz | 59 | 88 | 29 | 29 | 29 | 29 | 29 | 59 | 59 | 59 | 59 |
| Packaging Materials | 1324 | 941 | 441 | 147 | 1176 | 1176 | 1176 | 941 | 1412 | 705 | 2941 |
| Fast cooling (Energy) | 441 | 235 | 147 | 0 | 294 | 353 | 353 | 235 | 353 | 176 | 294 |
| Supervision | 29 | 59 | 29 | 0 | 29 | 29 | 29 | 59 | 59 | 59 | 88 |
| **Transport to port** | 279 | 185 | 103 | 192 | 191 | 368 | 368 | 150 | 226 | 121 | 191 |
| Transport to the port | 265 | 141 | 88 | 118 | 176 | 353 | 353 | 141 | 212 | 106 | 176 |
| Loading/Unloading | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |

## Crop Summary (LE)

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Production cost** | 971 | 1547 | 1436 | 739 | 1375 | 1324 | 1412 | 1817 | 3765 | 1594 | 10285 |
| Land Rent/Return | 147 | 235 | 294 | 147 | 294 | 294 | 294 | 294 | 235 | 294 | 294 |
| Labor | 88 | 236 | 235 | 88 | 118 | 118 | 118 | 206 | 309 | 266 | 663 |
| Unskilled | 74 | 206 | 206 | 88 | 88 | 88 | 88 | 147 | 256 | 177 | 515 |
| Skilled | 15 | 29 | 29 | 0 | 29 | 29 | 29 | 59 | 53 | 88 | 59 |
| Materials | 382 | 586 | 500 | 324 | 551 | 559 | 559 | 824 | 2588 | 737 | 6734 |
| Domestic | 294 | 412 | 382 | 265 | 375 | 382 | 382 | 471 | 1941 | 382 | 5794 |
| Imported | 88 | 176 | 118 | 59 | 176 | 176 | 176 | 353 | 647 | 354 | 1000 |
| Other Cost | 353 | 488 | 307 | 179 | 412 | 424 | 441 | 494 | 553 | 938 | 2594 |
| **Packing Cost** | 2068 | 1632 | 871 | 368 | 1897 | 1897 | 1897 | 1882 | 2250 | 1503 | 4388 |
| Facilities Rent/Return | 74 | 74 | 74 | 74 | 74 | 74 | 74 | 74 | 74 | 74 | 74 |
| Labor | 250 | 382 | 368 | 147 | 353 | 294 | 294 | 412 | 412 | 647 | 1000 |
| Unskilled (Packing) | 191 | 265 | 221 | 132 | 294 | 235 | 235 | 324 | 324 | 500 | 804 |
| Skilled (Packing) | 59 | 118 | 88 | 15 | 59 | 59 | 59 | 88 | 88 | 147 | 176 |
| Packing Materials | 1324 | 941 | 441 | 147 | 1176 | 1176 | 1176 | 941 | 1412 | 706 | 2941 |
| Domestic | 265 | 188 | 88 | 29 | 235 | 235 | 235 | 188 | 282 | 141 | 588 |
| Imported | 1059 | 753 | 353 | 118 | 941 | 941 | 941 | 753 | 1129 | 565 | 2353 |
| Energy | 441 | 235 | 147 | 0 | 294 | 353 | 353 | 235 | 353 | 176 | 294 |
| Other Cost | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total Production & Pac** | 3059 | 3179 | 2307 | 1106 | 3272 | 3291 | 3309 | 3679 | 6016 | 3096 | 14694 |
| Domestic Transport | 279 | 156 | 183 | 132 | 191 | 353 | 353 | 164 | 236 | 121 | 191 |

## Per Unit of Output (LE)

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Production cost** | 0.06 | 0.10 | 0.09 | 0.07 | 0.14 | 0.07 | 0.07 | 0.03 | 0.02 | 0.26 | 1.03 |
| Land Rent/Return | 0.01 | 0.03 | 0.04 | 0.01 | 0.03 | 0.01 | 0.01 | 0.04 | 0.02 | 0.05 | 0.03 |
| Labor | 0.01 | 0.03 | 0.03 | 0.01 | 0.01 | 0.01 | 0.01 | 0.03 | 0.03 | 0.04 | 0.06 |
| Unskilled | 0.00 | 0.03 | 0.04 | 0.01 | 0.01 | 0.00 | 0.00 | 0.02 | 0.02 | 0.03 | 0.05 |
| Skilled | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.01 | 0.01 |
| Materials | 0.03 | 0.07 | 0.10 | 0.08 | 0.06 | 0.03 | 0.03 | 0.10 | 0.22 | 0.12 | 0.68 |
| Domestic | 0.02 | 0.05 | 0.08 | 0.06 | 0.04 | 0.02 | 0.02 | 0.06 | 0.16 | 0.06 | 0.58 |
| Imported | 0.01 | 0.02 | 0.02 | 0.01 | 0.02 | 0.01 | 0.01 | 0.04 | 0.05 | 0.06 | 0.10 |
| Other Cost | 0.02 | 0.06 | 0.06 | 0.02 | 0.04 | 0.02 | 0.02 | 0.06 | 0.05 | 0.07 | 0.26 |
| **Packing Cost** | 0.14 | 0.20 | 0.18 | 0.04 | 0.18 | 0.09 | 0.09 | 0.21 | 0.18 | 0.27 | 0.43 |
| Facilities Rent/Return | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 |
| Labor | 0.02 | 0.05 | 0.08 | 0.01 | 0.04 | 0.01 | 0.01 | 0.05 | 0.03 | 0.11 | 0.10 |
| Unskilled (Packing) | 0.01 | 0.03 | 0.04 | 0.01 | 0.03 | 0.01 | 0.01 | 0.04 | 0.03 | 0.08 | 0.08 |
| Skilled (Packing) | 0.00 | 0.01 | 0.02 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 0.01 | 0.02 | 0.02 |
| Packing Materials | 0.09 | 0.12 | 0.09 | 0.01 | 0.12 | 0.09 | 0.09 | 0.12 | 0.12 | 0.12 | 0.29 |
| Domestic | 0.02 | 0.02 | 0.02 | 0.00 | 0.02 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.06 |
| Imported | 0.07 | 0.09 | 0.07 | 0.01 | 0.09 | 0.05 | 0.05 | 0.09 | 0.09 | 0.09 | 0.24 |
| Energy | 0.03 | 0.03 | 0.03 | 0.00 | 0.03 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 |
| Other Cost | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total Production & Pac | 0.20 | 0.40 | 0.48 | 0.11 | 0.33 | 0.16 | 0.17 | 0.48 | 0.59 | 0.50 | 1.46 |
| Domestic Transport | 0.02 | 0.02 | 0.04 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| Land Rent/Return | 0.01 | 0.03 | 0.06 | 0.01 | 0.03 | 0.01 | 0.01 | 0.04 | 0.02 | 0.05 | 0.03 |

Data Source: EUROSTAT EUROSTAT Auto Calc. Auto Calc. Auto Calc. EUROSTAT IMF FAOSTAT FAOSTAT FAOSTAT Estimates FAOSTAT FAOSTAT Estimates Auto Calc.

| Totals | Import MT | Import Value $ | Adj. CIF MT | Adj. Value $000 | CIF US$/kg | Category SITC/HS Code | Rate (LCU/$) | Implied MT | Production MT | Losses MT | Exports MT | Processing MT | Consumption MT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1957 Totals | 7,851 | $ 7,889,000 | 7,851 | $ 7,889.0 | 0.98 | 1 | 1.0000 | 7,851 | 80 | 4 | 37 | 0 | 7,896 |
| 1958 Totals | 4,517 | $ 4,867,000 | 4,517 | $ 4,867.0 | 1.08 | 1 | 1.0000 | 4,517 | 84 | 3 | 28 | 6 | 4,561 |
| 1959 Totals | 4,161 | $ 4,672,000 | 4,161 | $ 4,672.0 | 1.12 | 1 | 1.0000 | 4,161 | 66 | 3 | 24 | 6 | 4,194 |
| 1960 Totals | 3,585 | $ 4,833,000 | 3,585 | $ 4,500.0 | 1.30 | 1 | 1.0000 | 3,566 | 225 | 13 | 111 | 26 | 3,671 |
| 1961 Totals | 4,954 | $ 5,950,000 | 4,954 | $ 5,295.0 | 1.20 | 1 | 1.0000 | 4,954 | 327 | 18 | 142 | 33 | 4,788 |
| 1962 Totals | 4,195 | $ 7,911,000 | 4,195 | $ 7,911.0 | 1.89 | 1 | 1.0000 | 4,195 | 523 | 26 | 230 | 53 | 4,415 |
| 1963 Totals | 4,781 | $ 5,209,000 | 4,781 | $ 5,209.0 | 1.09 | 1 | 1.0000 | 4,781 | 257 | 15 | 90 | 21 | 4,887 |
| 1964 Totals | 4,638 | $ 5,383,000 | 4,638 | $ 5,283.0 | 1.16 | 1 | 1.0000 | 3,681 | 553 | 17 | 145 | 33 | 4,783 |
| 1965 Totals | 4,018 | $ 4,855,000 | 4,018 | $ 4,855.0 | 1.21 | 1 | 1.0000 | 4,025 | 153 | 7 | 65 | 15 | 4,098 |
| 1966 Totals | 5,421 | $ 5,650,000 | 5,421 | $ 5,650.0 | 1.04 | 1 | 1.0000 | 5,421 | 836 | 22 | 189 | 43 | 6,031 |
| 1967 Totals | 4,681 | $ 4,428,000 | 4,681 | $ 4,428.0 | 0.95 | 1 | 1.0000 | 5,681 | 528 | 26 | 612 | 53 | 4,218 |
| 1968 Totals | 4,681 | $ 4,428,000 | 4,681 | $ 4,428.0 | 0.95 | 1 | 1.0000 | 4,681 | 836 | 38 | 816 | 90 | 4,268 |
| 1969 Jan | 12,312 | 11,654 | 12,312 | $ 11,654.4 | 0.95 | 1 | 0.9414 | 12,312 | 7 | 0 | 1,012.0 | 1 | 12,316 |
| 1969 Feb | 15,509 | 8,609 | 15,509 | $ 7,889.3 | 0.51 | 1 | 0.9414 | 15,538 | 15 | 1 | 1,853.0 | 1 | 13,369 |
| 1969 Mar | 13,500 | 6,458 | 13,500 | $ 4,761.6 | 0.34 | 1 | 0.9414 | 19,569 | 16 | 1 | 1,876.0 | 1 | 17,872 |
| 1969 Apr | 25,489 | 7,961 | 25,489 | $ 7,304.1 | 0.29 | 1 | 0.9414 | 25,489 | 15 | 1 | 2,097.0 | 1 | 23,176 |
| 1969 May | 39,405 | 15,026 | 39,405 | $ 14,145.8 | 0.36 | 1 | 0.9414 | 40,658 | 15 | 1 | 1,736.0 | 1 | 37,925 |
| 1969 Jun | 24,573 | 9,798 | 24,573 | $ 9,216.3 | 0.38 | 1 | 0.9414 | 24,573 | 15 | 1 | 2,128.0 | 1 | 22,459 |
| 1969 Jul | 23,281 | 10,202 | 23,281 | $ 9,684.2 | 0.41 | 1 | 0.9414 | 23,281 | 21 | 1 | 2,841.0 | 2 | 21,459 |
| 1969 Aug | 19,603 | 7,331 | 19,684 | $ 6,901.4 | 0.35 | 1 | 0.9414 | 19,684 | 21 | 1 | 1,846.0 | 2 | 18,156 |
| 1969 Sep | 16,746 | 4,592 | 16,746 | $ 4,081.8 | 0.24 | 1 | 0.9414 | 16,746 | 23 | 1 | 2,027.0 | 2 | 14,756 |
| 1969 Oct | 16,945 | 4,641 | 16,945 | $ 3,604.2 | 0.22 | 1 | 0.9414 | 16,945 | 24 | 1 | 4,472.0 | 2 | 12,486 |
| 1969 Nov | 14,145 | 7,671 | 14,145 | $ 7,469.8 | 0.52 | 1 | 0.9414 | 14,145 | 0 | 0 | 2,834.0 | 0 | 11,311 |
| 1969 Dec | 12,378 | 9,488 | 12,378 | $ 7,582.6 | 0.61 | 1 | 0.9414 | 12,378 | 0 | 0 | 2,036.0 | 0 | 10,342 |
| 1970 Jan | 12,342 | 8,054 | 12,342 | $ 6,525.8 | 0.53 | 1 | 0.9414 | 12,342 | 28 | 1 | 1,012.0 | 2 | 11,351 |
| 1970 Feb | 15,508 | 8,035 | 15,508 | $ 7,580.3 | 0.49 | 1 | 0.9414 | 15,538 | 60 | 2 | 1,853.0 | 5 | 13,828 |
| 1970 Mar | 13,500 | 5,668 | 13,500 | $ 4,761.6 | 0.35 | 1 | 0.9414 | 19,569 | 60 | 2 | 1,876.0 | 5 | 17,695 |
| 1970 Apr | 25,489 | 7,885 | 25,489 | $ 7,304.1 | 0.29 | 1 | 0.9414 | 25,489 | 60 | 2 | 2,097.0 | 5 | 23,392 |
| 1970 May | 39,405 | 16,009 | 39,405 | $ 14,145.8 | 0.36 | 1 | 0.9414 | 38,458 | 60 | 2 | 1,736.0 | 5 | 37,716 |
| 1970 Jun | 24,573 | 9,798 | 24,573 | $ 9,216.3 | 0.38 | 1 | 0.9414 | 23,621 | 74 | 4 | 2,128.0 | 7 | 22,595 |
| 1970 Jul | 23,281 | 10,202 | 23,281 | $ 9,684.2 | 0.41 | 1 | 0.9414 | 23,281 | 74 | 4 | 2,841.0 | 7 | 20,469 |
| 1970 Aug | 19,603 | 7,331 | 19,684 | $ 6,901.4 | 0.35 | 1 | 0.9414 | 19,684 | 74 | 4 | 1,846.0 | 7 | 18,105 |
| 1970 Sep | 16,746 | 4,592 | 16,746 | $ 4,081.8 | 0.24 | 1 | 0.9414 | 16,746 | 74 | 4 | 2,027.0 | 7 | 14,786 |
| 1970 Oct | 16,945 | 4,641 | 16,945 | $ 3,604.2 | 0.22 | 1 | 0.9414 | 16,945 | 74 | 4 | 4,472.0 | 7 | 12,546 |
| 1970 Nov | 14,145 | 7,671 | 14,145 | $ 7,469.8 | 0.52 | 1 | 0.9414 | 14,145 | 0 | 0 | 2,834.0 | 0 | 11,311 |
| 1970 Dec | 12,378 | 9,488 | 12,378 | $ 7,582.6 | 0.61 | 1 | 0.9414 | 12,378 | 0 | 0 | 2,036.0 | 0 | 10,342 |
| 1971 Jan | 12,342 | 8,054 | 12,342 | $ 6,525.8 | 0.53 | 1 | 0.9414 | 12,342 | 28 | 1 | 1,012.0 | 2 | 11,351 |
| 1971 Feb | 15,508 | 8,035 | 15,508 | $ 7,580.3 | 0.49 | 1 | 0.9414 | 15,538 | 60 | 2 | 1,853.0 | 5 | 13,828 |
| 1971 Mar | 13,500 | 5,668 | 13,500 | $ 4,761.6 | 0.35 | 1 | 0.9414 | 19,569 | 60 | 2 | 1,876.0 | 5 | 17,695 |
| 1971 Apr | 25,489 | 7,885 | 25,489 | $ 7,304.1 | 0.29 | 1 | 0.9414 | 25,489 | 60 | 2 | 2,097.0 | 5 | 23,392 |
| 1971 May | 39,405 | 16,009 | 39,405 | $ 14,145.8 | 0.36 | 1 | 0.9414 | 38,458 | 60 | 2 | 1,736.0 | 5 | 37,716 |
| 1971 Jun | 24,573 | 9,798 | 24,573 | $ 9,216.3 | 0.38 | 1 | 0.9414 | 23,621 | 74 | 4 | 2,128.0 | 7 | 22,595 |
| 1971 Jul | 23,281 | 10,202 | 23,281 | $ 9,684.2 | 0.41 | 1 | 0.9414 | 23,281 | 74 | 4 | 2,841.0 | 7 | 20,469 |
| 1971 Aug | 19,603 | 7,331 | 19,684 | $ 6,901.4 | 0.35 | 1 | 0.9414 | 19,684 | 74 | 4 | 1,846.0 | 7 | 18,105 |
| 1971 Sep | 16,746 | 4,592 | 16,746 | $ 4,081.8 | 0.24 | 1 | 0.9414 | 16,746 | 74 | 4 | 2,027.0 | 7 | 14,786 |
| 1971 Oct | 16,945 | 4,641 | 16,945 | $ 3,604.2 | 0.22 | 1 | 0.9414 | 16,945 | 74 | 4 | 4,472.0 | 7 | 12,546 |
| 1971 Nov | 14,145 | 7,671 | 14,145 | $ 7,469.8 | 0.52 | 1 | 0.9414 | 14,145 | 0 | 0 | 2,834.0 | 0 | 11,311 |
| 1971 Dec | 12,378 | 9,488 | 12,378 | $ 7,582.6 | 0.61 | 1 | 0.9414 | 12,378 | 0 | 0 | 2,036.0 | 0 | 10,342 |
| 1972 Jan | 12,342 | 8,054 | 12,342 | $ 6,525.8 | 0.53 | 1 | 0.9414 | 12,342 | 28 | 1 | 1,012.0 | 2 | 11,351 |
| 1972 Feb | 15,508 | 8,035 | 15,508 | $ 7,580.3 | 0.49 | 1 | 0.9414 | 15,538 | 60 | 2 | 1,853.0 | 5 | 13,828 |
| 1972 Mar | 13,500 | 5,668 | 13,500 | $ 4,761.6 | 0.35 | 1 | 0.9414 | 19,569 | 60 | 2 | 1,876.0 | 5 | 17,695 |
| 1972 Apr | 25,489 | 7,885 | 25,489 | $ 7,304.1 | 0.29 | 1 | 0.9414 | 25,489 | 60 | 2 | 2,097.0 | 5 | 23,392 |
| 1972 May | 39,405 | 16,009 | 39,405 | $ 14,145.8 | 0.36 | 1 | 0.9414 | 38,458 | 60 | 2 | 1,736.0 | 5 | 37,716 |
| 1972 Jun | 24,573 | 9,798 | 24,573 | $ 9,216.3 | 0.38 | 1 | 0.9414 | 23,621 | 74 | 4 | 2,128.0 | 7 | 22,595 |
| 1972 Jul | 23,281 | 10,202 | 23,281 | $ 9,684.2 | 0.41 | 1 | 0.9414 | 23,281 | 74 | 4 | 2,841.0 | 7 | 20,469 |
| 1972 Aug | 19,603 | 7,331 | 19,684 | $ 6,901.4 | 0.35 | 1 | 0.9414 | 19,684 | 74 | 4 | 1,846.0 | 7 | 18,105 |
| 1972 Sep | 16,746 | 4,592 | 16,746 | $ 4,081.8 | 0.24 | 1 | 0.9414 | 16,746 | 74 | 4 | 2,027.0 | 7 | 14,786 |
| 1972 Oct | 16,945 | 4,641 | 16,945 | $ 3,604.2 | 0.22 | 1 | 0.9414 | 16,945 | 74 | 4 | 4,472.0 | 7 | 12,546 |
| 1972 Nov | 14,145 | 7,671 | 14,145 | $ 7,469.8 | 0.52 | 1 | 0.9414 | 14,145 | 0 | 0 | 2,834.0 | 0 | 11,311 |
| 1972 Dec | 12,378 | 9,488 | 12,378 | $ 7,582.6 | 0.61 | 1 | 0.9414 | 12,378 | 0 | 0 | 2,036.0 | 0 | 10,342 |

| Data Source | EUROSTAT | EUROSTAT | Auto Calc | Auto Calc | Auto Calc | EUROSTAT | | MI | FAO/ZMP | FAO/ZMP | FAO/ZMP Petroleos | FAO/ZMP | FAO/ZMP Petroleos | Auto Calc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Data | Import MT | Import Value CIF(000$ Curr) | Adj Q MT | Adj Value $(k) | CIF US$/Kg | Category (UIC/SITC Code) | Data (E.C.O.D.) | Exports MT | Production MT | Losses MT | Exports MT | Processing MT | Consumption MT |
| 1987 Totals | 308,965 | $ 315,986,000 | 308,965 | $ 315,986,000 | 1.02 | 1 | 1 (000) | 265,893 | 92,470 | 8,004 | 3,026.0 | 0.28 | 298,530.72 |
| 1988 Totals | 235,993 | $ 244,626,992 | 235,993 | $ 244,626,992 | 1.04 | 1 | 1 (000) | 225,993 | 89,952 | 4,208 | 2,560.0 | 8,749 | 296,498 |
| 1989 Totals | 253,342 | $ 320,750,000 | 231,342 | $ 329,756.0 | 0.98 | 1 | 1 (000) | 253,342 | 91,807 | 4,208 | 2,801.0 | 8,191 | 308,867 |
| 1990 Totals | 227,681 | $ 267,073,000 | 227,681 | $ 267,073.0 | 1.17 | 1 | 1 (000) | 227,681 | 101,687 | 5,143 | 2,178.0 | 10,085 | 311,303 |
| 1991 Totals | 243,789 | $ 298,987,000 | 243,789 | $ 296,087.0 | 1.21 | 1 | 1 (000) | 243,789 | 176,038 | 6,650 | 3,395.0 | 12,000 | 361,984 |
| 1992 Totals | 263,571 | $ 323,444,000 | 263,571 | $ 323,444.0 | 1.21 | 1 | 1 (000) | 263,571 | 118,000 | 5,900 | 2,730.0 | 11,800 | 361,183 |
| 1993 Totals | 349,695 | $ 357,106,000 | 349,695 | $ 357,106.0 | 1.02 | 1 | 1 (000) | 349,695 | 124,000 | 6,100 | 2,130.0 | 12,200 | 353,026 |
| 1994 Totals | 257,211 | $ 258,980,000 | 257,211 | $ 258,980.0 | 1.01 | 1 | 1 (000) | 257,211 | 128,000 | 6,030 | 2,560.0 | 12,800 | 380,218 |
| 1995 Totals | 280,736 | $ 274,521,000 | 280,736 | $ 274,521.0 | 1.14 | 1 | 1 (000) | 240,736 | 146,000 | 6,800 | 2,015.0 | 13,600 | 384,654 |
| 1996 Totals | 256,673 | $ 351,326,000 | 256,673 | $ 351,326.0 | 1.37 | 1 | 1 (000) | 256,673 | 130,000 | 6,758 | 3,030.0 | 13,508 | 367,967 |
| 1997 Totals | 277,663 | $ 362,637,000 | 277,663 | $ 362,637.0 | 1.31 | 1 | 1 (000) | 277,663 | 131,000 | 6,850 | 5,424.0 | 13,700 | 389,776 |
| 1998 Totals | 277,663 | $ 362,637,000 | 277,663 | $ 362,637.0 | 1.31 | 1 | 1 (000) | 277,663 | 151,000 | 7,850 | 6,824.0 | 15,700 | 409,016 |
| 1985 Jan | 10,452 | (6,600) | 10,452 | $ 9,978.8 | 0.95 | 1 | 0.0414 | 10,452 | 6,362 | 318 | 0.0 | 636 | 15,794 |
| 1985 Feb | 9,241 | (5,591) | 9,241 | $ 11,855.2 | 1.28 | 1 | 0.0414 | 9,241 | 0 | 0 | 89.0 | 0 | 0.000 |
| 1985 Mar | 10,836 | 12,000 | 10,836 | $ 11,333.6 | 1.05 | 1 | 0.0414 | 10,836 | 0 | 0 | 84.0 | 0 | 19,410 |
| 1985 Apr | 7,763 | 8,200 | 7,763 | $ 7,705.3 | 0.99 | 1 | 0.0414 | 7,763 | 0 | 0 | 136.0 | 0 | 0.000 |
| 1985 May | 8,968 | 7,800 | 8,968 | $ 7,401.7 | 0.83 | 1 | 0.0414 | 8,968 | 6,500 | 325 | 292.0 | 650 | 13,111 |
| 1985 Jun | 6,421 | 4,826 | 6,421 | $ 8,007.1 | 0.72 | 1 | 0.0414 | 6,421 | 18,000 | 585 | 88.0 | 1,800 | 27,316 |
| 1985 Jul | 2,284 | 1,836 | 2,284 | $ 1,542.6 | 0.68 | 1 | 0.0414 | 2,284 | 20,280 | 1,014 | 83.0 | 2,028 | 29,843 |
| 1985 Aug | 2,748 | 1,671 | 2,748 | $ 1,293.4 | 0.47 | 1 | 0.0414 | 2,748 | 85,000 | 4,250 | 0.0 | 8,500 | 79,500 |
| 1985 Sep | 1,348 | 1,298 | 1,348 | $ 1,012.8 | 0.75 | 1 | 0.0414 | 1,348 | 85,000 | 4,250 | 36.0 | 8,500 | 79,500 |
| 1985 Oct | 2,136 | 1,665 | 2,136 | $ 1,194.6 | 0.71 | 1 | 0.0414 | 2,136 | 18,000 | 585 | 149.0 | 1,800 | 18,132 |
| 1985 Nov | 4,602 | 4,418 | 4,602 | $ 3,450.1 | 0.75 | 1 | 0.0414 | 4,602 | 6,300 | 315 | 56.0 | 630 | 6,941 |
| 1985 Dec | 5,005 | 5,500 | 5,005 | $ 5,117.9 | 1.02 | 1 | 0.0414 | 5,005 | 3,780 | 189 | 56.0 | 378 | 3,913 |
| 1986 Jan | 10,452 | 10,000 | 10,452 | $ 9,978.8 | 0.95 | 1 | 0.0414 | 10,452 | 6,362 | 318 | 0.0 | 636 | 15,794 |
| 1986 Feb | 9,241 | 12,591 | 9,241 | $ 11,855.2 | 1.28 | 1 | 0.0414 | 9,241 | 0 | 0 | 89.0 | 0 | 0.000 |
| 1986 Mar | 10,836 | 12,000 | 10,836 | $ 11,333.6 | 1.05 | 1 | 0.0414 | 10,836 | 0 | 0 | 84.0 | 0 | 19,410 |
| 1986 Apr | 7,763 | 8,200 | 7,763 | $ 7,705.3 | 0.99 | 1 | 0.0414 | 7,763 | 0 | 0 | 136.0 | 0 | 0.000 |
| 1986 May | 8,968 | 7,800 | 8,968 | $ 7,401.7 | 0.83 | 1 | 0.0414 | 8,968 | 6,500 | 325 | 292.0 | 650 | 13,111 |
| 1986 Jun | 6,421 | 4,826 | 6,421 | $ 8,007.1 | 0.72 | 1 | 0.0414 | 6,421 | 18,000 | 585 | 88.0 | 1,800 | 27,316 |
| 1986 Jul | 2,284 | 1,836 | 2,284 | $ 1,542.6 | 0.68 | 1 | 0.0414 | 2,284 | 20,280 | 1,014 | 83.0 | 2,028 | 29,843 |
| 1986 Aug | 2,748 | 1,671 | 2,748 | $ 1,293.4 | 0.47 | 1 | 0.0414 | 2,748 | 85,000 | 4,250 | 36.0 | 8,500 | 79,500 |
| 1986 Sep | 1,348 | 1,298 | 1,348 | $ 1,012.8 | 0.75 | 1 | 0.0414 | 1,348 | 85,000 | 4,250 | 149.0 | 8,500 | 79,500 |
| 1986 Oct | 2,136 | 1,665 | 2,136 | $ 1,194.6 | 0.71 | 1 | 0.0414 | 2,136 | 18,000 | 585 | 56.0 | 1,800 | 18,132 |
| 1986 Nov | 4,602 | 4,418 | 4,602 | $ 3,450.1 | 0.75 | 1 | 0.0414 | 4,602 | 6,300 | 315 | 56.0 | 630 | 6,941 |
| 1986 Dec | 5,005 | 5,500 | 5,005 | $ 5,117.9 | 1.02 | 1 | 0.0414 | 5,005 | 3,780 | 189 | 56.0 | 378 | 3,913 |
| 1987 Jan | 10,452 | 10,000 | 10,452 | $ 9,978.8 | 0.95 | 1 | 0.0414 | 10,452 | 6,362 | 318 | 0.0 | 636 | 15,794 |
| 1987 Feb | 9,241 | 12,591 | 9,241 | $ 11,855.2 | 1.28 | 1 | 0.0414 | 9,241 | 0 | 0 | 89.0 | 0 | 0.000 |
| 1987 Mar | 10,836 | 12,000 | 10,836 | $ 11,333.6 | 1.05 | 1 | 0.0414 | 10,836 | 0 | 0 | 84.0 | 0 | 19,410 |
| 1987 Apr | 7,763 | 8,200 | 7,763 | $ 7,705.3 | 0.99 | 1 | 0.0414 | 7,763 | 0 | 0 | 136.0 | 0 | 0.000 |
| 1987 May | 8,968 | 7,800 | 8,968 | $ 7,401.7 | 0.83 | 1 | 0.0414 | 8,968 | 6,500 | 325 | 292.0 | 650 | 13,111 |
| 1987 Jun | 6,421 | 4,826 | 6,421 | $ 8,007.1 | 0.72 | 1 | 0.0414 | 6,421 | 18,000 | 585 | 88.0 | 1,800 | 27,316 |
| 1987 Jul | 2,284 | 1,836 | 2,284 | $ 1,542.6 | 0.68 | 1 | 0.0414 | 2,284 | 20,280 | 1,014 | 83.0 | 2,028 | 29,843 |
| 1987 Aug | 2,748 | 1,671 | 2,748 | $ 1,293.4 | 0.47 | 1 | 0.0414 | 2,748 | 85,000 | 4,250 | 36.0 | 8,500 | 79,500 |
| 1987 Sep | 1,348 | 1,298 | 1,348 | $ 1,012.8 | 0.75 | 1 | 0.0414 | 1,348 | 85,000 | 4,250 | 149.0 | 8,500 | 79,500 |
| 1987 Oct | 2,136 | 1,665 | 2,136 | $ 1,194.6 | 0.71 | 1 | 0.0414 | 2,136 | 18,000 | 585 | 56.0 | 1,800 | 18,132 |
| 1987 Nov | 4,602 | 4,418 | 4,602 | $ 3,450.1 | 0.75 | 1 | 0.0414 | 4,602 | 6,300 | 315 | 56.0 | 630 | 6,941 |
| 1987 Dec | 5,005 | 5,500 | 5,005 | $ 5,117.9 | 1.02 | 1 | 0.0414 | 5,005 | 3,780 | 189 | 56.0 | 378 | 3,913 |
| 1988 Jan | 10,452 | 10,000 | 10,452 | $ 9,978.8 | 0.95 | 1 | 0.0414 | 10,452 | 6,362 | 318 | 0.0 | 636 | 15,794 |
| 1988 Feb | 9,241 | 12,591 | 9,241 | $ 11,855.2 | 1.28 | 1 | 0.0414 | 9,241 | 0 | 0 | 89.0 | 0 | 0.000 |
| 1988 Mar | 10,836 | 12,000 | 10,836 | $ 11,333.6 | 1.05 | 1 | 0.0414 | 10,836 | 0 | 0 | 84.0 | 0 | 19,410 |
| 1988 Apr | 7,763 | 8,200 | 7,763 | $ 7,705.3 | 0.99 | 1 | 0.0414 | 7,763 | 0 | 0 | 136.0 | 0 | 0.000 |
| 1988 May | 8,968 | 7,800 | 8,968 | $ 7,401.7 | 0.83 | 1 | 0.0414 | 8,968 | 6,500 | 325 | 292.0 | 650 | 13,111 |
| 1988 Jun | 6,421 | 4,826 | 6,421 | $ 8,007.1 | 0.72 | 1 | 0.0414 | 6,421 | 18,000 | 585 | 88.0 | 1,800 | 27,316 |
| 1988 Jul | 2,284 | 1,836 | 2,284 | $ 1,542.6 | 0.68 | 1 | 0.0414 | 2,284 | 20,280 | 1,014 | 83.0 | 2,028 | 29,843 |
| 1988 Aug | 2,748 | 1,671 | 2,748 | $ 1,293.4 | 0.47 | 1 | 0.0414 | 2,748 | 85,000 | 4,250 | 36.0 | 8,500 | 79,500 |
| 1988 Sep | 1,348 | 1,298 | 1,348 | $ 1,012.8 | 0.75 | 1 | 0.0414 | 1,348 | 85,000 | 4,250 | 149.0 | 8,500 | 79,500 |
| 1988 Oct | 2,136 | 1,665 | 2,136 | $ 1,194.6 | 0.71 | 1 | 0.0414 | 2,136 | 18,000 | 585 | 56.0 | 1,800 | 18,132 |
| 1988 Nov | 4,602 | 4,418 | 4,602 | $ 3,450.1 | 0.75 | 1 | 0.0414 | 4,602 | 6,300 | 315 | 56.0 | 630 | 6,941 |
| 1988 Dec | 5,005 | 5,500 | 5,005 | $ 5,117.9 | 1.02 | 1 | 0.0414 | 5,005 | 3,780 | 189 | 56.0 | 378 | 3,913 |

| Data Source | EUROSTAT | EUROSTAT | Auto Calc. | Auto Calc. | Auto Calc. | EUROSTAT | IMF | FAO/ZMP | FAO/ZMP | FAO/ZMP Estimates | FAO/ZMP | FAO/ZMP Estimates | Auto Calc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Import | Import Value | Adj. Q MT | Adj. Value | CIF | Category | Rate | Imports | Production | Losses | Exports | Processing | Consumption |
| Units | MT | US$0MVE(3,0)0X | SITC | $000 | US$/Kg | SITC(R3) Qual | (ECOFS) | MT | MT | MT | MT | MT | MT |
| 1982 Totals | 14,826 | $ 20,185.0 | 14,826 | $ 20,185.0 | 1.36 | 1 | 1.0000 | 14,826 | 69,857 | 3,135 | 7,935.0 | 6,292 | 81,265 |
| 1983 Totals | 14,841 | $ 18,117.0 | 14,841 | $ 18,117.0 | 1.22 | 1 | 1.0000 | 14,841 | 75,086 | 3,754 | 5,736.0 | 7,509 | 78,926 |
| 1984 Totals | 15,097 | $ 19,621.0 | 15,097 | $ 19,621.0 | 1.30 | 1 | 1.0000 | 15,097 | 69,302 | 3,464 | 8,492.0 | 6,930 | 85,016 |
| 1985 Totals | 15,000 | $ 23,434.0 | 15,000 | $ 23,434.0 | 1.56 | 1 | 1.0000 | 15,000 | 47,460 | 2,373 | 6,835.0 | 4,746 | 88,775 |
| 1986 Totals | 15,780 | $ 25,400.0 | 15,780 | $ 25,400.0 | 1.61 | 1 | 1.0000 | 15,780 | 55,230 | 2,762 | 10,127.0 | 5,523 | 93,243 |
| 1987 Totals | 18,829 | $ 29,512.0 | 18,829 | $ 29,512.0 | 1.57 | 1 | 1.0000 | 18,829 | 69,178 | 3,459 | 8,618.0 | 6,918 | 106,888 |
| 1988 Totals | 19,721 | $ 28,152.0 | 19,721 | $ 28,152.0 | 1.47 | 1 | 1.0000 | 19,721 | 46,781 | 2,339 | 574.0 | 4,678 | 97,864 |
| 1989 Totals | 18,147 | $ 28,543.0 | 18,147 | $ 28,543.0 | 1.46 | 1 | 1.0000 | 18,147 | 38,107 | 1,905 | 540.0 | 3,811 | 99,015 |
| 1990 Totals | 17,134 | $ 26,404.0 | 17,134 | $ 26,404.0 | 1.38 | 1 | 1.0000 | 17,134 | 45,802 | 2,190 | 350.0 | 4,380 | 93,417 |
| 1991 Totals | 16,888 | $ 27,389.0 | 16,888 | $ 27,389.0 | 1.62 | 1 | 1.0000 | 16,888 | 48,695 | 2,439 | 1,950.0 | 4,881 | 86,230 |
| 1992 Totals | 17,113 | $ 25,764.0 | 17,113 | $ 25,764.0 | 1.51 | 1 | 1.0000 | 17,113 | 46,087 | 2,304 | 1,296.0 | 4,609 | 55,026 |
| 1993 Totals | 17,113 | $ 25,764.0 | 17,113 | $ 25,764.0 | 1.51 | 1 | 1.0000 | 17,113 | 46,200 | 2,310 | 1,296.0 | 4,620 | 55,126 |
| 1981 Jan | 821 | 1,505 | 821 | $ 1,410.1 | 2.27 | 1 | 0.9414 | 821 | 5,390 | 270 | 810 | 408 | 4,254 |
| 1981 Feb | 713 | 1,890 | 713 | $ 1,606.0 | 2.11 | 1 | 0.9414 | 713 | 5,390 | 270 | 36.0 | 408 | 4,254 |
| 1981 Mar | 751 | 1,551 | 751 | $ 1,460.1 | 1.94 | 1 | 0.9414 | 751 | 2,190 | 110 | 5.0 | 219 | 2,009 |
| 1982 Apr | 1,856 | 2,831 | 1,856 | $ 2,392.7 | 1.61 | 1 | 0.9414 | 1,566 | 0 | 0 | 50.0 | 0 | 1,703 |
| 1982 May | 1,079 | 2,626 | 1,077 | $ 2,470.1 | 2.42 | 1 | 0.9414 | 1,022 | 0 | 0 | 22.0 | 0 | 1,268 |
| 1982 Jun | 2,264 | 4,264 | 2,264 | $ 4,004.7 | 1.77 | 1 | 0.9414 | 2,264 | 0 | 0 | 175.0 | 0 | 2,078 |
| 1982 Jul | 2,130 | 4,660 | 2,130 | $ 4,077.5 | 2.05 | 1 | 0.9414 | 2,130 | 4,560 | 228 | 25.0 | 456 | 5,822 |
| 1982 Aug | 1,150 | 1,090 | 1,150 | $ 1,026.1 | 0.89 | 1 | 0.9414 | 1,150 | 6,840 | 342 | 131.0 | 684 | 6,975 |
| 1982 Sep | 1,448 | 1,361 | 1,448 | $ 1,271.8 | 0.88 | 1 | 0.9414 | 1,448 | 6,840 | 342 | 46.0 | 684 | 7,278 |
| 1982 Oct | 2,157 | 1,648 | 2,157 | $ 1,883.8 | 0.85 | 1 | 0.9414 | 2,157 | 6,840 | 342 | 328.0 | 684 | 7,105 |
| 1982 Nov | 1,491 | 1,908 | 1,491 | $ 1,824.4 | 1.22 | 1 | 0.9414 | 1,491 | 6,840 | 342 | 327.0 | 684 | 6,981 |
| 1982 Dec | 1,582 | 1,822 | 1,582 | $ 1,715.2 | 1.08 | 1 | 0.9414 | 1,582 | 6,840 | 342 | 1,108.0 | 684 | 6,981 |
| 1983 Jan | 821 | 1,505 | 821 | $ 1,410.1 | 2.27 | 1 | 0.9414 | 821 | 6,840 | 342 | 80.0 | 684 | 6,998 |
| 1983 Feb | 713 | 1,890 | 713 | $ 1,606.0 | 2.11 | 1 | 0.9414 | 713 | 6,840 | 342 | 95.0 | 684 | 6,945 |
| 1983 Mar | 751 | 1,551 | 751 | $ 1,460.1 | 1.94 | 1 | 0.9414 | 751 | 6,840 | 342 | 38.0 | 684 | 6,708 |
| 1983 Apr | 1,856 | 2,831 | 1,856 | $ 2,392.7 | 1.29 | 1 | 0.9414 | 1,566 | 0 | 0 | 50.0 | 0 | 1,533 |
| 1983 May | 1,079 | 2,626 | 1,077 | $ 2,470.1 | 2.42 | 1 | 0.9414 | 1,022 | 0 | 0 | 22.0 | 0 | 1,000 |
| 1983 Jun | 2,264 | 4,264 | 2,264 | $ 4,004.7 | 1.77 | 1 | 0.9414 | 2,264 | 0 | 0 | 175.0 | 0 | 2,089 |
| 1983 Jul | 2,130 | 4,660 | 2,130 | $ 4,077.5 | 2.05 | 1 | 0.9414 | 2,130 | 4,560 | 228 | 25.0 | 456 | 5,822 |
| 1983 Aug | 1,150 | 1,090 | 1,150 | $ 1,026.1 | 0.89 | 1 | 0.9414 | 1,150 | 6,840 | 342 | 131.0 | 684 | 6,975 |
| 1983 Sep | 1,448 | 1,361 | 1,448 | $ 1,271.8 | 0.88 | 1 | 0.9414 | 1,448 | 6,840 | 342 | 46.0 | 684 | 7,278 |
| 1983 Oct | 2,157 | 1,648 | 2,157 | $ 1,883.8 | 0.85 | 1 | 0.9414 | 2,157 | 6,840 | 342 | 328.0 | 684 | 7,105 |
| 1983 Nov | 1,491 | 1,908 | 1,491 | $ 1,824.4 | 1.22 | 1 | 0.9414 | 1,491 | 6,840 | 342 | 327.0 | 684 | 6,981 |
| 1983 Dec | 1,582 | 1,822 | 1,582 | $ 1,715.2 | 1.08 | 1 | 0.9414 | 1,582 | 6,840 | 342 | 1,108.0 | 684 | 6,981 |
| 1984 Jan | 821 | 1,505 | 821 | $ 1,410.1 | 2.27 | 1 | 0.9414 | 821 | 6,840 | 342 | 80.0 | 684 | 6,998 |
| 1984 Feb | 713 | 1,890 | 713 | $ 1,606.0 | 2.11 | 1 | 0.9414 | 713 | 6,840 | 342 | 95.0 | 684 | 6,945 |
| 1984 Mar | 751 | 1,551 | 751 | $ 1,460.1 | 1.94 | 1 | 0.9414 | 751 | 6,840 | 342 | 38.0 | 684 | 6,708 |
| 1984 Apr | 1,856 | 2,831 | 1,856 | $ 2,392.7 | 1.29 | 1 | 0.9414 | 1,566 | 0 | 0 | 50.0 | 0 | 1,533 |
| 1984 May | 1,079 | 2,626 | 1,077 | $ 2,470.1 | 2.42 | 1 | 0.9414 | 1,022 | 0 | 0 | 22.0 | 0 | 1,000 |
| 1984 Jun | 2,264 | 4,264 | 2,264 | $ 4,004.7 | 1.77 | 1 | 0.9414 | 2,264 | 0 | 0 | 175.0 | 0 | 2,089 |
| 1984 Jul | 2,130 | 4,660 | 2,130 | $ 4,077.5 | 2.05 | 1 | 0.9414 | 2,130 | 4,560 | 228 | 25.0 | 456 | 5,822 |
| 1984 Aug | 1,150 | 1,090 | 1,150 | $ 1,026.1 | 0.89 | 1 | 0.9414 | 1,150 | 6,840 | 342 | 131.0 | 684 | 6,975 |
| 1984 Sep | 1,448 | 1,361 | 1,448 | $ 1,271.8 | 0.88 | 1 | 0.9414 | 1,448 | 6,840 | 342 | 46.0 | 684 | 7,278 |
| 1984 Oct | 2,157 | 1,648 | 2,157 | $ 1,883.8 | 0.85 | 1 | 0.9414 | 2,157 | 6,840 | 342 | 328.0 | 684 | 7,105 |
| 1984 Nov | 1,491 | 1,908 | 1,491 | $ 1,824.4 | 1.22 | 1 | 0.9414 | 1,491 | 6,840 | 342 | 327.0 | 684 | 6,981 |
| 1984 Dec | 1,582 | 1,822 | 1,582 | $ 1,715.2 | 1.08 | 1 | 0.9414 | 1,582 | 6,840 | 342 | 1,108.0 | 684 | 6,981 |

| Data Source | EUROSTAT | EUROSTAT | Auto Calc | Auto Calc | Auto Calc | EUROSTAT | IMF | FAO/IMF | FAO/IMF | FAO/IMF | FAO/IMF | FAO/IMF | Auto Calc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Import | Import Value | Adj. (-) MT | Adj. Values | CIF | Category | Exchange | Imports | Production | Estimated Losses | Exports | Estimated Distribution | Domestic |
| Units | MT | $/$EUR Change | $/EU | $/EU | (2015=1) | (1=EU15, 2=x) | Rate | MT | MT | MT | MT | Pass-through | Consumption |
| 1987 Totals | 189,503 | $ 98,670,000 | 189,503 | $ 98,670.0 | 0.54 | 1 | 1.0000 | 190,503 | 262,000 | 10,100 | 82,112.0 | 20,000 | 361,125 |
| 1988 Totals | 178,804 | $ 74,494,000 | 178,804 | $ 74,494.0 | 0.42 | 1 | 1.0000 | 178,804 | 270,000 | 10,000 | 124,574.0 | 21,000 | 341,030 |
| 1989 Totals | 167,042 | $ 70,814,000 | 167,042 | $ 70,814.0 | 0.42 | 1 | 1.0000 | 167,042 | 279,000 | 11,000 | 124,574.0 | 21,000 | 341,030 |
| 1990 Totals | 170,203 | $ 94,867,000 | 170,203 | $ 94,867.0 | 0.56 | 1 | 1.0000 | 170,203 | 270,000 | 11,000 | 82,112.0 | 20,000 | 341,030 |
| 1991 Totals | 180,968 | $ 97,264,000 | 180,968 | $ 97,264.0 | 0.54 | 1 | 1.0000 | 180,968 | 270,000 | 10,000 | 82,112.0 | 20,000 | 341,030 |
| 1992 Totals | 153,181 | $ 84,856,000 | 153,181 | $ 84,856.0 | 0.55 | 1 | 1.0000 | 153,181 | 270,000 | 10,000 | 82,112.0 | 20,000 | 341,030 |
| 1993 Totals | 137,900 | $ 88,267,000 | 137,900 | $ 88,267.0 | 0.64 | 1 | 1.0000 | 137,900 | 270,000 | 10,000 | 82,112.0 | 20,000 | 341,030 |
| 1994 Totals | 146,834 | $ 111,461,000 | 146,834 | $ 111,461.0 | 0.76 | 1 | 1.0000 | 146,834 | 270,000 | 10,000 | 82,112.0 | 20,000 | 341,030 |
| 1995 Totals | 151,812 | $ 134,224,000 | 151,812 | $ 134,224.0 | 0.88 | 1 | 1.0000 | 151,812 | 270,000 | 10,000 | 82,112.0 | 20,000 | 341,030 |
| 1996 Totals | 158,883 | $ 87,136,000 | 158,883 | $ 87,136.0 | 0.55 | 1 | 1.0000 | 158,883 | 270,000 | 10,000 | 82,112.0 | 20,000 | 341,030 |
| 1997 Totals | 118,830 | $ 89,117,000 | 118,830 | $ 89,117.0 | 0.75 | 1 | 1.0000 | 118,830 | 270,000 | 10,000 | 82,112.0 | 20,000 | 341,030 |
| 1998 Totals | 118,830 | $ 89,117,000 | 118,830 | $ 89,117.0 | 0.75 | 1 | 1.0000 | 118,830 | 270,000 | 10,000 | 82,112.0 | 20,000 | 341,030 |
| 1999 Jan | 8,810 | 3,964 | 8,810 | $ 3,964.5 | 0.45 | 1 | 0.9418 | 8,810 | 21,633 | 1,100 | 10,411.0 | 2,000 | 28,855 |
| 1999 Feb | 8,445 | 3,800 | 8,445 | $ 3,800.3 | 0.45 | 1 | 0.9418 | 8,445 | 21,633 | 1,100 | 10,411.0 | 2,000 | 28,855 |
| 1999 Mar | 6,170 | 3,698 | 6,170 | $ 3,698.0 | 0.60 | 1 | 0.9418 | 6,170 | 23,645 | 1,100 | 10,411.0 | 2,000 | 28,855 |
| 1999 Apr | 5,400 | 3,645 | 5,400 | $ 3,644.9 | 0.68 | 1 | 0.9418 | 5,400 | 25,485 | 1,275 | 10,411.0 | 2,000 | 30,354 |
| 1999 May | 2,850 | 3,433 | 2,850 | $ 3,211.8 | 0.48 | 1 | 0.9418 | 2,850 | 25,485 | 1,275 | 10,411.0 | 2,000 | 30,354 |
| 1999 Jun | 2,600 | 3,039 | 2,600 | $ 3,039.4 | 0.49 | 1 | 0.9418 | 2,600 | 25,485 | 1,275 | 10,411.0 | 2,000 | 30,354 |
| 1999 Jul | 6,660 | 3,017 | 6,660 | $ 3,017.0 | 0.47 | 1 | 0.9418 | 6,660 | 25,485 | 1,275 | 10,411.0 | 2,000 | 30,354 |
| 1999 Aug | 7,380 | 3,004 | 7,380 | $ 3,004.3 | 0.43 | 1 | 0.9418 | 6,960 | 25,485 | 1,275 | 10,411.0 | 2,000 | 30,354 |
| 1999 Sep | 5,500 | 3,146 | 5,500 | $ 3,146.3 | 0.60 | 1 | 0.9418 | 5,500 | 27,000 | 1,350 | 10,411.0 | 2,000 | 31,979 |
| 1999 Oct | 5,205 | 3,015 | 5,205 | $ 3,015.3 | 0.62 | 1 | 0.9418 | 5,205 | 0 | 0 | 241.0 | 0 | 5,205 |
| 1999 Nov | 2,934 | 3,100 | 2,934 | $ 2,882.1 | 0.52 | 1 | 0.9418 | 2,934 | 0 | 0 | 276.0 | 0 | 5,210 |
| 1999 Dec | 2,934 | 6,109 | 2,934 | $ 4,264.0 | 1.04 | 1 | 0.9418 | 2,934 | 0 | 0 | 314.0 | 0 | 5,210 |
| 2000 Jan | 8,810 | 3,964 | 8,810 | $ 3,964.5 | 0.45 | 1 | 0.9418 | 8,810 | 0 | 0 | 314.0 | 0 | 5,210 |
| 2000 Feb | 8,445 | 3,800 | 8,445 | $ 3,800.3 | 0.45 | 1 | 0.9418 | 8,445 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2000 Mar | 6,170 | 3,698 | 6,170 | $ 3,698.0 | 0.60 | 1 | 0.9418 | 6,170 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2000 Apr | 5,400 | 3,645 | 5,400 | $ 3,644.9 | 0.68 | 1 | 0.9418 | 5,400 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2000 May | 4,500 | 3,433 | 4,500 | $ 3,211.8 | 0.71 | 1 | 0.9418 | 4,500 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2000 Jun | 7,020 | 3,039 | 7,020 | $ 3,039.4 | 0.43 | 1 | 0.9418 | 7,020 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2000 Jul | 6,660 | 3,017 | 6,660 | $ 3,017.0 | 0.45 | 1 | 0.9418 | 6,660 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2000 Aug | 7,380 | 3,004 | 7,380 | $ 3,004.3 | 0.41 | 1 | 0.9418 | 6,960 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2000 Sep | 5,500 | 3,146 | 5,500 | $ 3,146.3 | 0.57 | 1 | 0.9418 | 5,500 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2000 Oct | 5,205 | 3,015 | 5,205 | $ 3,015.3 | 0.58 | 1 | 0.9418 | 5,205 | 0 | 0 | 241.0 | 0 | 5,205 |
| 2000 Nov | 2,934 | 3,100 | 2,934 | $ 2,882.1 | 0.49 | 1 | 0.9418 | 2,934 | 0 | 0 | 276.0 | 0 | 5,210 |
| 2000 Dec | 2,934 | 6,109 | 2,934 | $ 4,264.0 | 1.00 | 1 | 0.9418 | 2,934 | 0 | 0 | 314.0 | 0 | 5,210 |
| 2001 Jan | 8,810 | 3,964 | 8,810 | $ 3,964.5 | 0.45 | 1 | 0.9418 | 8,810 | 0 | 0 | 314.0 | 0 | 5,210 |
| 2001 Feb | 8,445 | 3,800 | 8,445 | $ 3,800.3 | 0.45 | 1 | 0.9418 | 8,445 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2001 Mar | 6,170 | 3,698 | 6,170 | $ 3,698.0 | 0.60 | 1 | 0.9418 | 6,170 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2001 Apr | 5,400 | 3,645 | 5,400 | $ 3,644.9 | 0.68 | 1 | 0.9418 | 5,400 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2001 May | 4,500 | 3,433 | 4,500 | $ 3,211.8 | 0.71 | 1 | 0.9418 | 4,500 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2001 Jun | 7,020 | 3,039 | 7,020 | $ 3,039.4 | 0.43 | 1 | 0.9418 | 7,020 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2001 Jul | 6,660 | 3,017 | 6,660 | $ 3,017.0 | 0.45 | 1 | 0.9418 | 6,660 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2001 Aug | 7,380 | 3,004 | 7,380 | $ 3,004.3 | 0.41 | 1 | 0.9418 | 6,960 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2001 Sep | 5,500 | 3,146 | 5,500 | $ 3,146.3 | 0.57 | 1 | 0.9418 | 5,500 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2001 Oct | 5,205 | 3,015 | 5,205 | $ 3,015.3 | 0.58 | 1 | 0.9418 | 5,205 | 0 | 0 | 241.0 | 0 | 5,205 |
| 2001 Nov | 2,934 | 3,100 | 2,934 | $ 2,882.1 | 0.49 | 1 | 0.9418 | 2,934 | 0 | 0 | 276.0 | 0 | 5,210 |
| 2001 Dec | 2,934 | 6,109 | 2,934 | $ 4,264.0 | 1.00 | 1 | 0.9418 | 2,934 | 0 | 0 | 314.0 | 0 | 5,210 |
| 2002 Jan | 8,810 | 3,964 | 8,810 | $ 3,964.5 | 0.45 | 1 | 0.9418 | 8,810 | 0 | 0 | 314.0 | 0 | 5,210 |
| 2002 Feb | 8,445 | 3,800 | 8,445 | $ 3,800.3 | 0.45 | 1 | 0.9418 | 8,445 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2002 Mar | 6,170 | 3,698 | 6,170 | $ 3,698.0 | 0.60 | 1 | 0.9418 | 6,170 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2002 Apr | 5,400 | 3,645 | 5,400 | $ 3,644.9 | 0.68 | 1 | 0.9418 | 5,400 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2002 May | 4,500 | 3,433 | 4,500 | $ 3,211.8 | 0.71 | 1 | 0.9418 | 4,500 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2002 Jun | 7,020 | 3,039 | 7,020 | $ 3,039.4 | 0.43 | 1 | 0.9418 | 7,020 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2002 Jul | 6,660 | 3,017 | 6,660 | $ 3,017.0 | 0.45 | 1 | 0.9418 | 6,660 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2002 Aug | 7,380 | 3,004 | 7,380 | $ 3,004.3 | 0.41 | 1 | 0.9418 | 6,960 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2002 Sep | 5,500 | 3,146 | 5,500 | $ 3,146.3 | 0.57 | 1 | 0.9418 | 5,500 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2002 Oct | 5,205 | 3,015 | 5,205 | $ 3,015.3 | 0.58 | 1 | 0.9418 | 5,205 | 0 | 0 | 241.0 | 0 | 5,205 |
| 2002 Nov | 2,934 | 3,100 | 2,934 | $ 2,882.1 | 0.49 | 1 | 0.9418 | 2,934 | 0 | 0 | 276.0 | 0 | 5,210 |
| 2002 Dec | 2,934 | 6,109 | 2,934 | $ 4,264.0 | 1.00 | 1 | 0.9418 | 2,934 | 0 | 0 | 314.0 | 0 | 5,210 |
| 2003 Jan | 8,810 | 3,964 | 8,810 | $ 3,964.5 | 0.45 | 1 | 0.9418 | 8,810 | 0 | 0 | 314.0 | 0 | 5,210 |
| 2003 Feb | 8,445 | 3,800 | 8,445 | $ 3,800.3 | 0.45 | 1 | 0.9418 | 8,445 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2003 Mar | 6,170 | 3,698 | 6,170 | $ 3,698.0 | 0.60 | 1 | 0.9418 | 6,170 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2003 Apr | 5,400 | 3,645 | 5,400 | $ 3,644.9 | 0.68 | 1 | 0.9418 | 5,400 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2003 May | 4,500 | 3,433 | 4,500 | $ 3,211.8 | 0.71 | 1 | 0.9418 | 4,500 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2003 Jun | 7,020 | 3,039 | 7,020 | $ 3,039.4 | 0.43 | 1 | 0.9418 | 7,020 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2003 Jul | 6,660 | 3,017 | 6,660 | $ 3,017.0 | 0.45 | 1 | 0.9418 | 6,660 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2003 Aug | 7,380 | 3,004 | 7,380 | $ 3,004.3 | 0.41 | 1 | 0.9418 | 6,960 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2003 Sep | 5,500 | 3,146 | 5,500 | $ 3,146.3 | 0.57 | 1 | 0.9418 | 5,500 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2003 Oct | 5,205 | 3,015 | 5,205 | $ 3,015.3 | 0.58 | 1 | 0.9418 | 5,205 | 0 | 0 | 241.0 | 0 | 5,205 |
| 2003 Nov | 2,934 | 3,100 | 2,934 | $ 2,882.1 | 0.49 | 1 | 0.9418 | 2,934 | 0 | 0 | 276.0 | 0 | 5,210 |
| 2003 Dec | 2,934 | 6,109 | 2,934 | $ 4,264.0 | 1.00 | 1 | 0.9418 | 2,934 | 0 | 0 | 314.0 | 0 | 5,210 |
| 2004 Jan | 8,810 | 3,964 | 8,810 | $ 3,964.5 | 0.45 | 1 | 0.9418 | 8,810 | 0 | 0 | 314.0 | 0 | 5,210 |
| 2004 Feb | 8,445 | 3,800 | 8,445 | $ 3,800.3 | 0.45 | 1 | 0.9418 | 8,445 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2004 Mar | 6,170 | 3,698 | 6,170 | $ 3,698.0 | 0.60 | 1 | 0.9418 | 6,170 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2004 Apr | 5,400 | 3,645 | 5,400 | $ 3,644.9 | 0.68 | 1 | 0.9418 | 5,400 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2004 May | 4,500 | 3,433 | 4,500 | $ 3,211.8 | 0.71 | 1 | 0.9418 | 4,500 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2004 Jun | 7,020 | 3,039 | 7,020 | $ 3,039.4 | 0.43 | 1 | 0.9418 | 7,020 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2004 Jul | 6,660 | 3,017 | 6,660 | $ 3,017.0 | 0.45 | 1 | 0.9418 | 6,660 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2004 Aug | 7,380 | 3,004 | 7,380 | $ 3,004.3 | 0.41 | 1 | 0.9418 | 6,960 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2004 Sep | 5,500 | 3,146 | 5,500 | $ 3,146.3 | 0.57 | 1 | 0.9418 | 5,500 | 27,000 | 1,350 | 314.0 | 2,000 | 32,489 |
| 2004 Oct | 5,205 | 3,015 | 5,205 | $ 3,015.3 | 0.58 | 1 | 0.9418 | 5,205 | 0 | 0 | 241.0 | 0 | 5,205 |
| 2004 Nov | 2,934 | 3,100 | 2,934 | $ 2,882.1 | 0.49 | 1 | 0.9418 | 2,934 | 0 | 0 | 276.0 | 0 | 5,210 |
| 2004 Dec | 2,934 | 6,109 | 2,934 | $ 4,264.0 | 1.00 | 1 | 0.9418 | 2,934 | 0 | 0 | 314.0 | 0 | 5,210 |

| Data Source | EUROSTAT | EUROSTAT | Auto Calc. | Auto Calc. | Auto Calc. | EUROSTAT | IMF | FAOZSMP | FAOZSMP | FAOZSMP Estimates | FAOZSMP | FAOZSMP Estimates | Auto Calc. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Import MT | Import Value $8000$,000 | Adj. Q MT (1YD) | Adj. Value $000 | CIF US$/kg | Category SITC/HS Cod | Rate (EC/US$) | Imports MT | Production MT | Losses MT | Exports MT | Processing MT | Consumption MT |
| 1987 Totals | 2,894 | $ 7,317.00 | 2,894 | $ 7,317.0 | 2.53 | 1 | 1.0000 | 2,894 | 0 | 0 | 80.0 | 0 | 2,814 |
| 1988 Totals | 2,981 | $ 7,218.00 | 2,981 | $ 7,218.0 | 2.42 | 1 | 1.0000 | 2,981 | 0 | 0 | 153.0 | 0 | 2,828 |
| 1989 Totals | 3,818 | $ 8,375.00 | 3,818 | $ 8,375.0 | 2.19 | 1 | 1.0000 | 3,818 | 0 | 0 | 172.0 | 0 | 3,646 |
| 1990 Totals | 4,151 | $ 10,843.00 | 4,151 | $ 10,843.0 | 2.61 | 1 | 1.0000 | 4,151 | 0 | 0 | 361.0 | 0 | 3,790 |
| 1991 Totals | 4,319 | $ 10,821.00 | 4,319 | $ 10,821.0 | 2.51 | 1 | 1.0000 | 4,319 | 0 | 0 | 385.0 | 0 | 3,934 |
| 1992 Totals | 4,457 | $ 12,429.00 | 4,457 | $ 12,429.0 | 2.80 | 1 | 1.0000 | 4,457 | 0 | 0 | 476.0 | 0 | 3,981 |
| 1993 Totals | 5,775 | $ 12,570.00 | 5,775 | $ 12,570.0 | 2.18 | 1 | 1.0000 | 5,775 | 0 | 0 | 359.0 | 0 | 5,416 |
| 1994 Totals | 4,040 | $ 11,136.00 | 4,040 | $ 11,136.0 | 2.80 | 1 | 1.0000 | 4,040 | 0 | 0 | 589.0 | 0 | 3,451 |
| 1995 Totals | 4,291 | $ 11,030.00 | 4,291 | $ 11,030.0 | 2.64 | 1 | 1.0000 | 4,291 | 0 | 0 | 448.0 | 0 | 3,843 |
| 1996 Totals | 4,991 | $ 12,458.00 | 4,991 | $ 12,458.0 | 2.59 | 1 | 1.0000 | 4,691 | 0 | 0 | 284.0 | 0 | 4,177 |
| 1997 Totals | 5,182 | $ 11,860.00 | 5,182 | $ 11,860.0 | 2.29 | 1 | 1.0000 | 5,182 | 0 | 0 | 709.0 | 0 | 4,473 |
| 1998 Totals | 5,182 | $ 11,860.00 | 5,182 | $ 11,860.0 | 2.29 | 1 | 1.0000 | 5,182 | 0 | 0 | 401.0 | 0 | 4,473 |
| 1995 Jan | 800 | 700 | 800 | $ 699.0 | 1.80 | 1 | 0.9418 | 500 | 0 | 0 | 80.0 | 0 | 420 |
| 1995 Feb | 600 | 800 | 600 | $ 577.0 | 1.48 | 1 | 0.9418 | 400 | 0 | 0 | 32.0 | 0 | 368 |
| 1995 Mar | 124 | 290 | 124 | $ 210.0 | 1.70 | 1 | 0.9418 | 124 | 0 | 0 | 32.0 | 0 | 92 |
| 1995 Apr | 164 | 335 | 164 | $ 316.0 | 1.73 | 1 | 0.9418 | 164 | 0 | 0 | 32.0 | 0 | 132 |
| 1995 May | 146 | 190 | 136 | $ 160.0 | 1.16 | 1 | 0.9418 | 146 | 0 | 0 | 32.0 | 0 | 114 |
| 1995 Jun | 83 | 163 | 83 | $ 153.0 | 1.85 | 1 | 0.9418 | 83 | 0 | 0 | 32.0 | 0 | 51 |
| 1995 Jul | 82 | 102 | 82 | $ 84.0 | 1.05 | 1 | 0.9418 | 82 | 0 | 0 | 32.0 | 0 | 50 |
| 1995 Aug | 171 | 477 | 171 | $ 260.0 | 1.52 | 1 | 0.9418 | 171 | 0 | 0 | 32.0 | 0 | 139 |
| 1995 Sep | 537 | 1,051 | 137 | $ 253.0 | 1.84 | 1 | 0.9418 | 537 | 0 | 0 | 32.0 | 0 | 505 |
| 1995 Oct | 830 | 1,886 | 530 | $ 1,151.0 | 2.28 | 1 | 0.9418 | 329 | 0 | 0 | 41.0 | 0 | 496 |
| 1995 Nov | 1,083 | 2,511 | 1,083 | $ 2,403.0 | 2.07 | 1 | 0.9418 | 1,083 | 0 | 0 | 159.0 | 0 | 924 |
| 1995 Dec | 933 | 1,810 | 533 | $ 1,703.0 | 2.02 | 1 | 0.9418 | 533 | 0 | 0 | 148.0 | 0 | 385 |
| 1996 Jan | 530 | 700 | 500 | $ 654.0 | 1.62 | 1 | 0.9418 | 500 | 0 | 0 | 80.0 | 0 | 420 |
| 1996 Feb | 403 | 606 | 403 | $ 617.0 | 1.65 | 1 | 0.9418 | 403 | 0 | 0 | 16.0 | 0 | 387 |
| 1996 Mar | 154 | 260 | 154 | $ 216.0 | 1.75 | 1 | 0.9418 | 154 | 0 | 0 | 27.0 | 0 | 127 |
| 1996 Apr | 154 | 268 | 154 | $ 216.0 | 1.73 | 1 | 0.9418 | 154 | 0 | 0 | 18.0 | 0 | 136 |
| 1996 May | 146 | 190 | 146 | $ 160.0 | 1.16 | 1 | 0.9418 | 146 | 0 | 0 | 54.0 | 0 | 92 |
| 1996 Jun | 83 | 163 | 83 | $ 153.0 | 1.85 | 1 | 0.9418 | 83 | 0 | 0 | 32.0 | 0 | 51 |
| 1996 Jul | 82 | 102 | 82 | $ 84.0 | 1.05 | 1 | 0.9418 | 82 | 0 | 0 | 32.0 | 0 | 50 |
| 1996 Aug | 171 | 477 | 171 | $ 260.0 | 1.52 | 1 | 0.9418 | 171 | 0 | 0 | 32.0 | 0 | 139 |
| 1996 Sep | 537 | 1,051 | 137 | $ 253.0 | 1.84 | 1 | 0.9418 | 537 | 0 | 0 | 32.0 | 0 | 505 |
| 1996 Oct | 830 | 1,886 | 530 | $ 1,151.0 | 2.28 | 1 | 0.9418 | 329 | 0 | 0 | 41.0 | 0 | 496 |
| 1996 Nov | 1,083 | 2,511 | 1,083 | $ 2,403.0 | 2.07 | 1 | 0.9418 | 1,083 | 0 | 0 | 159.0 | 0 | 924 |
| 1996 Dec | 933 | 1,810 | 533 | $ 1,703.0 | 2.02 | 1 | 0.9418 | 533 | 0 | 0 | 148.0 | 0 | 385 |
| 1997 Jan | 500 | 700 | 500 | $ 654.0 | 1.62 | 1 | 0.9418 | 500 | 0 | 0 | 80.0 | 0 | 420 |
| 1997 Feb | 403 | 606 | 403 | $ 617.0 | 1.65 | 1 | 0.9418 | 403 | 0 | 0 | 16.0 | 0 | 387 |
| 1997 Mar | 154 | 269 | 124 | $ 216.0 | 1.75 | 1 | 0.9418 | 154 | 0 | 0 | 27.0 | 0 | 127 |
| 1997 Apr | 184 | 358 | 184 | $ 316.0 | 1.73 | 1 | 0.9418 | 184 | 0 | 0 | 18.0 | 0 | 166 |
| 1997 May | 146 | 190 | 146 | $ 160.0 | 1.16 | 1 | 0.9418 | 146 | 0 | 0 | 54.0 | 0 | 92 |
| 1997 Jun | 83 | 163 | 83 | $ 153.0 | 1.85 | 1 | 0.9418 | 83 | 0 | 0 | 32.0 | 0 | 51 |
| 1997 Jul | 82 | 102 | 82 | $ 86.0 | 1.04 | 1 | 0.9418 | 82 | 0 | 0 | 11.0 | 0 | 71 |
| 1997 Aug | 171 | 277 | 171 | $ 260.0 | 1.52 | 1 | 0.9418 | 171 | 0 | 0 | 77.0 | 0 | 15 |
| 1997 Sep | 537 | 1,051 | 537 | $ 980.0 | 1.84 | 1 | 0.9418 | 537 | 0 | 0 | 95.0 | 0 | 136 |
| 1997 Oct | 530 | 1,086 | 540 | $ 1,191.0 | 2.09 | 1 | 0.9418 | 329 | 0 | 0 | 41.0 | 0 | 488 |
| 1997 Nov | 1,083 | 2,511 | 1,083 | $ 2,403.0 | 2.07 | 1 | 0.9418 | 1,083 | 0 | 0 | 159.0 | 0 | 924 |
| 1997 Dec | 933 | 1,810 | 533 | $ 1,703.0 | 2.00 | 1 | 0.9418 | 805 | 0 | 0 | 81.0 | 0 | 724 |
| 1998 Jan | 500 | 700 | 500 | $ 658.0 | 1.06 | 1 | 0.9418 | 500 | 0 | 0 | 16.0 | 0 | 480 |
| 1998 Feb | 403 | 606 | 403 | $ 617.0 | 1.65 | 1 | 0.9418 | 403 | 0 | 0 | 27.0 | 0 | 403 |
| 1998 Mar | 124 | 269 | 124 | $ 216.0 | 1.75 | 1 | 0.9418 | 124 | 0 | 0 | 18.0 | 0 | 106 |
| 1998 Apr | 184 | 336 | 184 | $ 316.0 | 1.73 | 1 | 0.9418 | 184 | 0 | 0 | 54.0 | 0 | 130 |
| 1998 May | 146 | 190 | 146 | $ 160.0 | 1.15 | 1 | 0.9418 | 146 | 0 | 0 | 32.0 | 0 | 126 |
| 1998 Jun | 83 | 163 | 83 | $ 153.0 | 1.85 | 1 | 0.9418 | 83 | 0 | 0 | 11.0 | 0 | 72 |
| 1998 Jul | 82 | 102 | 82 | $ 86.0 | 1.05 | 1 | 0.9418 | 82 | 0 | 0 | 77.0 | 0 | 15 |
| 1998 Aug | 171 | 277 | 171 | $ 260.0 | 1.52 | 1 | 0.9418 | 171 | 0 | 0 | 95.0 | 0 | 136 |
| 1998 Sep | 537 | 1,051 | 537 | $ 980.0 | 1.84 | 1 | 0.9418 | 537 | 0 | 0 | 41.0 | 0 | 496 |
| 1998 Oct | 530 | 1,268 | 528 | $ 1,181.0 | 2.09 | 1 | 0.9418 | 329 | 0 | 0 | 159.0 | 0 | 924 |
| 1998 Nov | 1,083 | 2,511 | 1,083 | $ 2,403.0 | 2.07 | 1 | 0.9418 | 1,083 | 0 | 0 | 148.0 | 0 | 385 |
| 1998 Dec | 933 | 1,810 | 533 | $ 1,703.0 | 2.00 | 1 | 0.9418 | 805 | 0 | 0 | 81.0 | 0 | 724 |

| Data Source | EUROSTAT | EUROSTAT | Auto Calc | Auto Calc | Auto Calc | EUROSTAT | IMF | FAO/FMP | FAO/FMP | FAO/FMP Estimates | FAO/FMP | FAO/FMP Estimates | Auto Calc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Units | Import MT | Import Value $ | Adj. C.M.T. $ | Adj. Value $ | Cif Fob Ratio | Category | Rate | Imports MT | Production MT | Losses MT | Exports MT | Processing MT | Consumption MT |
| 1987 Totals | 704,764 | 296,000 | 704,764 | $ 296,000 | 0.42 | 1 | 1.0000 | 704,764 | 0 | 0 | 21,000 | 0 | 683,764 |
| 1988 Totals | 704,400 | 301,780 | 704,400 | $ 301,780 | 0.43 | 1 | 1.0000 | 704,400 | 0 | 0 | 21,000 | 0 | 683,400 |
| 1989 Totals | 681,369 | 282,309 | 681,369 | $ 282,309 | 0.41 | 1 | 1.0000 | 681,369 | 0 | 0 | 15,969 | 0 | 665,400 |
| 1990 Totals | 752,740 | 355,773 | 752,740 | $ 355,773 | 0.47 | 1 | 1.0000 | 752,740 | 0 | 0 | 13,340 | 0 | 739,400 |
| 1991 Totals | 598,866 | 305,823 | 598,866 | $ 305,823 | 0.51 | 1 | 1.0000 | 598,866 | 0 | 0 | 15,036 | 0 | 583,830 |
| 1992 Totals | 816,901 | 401,221 | 816,901 | $ 401,221 | 0.49 | 1 | 1.0000 | 816,901 | 0 | 0 | 17,078 | 0 | 799,823 |
| 1993 Totals | 441,535 | 261,101 | 441,535 | $ 261,101 | 0.59 | 1 | 1.0000 | 441,535 | 0 | 0 | 32,814 | 0 | 408,721 |
| 1994 Totals | 520,079 | 266,005 | 520,079 | $ 266,005 | 0.51 | 1 | 1.0000 | 520,079 | 0 | 0 | 19,295 | 0 | 500,784 |
| 1995 Totals | 881,785 | 291,848 | 881,785 | $ 291,848 | 0.33 | 1 | 1.0000 | 881,785 | 0 | 0 | 18,864 | 0 | 862,921 |
| 1996 Totals | 551,034 | 348,558 | 551,034 | $ 348,558 | 0.63 | 1 | 1.0000 | 551,034 | 0 | 0 | 30,800 | 0 | 520,234 |
| 1997 Totals | 499,046 | 253,995 | 499,046 | $ 253,995 | 0.51 | 1 | 1.0000 | 499,046 | 0 | 0 | 26,464 | 0 | 472,582 |
| 1998 Totals | 499,046 | 283,966 | 499,046 | $ 283,966 | 0.57 | 1 | 1.0000 | 499,046 | 0 | 0 | 26,464 | 0 | 472,582 |
| 1985 Jan | 80,588 | 43,650 | 80,588 | $ 43,650 | 0.54 | 1 | 0.9414 | 50,548 | 0 | 0 | 1,836 | 0 | 48,712 |
| 1985 Feb | 87,548 | 42,552 | 87,548 | $ 42,552 | 0.49 | 1 | 0.9414 | 82,548 | 0 | 0 | 1,440 | 0 | 81,108 |
| 1985 Mar | 63,496 | 32,456 | 67,496 | $ 32,456 | 0.48 | 1 | 0.9414 | 63,496 | 0 | 0 | 3,612 | 0 | 59,884 |
| 1985 Apr | 61,208 | 29,864 | 61,208 | $ 29,864 | 0.49 | 1 | 0.9414 | 61,208 | 0 | 0 | 2,532 | 0 | 58,676 |
| 1985 May | 48,107 | 21,917 | 48,107 | $ 21,917 | 0.46 | 1 | 0.9414 | 48,107 | 0 | 0 | 1,212 | 0 | 46,895 |
| 1985 Jun | 29,712 | 10,548 | 29,712 | $ 10,548 | 0.36 | 1 | 0.9414 | 29,712 | 0 | 0 | 744 | 0 | 28,968 |
| 1985 Jul | 10,588 | 5,270 | 10,588 | $ 4,981 | 0.47 | 1 | 0.9414 | 10,588 | 0 | 0 | 264 | 0 | 10,324 |
| 1985 Aug | 11,295 | 6,120 | 11,295 | $ 5,761 | 0.51 | 1 | 0.9414 | 11,295 | 0 | 0 | 1,212 | 0 | 10,083 |
| 1985 Sep | 14,373 | 8,295 | 14,373 | $ 8,295 | 0.58 | 1 | 0.9414 | 13,295 | 0 | 0 | 1,212 | 0 | 12,083 |
| 1985 Oct | 19,812 | 10,527 | 19,812 | $ 9,919 | 0.50 | 1 | 0.9414 | 19,812 | 0 | 0 | 2,532 | 0 | 17,280 |
| 1985 Nov | 36,011 | 14,989 | 36,011 | $ 14,989 | 0.42 | 1 | 0.9414 | 36,011 | 0 | 0 | 3,612 | 0 | 32,399 |
| 1985 Dec | 63,259 | 28,801 | 63,259 | $ 27,156 | 0.43 | 1 | 0.9414 | 63,259 | 0 | 0 | 3,612 | 0 | 59,647 |
| 1986 Jan | 90,588 | 43,650 | 90,588 | $ 43,650 | 0.48 | 1 | 0.9414 | 90,588 | 0 | 0 | 1,836 | 0 | 88,752 |
| 1986 Feb | 87,548 | 42,552 | 87,548 | $ 42,552 | 0.49 | 1 | 0.9414 | 87,548 | 0 | 0 | 1,440 | 0 | 86,108 |
| 1986 Mar | 63,496 | 32,456 | 63,496 | $ 32,456 | 0.51 | 1 | 0.9414 | 63,496 | 0 | 0 | 3,612 | 0 | 59,884 |
| 1986 Apr | 60,208 | 29,864 | 60,208 | $ 29,864 | 0.50 | 1 | 0.9414 | 60,208 | 0 | 0 | 2,532 | 0 | 57,676 |
| 1986 May | 48,107 | 21,917 | 48,107 | $ 19,785 | 0.41 | 1 | 0.9414 | 48,107 | 0 | 0 | 1,212 | 0 | 46,895 |
| 1986 Jun | 29,712 | 10,548 | 29,712 | $ 9,919 | 0.33 | 1 | 0.9414 | 29,712 | 0 | 0 | 744 | 0 | 28,968 |
| 1986 Jul | 10,588 | 5,270 | 10,588 | $ 4,981 | 0.47 | 1 | 0.9414 | 10,588 | 0 | 0 | 264 | 0 | 10,324 |
| 1986 Aug | 11,295 | 6,120 | 11,295 | $ 5,761 | 0.51 | 1 | 0.9414 | 11,295 | 0 | 0 | 1,212 | 0 | 10,083 |
| 1986 Sep | 14,373 | 8,295 | 14,373 | $ 8,295 | 0.58 | 1 | 0.9414 | 13,295 | 0 | 0 | 1,212 | 0 | 12,083 |
| 1986 Oct | 19,812 | 10,527 | 19,812 | $ 9,919 | 0.50 | 1 | 0.9414 | 19,812 | 0 | 0 | 2,532 | 0 | 17,280 |
| 1986 Nov | 36,011 | 14,989 | 36,011 | $ 14,989 | 0.42 | 1 | 0.9414 | 36,011 | 0 | 0 | 3,612 | 0 | 32,399 |
| 1986 Dec | 63,259 | 28,801 | 63,259 | $ 27,156 | 0.43 | 1 | 0.9414 | 63,259 | 0 | 0 | 3,612 | 0 | 59,647 |
| 1987 Jan | 90,588 | 43,650 | 90,588 | $ 43,650 | 0.48 | 1 | 0.9414 | 90,588 | 0 | 0 | 1,836 | 0 | 88,752 |
| 1987 Feb | 87,548 | 42,552 | 87,548 | $ 42,552 | 0.49 | 1 | 0.9414 | 87,548 | 0 | 0 | 1,440 | 0 | 86,108 |
| 1987 Mar | 63,496 | 32,456 | 63,496 | $ 32,456 | 0.51 | 1 | 0.9414 | 63,496 | 0 | 0 | 3,612 | 0 | 59,884 |
| 1987 Apr | 60,208 | 29,864 | 60,208 | $ 29,864 | 0.50 | 1 | 0.9414 | 60,208 | 0 | 0 | 2,532 | 0 | 57,676 |
| 1987 May | 48,107 | 21,917 | 48,107 | $ 19,785 | 0.41 | 1 | 0.9414 | 48,107 | 0 | 0 | 1,212 | 0 | 46,895 |
| 1987 Jun | 29,712 | 10,548 | 29,712 | $ 9,919 | 0.33 | 1 | 0.9414 | 29,712 | 0 | 0 | 744 | 0 | 28,968 |
| 1987 Jul | 10,588 | 5,270 | 10,588 | $ 4,981 | 0.47 | 1 | 0.9414 | 10,588 | 0 | 0 | 264 | 0 | 10,324 |
| 1987 Aug | 11,295 | 6,120 | 11,295 | $ 5,761 | 0.51 | 1 | 0.9414 | 11,295 | 0 | 0 | 1,212 | 0 | 10,083 |
| 1987 Sep | 14,373 | 8,295 | 14,373 | $ 8,295 | 0.58 | 1 | 0.9414 | 13,295 | 0 | 0 | 1,212 | 0 | 12,083 |
| 1987 Oct | 19,812 | 10,527 | 19,812 | $ 9,919 | 0.50 | 1 | 0.9414 | 19,812 | 0 | 0 | 2,532 | 0 | 17,280 |
| 1987 Nov | 36,011 | 14,989 | 36,011 | $ 14,989 | 0.42 | 1 | 0.9414 | 36,011 | 0 | 0 | 3,612 | 0 | 32,399 |
| 1987 Dec | 63,259 | 28,801 | 63,259 | $ 27,156 | 0.43 | 1 | 0.9414 | 63,259 | 0 | 0 | 3,612 | 0 | 59,647 |
| 1988 Jan | 90,588 | 43,650 | 90,588 | $ 43,650 | 0.48 | 1 | 0.9414 | 90,588 | 0 | 0 | 1,836 | 0 | 88,752 |
| 1988 Feb | 87,548 | 42,552 | 87,548 | $ 42,552 | 0.49 | 1 | 0.9414 | 87,548 | 0 | 0 | 1,440 | 0 | 86,108 |
| 1988 Mar | 63,496 | 32,456 | 63,496 | $ 32,456 | 0.51 | 1 | 0.9414 | 63,496 | 0 | 0 | 3,612 | 0 | 59,884 |
| 1988 Apr | 60,208 | 29,864 | 60,208 | $ 29,864 | 0.50 | 1 | 0.9414 | 60,208 | 0 | 0 | 2,532 | 0 | 57,676 |
| 1988 May | 48,107 | 21,917 | 48,107 | $ 19,785 | 0.41 | 1 | 0.9414 | 48,107 | 0 | 0 | 1,212 | 0 | 46,895 |
| 1988 Jun | 29,712 | 10,548 | 29,712 | $ 9,919 | 0.33 | 1 | 0.9414 | 29,712 | 0 | 0 | 744 | 0 | 28,968 |
| 1988 Jul | 10,588 | 5,270 | 10,588 | $ 4,981 | 0.47 | 1 | 0.9414 | 10,588 | 0 | 0 | 264 | 0 | 10,324 |
| 1988 Aug | 11,295 | 6,120 | 11,295 | $ 5,761 | 0.51 | 1 | 0.9414 | 11,295 | 0 | 0 | 1,212 | 0 | 10,083 |
| 1988 Sep | 14,373 | 8,295 | 14,373 | $ 8,295 | 0.58 | 1 | 0.9414 | 13,295 | 0 | 0 | 1,212 | 0 | 12,083 |
| 1988 Oct | 19,812 | 10,527 | 19,812 | $ 9,919 | 0.50 | 1 | 0.9414 | 19,812 | 0 | 0 | 2,532 | 0 | 17,280 |
| 1988 Nov | 36,011 | 14,989 | 36,011 | $ 14,989 | 0.42 | 1 | 0.9414 | 36,011 | 0 | 0 | 3,612 | 0 | 32,399 |
| 1988 Dec | 63,259 | 28,801 | 63,259 | $ 27,156 | 0.43 | 1 | 0.9414 | 63,259 | 0 | 0 | 3,612 | 0 | 59,647 |

| Data Source | | EUROSTAT | EUROSTAT | Auto Calc | | Auto Calc | Auto Calc | EUROSTAT | | IMF | FAO/ZMP | FAO/ZMP | FAO/ZMP | FAO/ZMP | FAO/ZMP | Auto Calc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Units | Import Q MT | Import Value $&000EUR | Adj. Q MT DITC | | Adj Value $000 | Cif US$/Kg | Category DITCSHS Cod | | Rate (EC/US) | Imports MT | Production MT | Seamaus Losses MT | Exports MT | Estimate Processing MT | Consumption MT |
| 1967 | Totals | 350,352 | 145,340 | 350,352 | $ | 145,340.0 | 0.41 | 1 | | 1.0000 | 352,352 | 0 | 0 | 10,654.0 | 0 | 841,758 |
| 1968 | Totals | 352,712 | 150,550 | 352,212 | $ | 150,350.0 | 0.43 | 1 | | 1.0000 | 352,212 | 0 | 0 | 6,798.0 | 0 | 845,513 |
| 1969 | Totals | 340,700 | 141,155 | 340,700 | $ | 141,154.6 | 0.41 | 1 | | 1.0000 | 340,700 | 0 | 0 | 7,811.0 | 0 | 777,786 |
| 1970 | Totals | 376,350 | 177,887 | 376,350 | $ | 177,886.6 | 0.47 | 1 | | 1.0000 | 376,350 | 0 | 0 | 6,603.0 | 0 | 869,745 |
| 1971 | Totals | 280,840 | 152,927 | 280,840 | $ | 152,926.6 | 0.54 | 1 | | 1.0000 | 280,840 | 0 | 0 | 6,998.0 | 0 | 850,378 |
| 1972 | Totals | 309,861 | 150,611 | 309,461 | $ | 150,610.6 | 0.49 | 1 | | 1.0000 | 309,861 | 0 | 0 | 5,039.5 | 0 | 804,403 |
| 1973 | Totals | 220,668 | 193,051 | 220,668 | $ | 193,050.6 | 0.87 | 1 | | 1.0000 | 220,668 | 0 | 0 | 8,407.0 | 0 | 214,261 |
| 1974 | Totals | 260,040 | 133,431 | 260,040 | $ | 133,430.5 | 0.51 | 1 | | 1.0000 | 260,040 | 0 | 0 | 9,642.0 | 0 | 850,368 |
| 1975 | Totals | 340,393 | 146,924 | 340,393 | $ | 146,926.0 | 0.43 | 1 | | 1.0000 | 340,393 | 0 | 0 | 8,839.5 | 0 | 832,056 |
| 1976 | Totals | 275,517 | 174,134 | 275,517 | $ | 174,134.0 | 0.63 | 1 | | 1.0000 | 275,517 | 0 | 0 | 15,401.5 | 0 | 860,116 |
| 1977 | Totals | 249,529 | 141,999 | 249,529 | $ | 141,999.5 | 0.57 | 1 | | 1.0000 | 249,529 | 0 | 0 | 18,046.5 | 0 | 838,278 |
| 1978 | Totals | 240,121 | 142,009 | 240,529 | $ | 141,999.5 | 0.57 | 1 | | 1.0000 | 240,121 | 0 | 0 | 13,046.5 | 0 | 838,278 |
| 1979 | Jan | 66,221 | 48,886 | 66,221 | $ | 48,886.4 | 0.71 | 1 | | 0.9414 | 66,221 | 0 | 0 | 2,709.0 | 0 | 163,161 |
| 1979 | Feb | 66,326 | 56,679 | 66,326 | $ | 47,687.8 | 0.72 | 1 | | 0.9414 | 66,326 | 0 | 0 | 2,858.0 | 0 | 163,790 |
| 1979 | Mar | 39,056 | 31,720 | 39,556 | $ | 38,863.2 | 0.96 | 1 | | 0.9414 | 39,556 | 0 | 0 | 6,054.0 | 0 | 96,475 |
| 1979 | Apr | 28,615 | 18,132 | 28,615 | $ | 18,048.5 | 0.63 | 1 | | 0.9414 | 28,615 | 0 | 0 | 2,458.0 | 0 | 24,157 |
| 1979 | May | 8,483 | 8,546 | 8,483 | $ | 8,185.2 | 0.78 | 1 | | 0.9414 | 8,483 | 0 | 0 | 326.0 | 0 | 8,157 |
| 1979 | Jun | 3,684 | 2,672 | 3,684 | $ | 2,515.4 | 0.68 | 1 | | 0.9414 | 3,684 | 0 | 0 | 89.0 | 0 | 4,078 |
| 1979 | Jul | 1,718 | 1,600 | 1,718 | $ | 1,506.2 | 0.88 | 1 | | 0.9414 | 1,718 | 0 | 0 | 57.0 | 0 | 1,183 |
| 1979 | Aug | 2,219 | 2,124 | 2,219 | $ | 1,995.5 | 0.90 | 1 | | 0.9414 | 2,219 | 0 | 0 | 944.0 | 0 | 1,075 |
| 1979 | Sep | 3,864 | 3,007 | 3,864 | $ | 2,846.6 | 0.74 | 1 | | 0.9414 | 3,864 | 0 | 0 | 216.0 | 0 | 3,648 |
| 1979 | Oct | 21,658 | 13,129 | 21,658 | $ | 12,368.6 | 0.57 | 1 | | 0.9414 | 21,658 | 0 | 0 | 2,887.0 | 0 | 18,101 |
| 1979 | Nov | 85,119 | 39,763 | 85,119 | $ | 37,482.8 | 0.44 | 1 | | 0.9414 | 85,119 | 0 | 0 | 4,673.0 | 0 | 80,648 |
| 1979 | Dec | 81,434 | 47,763 | 81,434 | $ | 44,994.1 | 0.55 | 1 | | 0.9414 | 81,434 | 0 | 0 | 8,063.0 | 0 | 75,371 |
| 1980 | Jan | 66,221 | 49,866 | 66,221 | $ | 46,974.4 | 0.71 | 1 | | 0.9414 | 66,221 | 0 | 0 | 2,709.0 | 0 | 63,621 |
| 1980 | Feb | 66,326 | 50,879 | 66,326 | $ | 47,687.5 | 0.72 | 1 | | 0.9414 | 66,326 | 0 | 0 | 2,556.0 | 0 | 63,770 |
| 1980 | Mar | 39,504 | 31,709 | 39,504 | $ | 29,861.2 | 0.76 | 1 | | 0.9414 | 39,504 | 0 | 0 | 5,054.0 | 0 | 94,321 |
| 1980 | Apr | 28,615 | 18,132 | 28,615 | $ | 18,048.5 | 0.63 | 1 | | 0.9414 | 28,615 | 0 | 0 | 2,458.0 | 0 | 24,157 |
| 1980 | May | 8,483 | 8,546 | 8,483 | $ | 8,185.2 | 0.73 | 1 | | 0.9414 | 8,483 | 0 | 0 | 326.0 | 0 | 8,157 |
| 1980 | Jun | 3,684 | 2,672 | 3,684 | $ | 2,515.4 | 0.68 | 1 | | 0.9414 | 3,684 | 0 | 0 | 968.0 | 0 | 7,996 |
| 1980 | Jul | 1,718 | 1,600 | 1,718 | $ | 1,506.2 | 0.88 | 1 | | 0.9414 | 1,718 | 0 | 0 | 578.0 | 0 | 1,183 |
| 1980 | Aug | 2,219 | 2,124 | 2,219 | $ | 1,995.5 | 0.90 | 1 | | 0.9414 | 2,219 | 0 | 0 | 944.0 | 0 | 1,075 |
| 1980 | Sep | 3,864 | 3,007 | 3,864 | $ | 2,846.6 | 0.74 | 1 | | 0.9414 | 3,864 | 0 | 0 | 216.0 | 0 | 3,648 |
| 1980 | Oct | 21,658 | 13,129 | 21,658 | $ | 12,368.6 | 0.57 | 1 | | 0.9414 | 21,658 | 0 | 0 | 2,887.0 | 0 | 18,101 |
| 1980 | Nov | 85,119 | 39,763 | 85,119 | $ | 37,482.8 | 0.44 | 1 | | 0.9414 | 85,119 | 0 | 0 | 4,673.0 | 0 | 80,648 |
| 1980 | Dec | 81,434 | 47,763 | 81,434 | $ | 44,994.1 | 0.55 | 1 | | 0.9414 | 81,434 | 0 | 0 | 8,063.0 | 0 | 75,371 |
| 1981 | Jan | 66,221 | 49,866 | 66,221 | $ | 46,974.4 | 0.71 | 1 | | 0.9414 | 66,221 | 0 | 0 | 2,709.0 | 0 | 63,621 |
| 1981 | Feb | 66,326 | 50,879 | 66,326 | $ | 47,687.5 | 0.72 | 1 | | 0.9414 | 66,326 | 0 | 0 | 2,556.0 | 0 | 63,770 |
| 1981 | Mar | 39,504 | 31,709 | 39,504 | $ | 29,861.2 | 0.76 | 1 | | 0.9414 | 39,504 | 0 | 0 | 5,054.0 | 0 | 94,321 |
| 1981 | Apr | 28,615 | 18,132 | 28,615 | $ | 18,048.5 | 0.63 | 1 | | 0.9414 | 28,615 | 0 | 0 | 2,458.0 | 0 | 24,157 |
| 1981 | May | 8,483 | 8,546 | 8,483 | $ | 8,185.2 | 0.73 | 1 | | 0.9414 | 8,483 | 0 | 0 | 326.0 | 0 | 8,157 |
| 1981 | Jun | 3,684 | 2,672 | 3,684 | $ | 2,515.4 | 0.68 | 1 | | 0.9414 | 3,684 | 0 | 0 | 968.0 | 0 | 7,996 |
| 1981 | Jul | 1,718 | 1,600 | 1,718 | $ | 1,506.2 | 0.88 | 1 | | 0.9414 | 1,718 | 0 | 0 | 578.0 | 0 | 1,183 |
| 1981 | Aug | 2,219 | 2,124 | 2,219 | $ | 1,995.5 | 0.90 | 1 | | 0.9414 | 2,219 | 0 | 0 | 944.0 | 0 | 1,075 |
| 1981 | Sep | 3,864 | 3,007 | 3,864 | $ | 2,846.6 | 0.74 | 1 | | 0.9414 | 3,864 | 0 | 0 | 216.0 | 0 | 3,648 |
| 1981 | Oct | 21,658 | 13,129 | 21,658 | $ | 12,368.6 | 0.57 | 1 | | 0.9414 | 21,658 | 0 | 0 | 2,887.0 | 0 | 18,101 |
| 1981 | Nov | 85,119 | 39,763 | 85,119 | $ | 37,482.8 | 0.44 | 1 | | 0.9414 | 85,119 | 0 | 0 | 4,673.0 | 0 | 80,648 |
| 1981 | Dec | 81,434 | 47,763 | 81,434 | $ | 44,994.1 | 0.55 | 1 | | 0.9414 | 81,434 | 0 | 0 | 8,063.0 | 0 | 75,371 |

| Units | Imports MT | Import Value ($000's) | Adj. U.M.V. $/MT | Adj. Value $'000 | CIF US$/Kg | Category | Rate (EC$/US$) | Imports MT | Production MT | Exports MT | Exports MT | Production MT | Consumption MT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1987 Totals | 322,079 | 297,148 | 922,000 | $ 237,140.0 | 0.74 | 1 | 2.70 | 322,079 | 806,000 | 32,700 | 9,200.0 | 85,500 | 869,879 |
| 1988 Totals | 301,385 | 295,242 | 301,385 | $ 295,400.0 | 0.98 | 1 | 2.70 | 301,385 | 872,000 | 53,000 | 9,000.0 | 82,200 | 861,607 |
| 1989 Totals | 282,336 | 224,030 | 282,336 | $ 274,000.0 | 0.79 | 1 | 2.70 | 282,336 | 970,000 | 48,000 | 6,000.0 | 87,800 | 1,197,336 |
| 1990 Totals | 338,873 | 363,400 | 338,873 | $ 360,400.0 | 1.07 | 1 | 2.70 | 338,873 | 837,000 | 31,675 | 4,700.0 | 83,200 | 826,041 |
| 1991 Totals | 378,720 | 429,001 | 378,720 | $ 426,001.0 | 1.13 | 1 | 2.70 | 378,720 | 910,000 | 35,000 | 7,000.0 | 71,000 | 974,013 |
| 1992 Totals | 401,184 | 434,721 | 401,184 | $ 433,721.0 | 1.08 | 1 | 2.70 | 401,184 | 897,000 | 44,895 | 8,812.0 | 89,750 | 1,150,237 |
| 1993 Totals | 336,574 | 329,792 | 336,574 | $ 329,792.0 | 0.98 | 1 | 2.70 | 336,574 | 886,000 | 34,350 | 10,145.0 | 88,600 | 900,503 |
| 1994 Totals | 380,069 | 345,811 | 380,069 | $ 346,811.0 | 0.91 | 1 | 2.70 | 380,069 | 760,000 | 38,000 | 11,721.0 | 76,000 | 1,018,948 |
| 1995 Totals | 319,508 | 366,043 | 319,508 | $ 356,043.0 | 1.12 | 1 | 2.70 | 319,508 | 781,000 | 37,375 | 7,037.0 | 73,350 | 944,582 |
| 1996 Totals | 329,356 | 394,605 | 329,356 | $ 398,205.0 | 1.04 | 1 | 2.70 | 329,356 | 831,000 | 31,975 | 15,065.0 | 83,150 | 961,053 |
| 1997 Totals | 355,859 | 397,603 | 355,859 | $ 397,603.0 | 1.12 | 1 | 2.70 | 355,859 | 825,000 | 31,250 | 15,049.0 | 82,500 | 871,207 |
| 1998 Totals | 365,020 | 407,660 | 365,020 | $ 407,660.0 | 1.14 | 1 | 2.70 | 365,020 | 625,000 | 31,250 | 15,049.0 | 80,500 | 891,204 |
| 1995 Jan | 300 | 450 | 300 | $ 720.0 | 2.25 | 1 | 0.2414 | 300 | 0 | 0 | 500.0 | 0 | 250 |
| 1995 Feb | 15,017 | 15,038 | 15,017 | $ 12,760.4 | 0.98 | 1 | 0.2414 | 15,017 | 0 | 0 | 475.0 | 0 | 12,602 |
| 1995 Mar | 8,265 | 13,038 | 8,265 | $ 12,274.0 | 1.49 | 1 | 0.2414 | 8,265 | 0 | 0 | 1,100.0 | 0 | 8,134 |
| 1995 Apr | 29,961 | 35,789 | 29,961 | $ 31,800.0 | 1.50 | 1 | 0.2414 | 29,961 | 0 | 0 | 3,050.0 | 0 | 17,894 |
| 1995 May | 18,452 | 27,141 | 18,452 | $ 25,550.0 | 1.38 | 1 | 0.2414 | 18,452 | 0 | 0 | 2,972.0 | 0 | 15,480 |
| 1995 Jun | 6,010 | 6,259 | 6,010 | $ 8,210.0 | 1.45 | 1 | 0.2414 | 6,010 | 0 | 0 | 1,500.0 | 0 | 4,878 |
| 1995 Jul | 13,821 | 16,029 | 13,821 | $ 17,968.3 | 1.25 | 1 | 0.2414 | 13,821 | 32,125 | 5,850 | 1,000.0 | 3,238 | 44,536 |
| 1995 Aug | 37,731 | 33,242 | 37,731 | $ 31,208.7 | 0.83 | 1 | 0.2414 | 37,731 | 97,000 | 8,042 | 1,500.0 | 9,264 | 110,752 |
| 1995 Sep | 24,738 | 63,726 | 24,738 | $ 56,004.5 | 2.26 | 1 | 0.2414 | 24,738 | 111,625 | 6,578 | 2,981.0 | 13,150 | 142,756 |
| 1995 Oct | 67,611 | 55,386 | 67,611 | $ 56,004.5 | 0.82 | 1 | 0.2414 | 67,611 | 24,000 | 3,216 | 2,000.0 | 7,835 | 1,200,811 |
| 1995 Nov | 56,827 | 61,725 | 56,827 | $ 68,000.0 | 1.21 | 1 | 0.2414 | 56,827 | 25,000 | 2,744 | 500.0 | 5,000 | 196,611 |
| 1995 Dec | 18,865 | 16,165 | 18,865 | $ 18,021.0 | 0.96 | 1 | 0.2414 | 18,865 | 0 | 0 | 350.0 | 0 | 167,000 |
| 1996 Jan | 300 | 450 | 300 | $ 720.0 | 2.25 | 1 | 0.2414 | 300 | 0 | 0 | 500.0 | 0 | 250 |
| 1996 Feb | 15,017 | 15,038 | 15,017 | $ 12,760.4 | 0.98 | 1 | 0.2414 | 15,017 | 0 | 0 | 475.0 | 0 | 12,602 |
| 1996 Mar | 8,265 | 13,038 | 8,265 | $ 12,274.0 | 1.49 | 1 | 0.2414 | 8,265 | 0 | 0 | 1,100.0 | 0 | 8,134 |
| 1996 Apr | 29,961 | 35,789 | 29,961 | $ 31,800.0 | 1.50 | 1 | 0.2414 | 29,961 | 0 | 0 | 3,050.0 | 0 | 17,894 |
| 1996 May | 18,452 | 27,141 | 18,452 | $ 25,550.0 | 1.38 | 1 | 0.2414 | 18,452 | 0 | 0 | 2,972.0 | 0 | 15,480 |
| 1996 Jun | 6,010 | 6,259 | 6,010 | $ 8,210.0 | 1.45 | 1 | 0.2414 | 6,010 | 0 | 0 | 1,500.0 | 0 | 4,878 |
| 1996 Jul | 13,821 | 16,029 | 13,821 | $ 17,968.3 | 1.25 | 1 | 0.2414 | 13,821 | 32,125 | 5,850 | 1,000.0 | 3,238 | 44,536 |
| 1996 Aug | 37,731 | 33,242 | 37,731 | $ 31,208.7 | 0.83 | 1 | 0.2414 | 37,731 | 97,000 | 8,042 | 1,500.0 | 9,264 | 110,752 |
| 1996 Sep | 24,738 | 63,726 | 24,738 | $ 56,004.5 | 2.26 | 1 | 0.2414 | 24,738 | 111,625 | 6,578 | 2,981.0 | 13,150 | 142,756 |
| 1996 Oct | 67,611 | 55,386 | 67,611 | $ 56,004.5 | 0.82 | 1 | 0.2414 | 67,611 | 24,000 | 3,216 | 2,000.0 | 7,835 | 1,200,811 |
| 1996 Nov | 56,827 | 61,725 | 56,827 | $ 68,000.0 | 1.21 | 1 | 0.2414 | 56,827 | 25,000 | 2,744 | 500.0 | 5,000 | 196,611 |
| 1996 Dec | 18,865 | 16,165 | 18,865 | $ 18,021.0 | 0.96 | 1 | 0.2414 | 18,865 | 0 | 0 | 350.0 | 0 | 167,000 |
| 1997 Jan | 300 | 450 | 300 | $ 720.0 | 2.25 | 1 | 0.2414 | 300 | 0 | 0 | 500.0 | 0 | 250 |
| 1997 Feb | 15,017 | 15,038 | 15,017 | $ 12,760.4 | 0.98 | 1 | 0.2414 | 15,017 | 0 | 0 | 475.0 | 0 | 12,602 |
| 1997 Mar | 8,265 | 13,038 | 8,265 | $ 12,274.0 | 1.49 | 1 | 0.2414 | 8,265 | 0 | 0 | 1,100.0 | 0 | 8,134 |
| 1997 Apr | 29,961 | 35,789 | 29,961 | $ 31,800.0 | 1.50 | 1 | 0.2414 | 29,961 | 0 | 0 | 3,050.0 | 0 | 17,894 |
| 1997 May | 18,452 | 27,141 | 18,452 | $ 25,550.0 | 1.38 | 1 | 0.2414 | 18,452 | 0 | 0 | 2,972.0 | 0 | 15,480 |
| 1997 Jun | 6,010 | 6,259 | 6,010 | $ 8,210.0 | 1.45 | 1 | 0.2414 | 6,010 | 0 | 0 | 1,500.0 | 0 | 4,878 |
| 1997 Jul | 13,821 | 16,029 | 13,821 | $ 17,968.3 | 1.25 | 1 | 0.2414 | 13,821 | 32,125 | 5,850 | 1,000.0 | 3,238 | 44,536 |
| 1997 Aug | 37,731 | 33,242 | 37,731 | $ 31,208.7 | 0.83 | 1 | 0.2414 | 37,731 | 97,000 | 8,042 | 1,500.0 | 9,264 | 110,752 |
| 1997 Sep | 24,738 | 63,726 | 24,738 | $ 56,004.5 | 2.26 | 1 | 0.2414 | 24,738 | 111,625 | 6,578 | 2,981.0 | 13,150 | 142,756 |
| 1997 Oct | 67,611 | 55,386 | 67,611 | $ 56,004.5 | 0.82 | 1 | 0.2414 | 67,611 | 24,000 | 3,216 | 2,000.0 | 7,835 | 1,200,811 |
| 1997 Nov | 56,827 | 61,725 | 56,827 | $ 68,000.0 | 1.21 | 1 | 0.2414 | 56,827 | 25,000 | 2,744 | 500.0 | 5,000 | 196,611 |
| 1997 Dec | 18,865 | 16,165 | 18,865 | $ 18,021.0 | 0.96 | 1 | 0.2414 | 18,865 | 0 | 0 | 350.0 | 0 | 167,000 |
| 1998 Jan | 300 | 450 | 300 | $ 720.0 | 2.25 | 1 | 0.2414 | 300 | 0 | 0 | 500.0 | 0 | 250 |
| 1998 Feb | 15,017 | 15,038 | 15,017 | $ 12,760.4 | 0.98 | 1 | 0.2414 | 15,017 | 0 | 0 | 475.0 | 0 | 12,602 |
| 1998 Mar | 8,265 | 13,038 | 8,265 | $ 12,274.0 | 1.49 | 1 | 0.2414 | 8,265 | 0 | 0 | 1,100.0 | 0 | 8,134 |
| 1998 Apr | 29,961 | 35,789 | 29,961 | $ 31,800.0 | 1.50 | 1 | 0.2414 | 29,961 | 0 | 0 | 3,050.0 | 0 | 17,894 |
| 1998 May | 18,452 | 27,141 | 18,452 | $ 25,550.0 | 1.38 | 1 | 0.2414 | 18,452 | 0 | 0 | 2,972.0 | 0 | 15,480 |
| 1998 Jun | 6,010 | 6,259 | 6,010 | $ 8,210.0 | 1.45 | 1 | 0.2414 | 6,010 | 0 | 0 | 1,500.0 | 0 | 4,878 |
| 1998 Jul | 13,821 | 16,029 | 13,821 | $ 17,968.3 | 1.25 | 1 | 0.2414 | 13,821 | 32,125 | 5,850 | 1,000.0 | 3,238 | 44,536 |
| 1998 Aug | 37,731 | 33,242 | 37,731 | $ 31,208.7 | 0.83 | 1 | 0.2414 | 37,731 | 97,000 | 8,042 | 1,500.0 | 9,264 | 110,752 |
| 1998 Sep | 24,738 | 63,726 | 24,738 | $ 56,004.5 | 2.26 | 1 | 0.2414 | 24,738 | 111,625 | 6,578 | 2,981.0 | 13,150 | 142,756 |
| 1998 Oct | 67,611 | 55,386 | 67,611 | $ 56,004.5 | 0.82 | 1 | 0.2414 | 67,611 | 24,000 | 3,216 | 2,000.0 | 7,835 | 1,200,811 |
| 1998 Nov | 56,827 | 61,725 | 56,827 | $ 68,000.0 | 1.21 | 1 | 0.2414 | 56,827 | 25,000 | 2,744 | 500.0 | 5,000 | 196,611 |
| 1998 Dec | 18,865 | 16,165 | 18,865 | $ 18,021.0 | 0.96 | 1 | 0.2414 | 18,865 | 0 | 0 | 350.0 | 0 | 167,000 |

| Data Source | EUROSTAT | EUROSTAT | Auto Calc | Auto Calc | Auto Calc | EUROSTAT | IMF | FAOSTAT | FAOSTAT | FAOSTAT Estimated | FAOSTAT | FAOSTAT Estimated | Auto Calc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Units | Import MT | Import Value S$000/ECU000 | Adj C.M.T SITC | Adj Value $000 | CIF US$/Kg | Category SITCINS Cod | Ratio (ECOS) | Imports MT | Production MT | Losses MT | Exports MT | Processing MT | Consumption MT |
| 1967 Totals | 34,127 | 24,205 | 34,127 | $ 24,205.0 | 0.71 | 1 | 1.0000 | 34,127 | 0 | 0 | 1,283.0 | 0 | 32,844 |
| 1968 Totals | 32,556 | 23,117 | 32,556 | $ 23,117.0 | 0.72 | 1 | 1.0000 | 32,556 | 0 | 0 | 444.0 | 0 | 31,022 |
| 1969 Totals | 29,916 | 25,405 | 29,916 | $ 25,405.0 | 0.85 | 1 | 1.0000 | 29,916 | 0 | 0 | 481.0 | 0 | 29,435 |
| 1970 Totals | 40,232 | 34,622 | 40,232 | $ 34,622.0 | 0.87 | 1 | 1.0000 | 40,232 | 0 | 0 | 686.0 | 0 | 39,546 |
| 1971 Totals | 51,944 | 46,113 | 51,944 | $ 46,113.0 | 0.89 | 1 | 1.0000 | 51,944 | 0 | 0 | 504.0 | 0 | 51,440 |
| 1972 Totals | 48,149 | 47,389 | 48,149 | $ 47,389.0 | 1.03 | 1 | 1.0000 | 48,149 | 0 | 0 | 619.0 | 0 | 47,530 |
| 1973 Totals | 52,805 | 40,874 | 52,805 | $ 40,874.0 | 0.77 | 1 | 1.0000 | 52,805 | 0 | 0 | 1,001.0 | 0 | 51,804 |
| 1974 Totals | 66,970 | 57,893 | 66,970 | $ 57,893.0 | 0.85 | 1 | 1.0000 | 66,970 | 0 | 0 | 1,086.0 | 0 | 65,884 |
| 1975 Totals | 76,728 | 60,973 | 76,728 | $ 60,973.0 | 0.81 | 1 | 1.0000 | 76,728 | 0 | 0 | 1,368.0 | 0 | 75,360 |
| 1976 Totals | 77,276 | 58,476 | 77,276 | $ 58,476.0 | 0.76 | 1 | 1.0000 | 77,276 | 0 | 0 | 1,662.0 | 0 | 75,614 |
| 1977 Totals | 88,748 | 64,458 | 88,748 | $ 64,458.0 | 0.74 | 1 | 1.0000 | 88,748 | 0 | 0 | 2,193.0 | 0 | 86,555 |
| 1978 Totals | 88,748 | 64,458 | 88,748 | $ 64,458.0 | 0.74 | 1 | 1.0000 | 88,748 | 0 | 0 | 2,193.0 | 0 | 86,555 |
| 1965 Jan | 1,260 | 1,228 | 1,260 | $ 1,228.1 | 1.00 | 1 | 0.9814 | 1,284 | 0 | 0 | 86.0 | 0 | 1,198 |
| 1965 Feb | 1,038 | 1,046 | 1,038 | $ 1,046.1 | 0.99 | 1 | 0.9814 | 1,058 | 0 | 0 | 94.0 | 0 | 964 |
| 1965 Mar | 1,702 | 1,747 | 1,702 | $ 1,746.8 | 0.97 | 1 | 0.9814 | 1,735 | 0 | 0 | 43.0 | 0 | 1,692 |
| 1965 Apr | 3,958 | 3,833 | 3,958 | $ 3,917.0 | 0.97 | 1 | 0.9814 | 4,033 | 0 | 0 | 106.0 | 0 | 3,927 |
| 1965 May | 4,044 | 4,116 | 4,044 | $ 4,116.7 | 0.98 | 1 | 0.9814 | 4,121 | 0 | 0 | 88.0 | 0 | 4,033 |
| 1965 Jun | 10,086 | 7,397 | 10,086 | $ 7,397.0 | 0.73 | 1 | 0.9814 | 10,278 | 0 | 0 | 125.0 | 0 | 10,153 |
| 1965 Jul | 17,379 | 9,136 | 17,379 | $ 9,136.0 | 0.53 | 1 | 0.9814 | 17,711 | 0 | 0 | 408.0 | 0 | 17,303 |
| 1965 Aug | 16,780 | 9,222 | 16,780 | $ 9,222.2 | 0.55 | 1 | 0.9814 | 17,100 | 0 | 0 | 154.0 | 0 | 16,946 |
| 1965 Sep | 18,344 | 10,608 | 18,344 | $ 10,608.4 | 0.58 | 1 | 0.9814 | 18,693 | 0 | 0 | 258.0 | 0 | 18,435 |
| 1965 Oct | 7,478 | 6,852 | 7,478 | $ 6,852.4 | 0.92 | 1 | 0.9814 | 7,620 | 0 | 0 | 688.0 | 0 | 6,932 |
| 1965 Nov | 3,965 | 3,085 | 3,965 | $ 3,085.0 | 0.78 | 1 | 0.9814 | 4,040 | 0 | 0 | 87.0 | 0 | 3,953 |
| 1965 Dec | 3,038 | 3,088 | 3,038 | $ 3,088.2 | 1.02 | 1 | 0.9814 | 3,095 | 0 | 0 | 111.0 | 0 | 2,984 |
| 1966 Jan | 1,260 | 1,228 | 1,260 | $ 1,228.1 | 0.97 | 1 | 0.9814 | 1,284 | 0 | 0 | 86.0 | 0 | 1,198 |
| 1966 Feb | 1,038 | 1,046 | 1,038 | $ 1,046.1 | 0.99 | 1 | 0.9814 | 1,058 | 0 | 0 | 94.0 | 0 | 964 |
| 1966 Mar | 1,702 | 1,747 | 1,702 | $ 1,746.8 | 0.97 | 1 | 0.9814 | 1,735 | 0 | 0 | 43.0 | 0 | 1,692 |
| 1966 Apr | 3,958 | 3,833 | 3,958 | $ 3,917.0 | 0.97 | 1 | 0.9814 | 4,033 | 0 | 0 | 106.0 | 0 | 3,927 |
| 1966 May | 4,044 | 4,116 | 4,044 | $ 4,116.7 | 0.98 | 1 | 0.9814 | 4,121 | 0 | 0 | 88.0 | 0 | 4,033 |
| 1966 Jun | 10,086 | 7,397 | 10,086 | $ 7,397.0 | 0.73 | 1 | 0.9814 | 10,278 | 0 | 0 | 125.0 | 0 | 10,153 |
| 1966 Jul | 17,379 | 9,136 | 17,379 | $ 9,136.0 | 0.53 | 1 | 0.9814 | 17,711 | 0 | 0 | 408.0 | 0 | 17,303 |
| 1966 Aug | 16,780 | 9,222 | 16,780 | $ 9,222.2 | 0.55 | 1 | 0.9814 | 17,100 | 0 | 0 | 154.0 | 0 | 16,946 |
| 1966 Sep | 18,344 | 10,608 | 18,344 | $ 10,608.4 | 0.58 | 1 | 0.9814 | 18,693 | 0 | 0 | 258.0 | 0 | 18,435 |
| 1966 Oct | 7,478 | 6,852 | 7,478 | $ 6,852.4 | 0.92 | 1 | 0.9814 | 7,620 | 0 | 0 | 688.0 | 0 | 6,932 |
| 1966 Nov | 3,965 | 3,085 | 3,965 | $ 3,085.0 | 0.78 | 1 | 0.9814 | 4,040 | 0 | 0 | 87.0 | 0 | 3,953 |
| 1966 Dec | 3,038 | 3,088 | 3,038 | $ 3,088.2 | 1.02 | 1 | 0.9814 | 3,095 | 0 | 0 | 111.0 | 0 | 2,984 |
| 1967 Jan | 1,260 | 1,228 | 1,260 | $ 1,228.1 | 0.97 | 1 | 0.9814 | 1,284 | 0 | 0 | 86.0 | 0 | 1,198 |
| 1967 Feb | 1,038 | 1,046 | 1,038 | $ 1,046.1 | 0.99 | 1 | 0.9814 | 1,058 | 0 | 0 | 94.0 | 0 | 964 |
| 1967 Mar | 1,702 | 1,747 | 1,702 | $ 1,746.8 | 0.97 | 1 | 0.9814 | 1,735 | 0 | 0 | 43.0 | 0 | 1,692 |
| 1967 Apr | 3,958 | 3,833 | 3,958 | $ 3,917.0 | 0.97 | 1 | 0.9814 | 4,033 | 0 | 0 | 106.0 | 0 | 3,927 |
| 1967 May | 4,044 | 4,116 | 4,044 | $ 4,116.7 | 0.98 | 1 | 0.9814 | 4,121 | 0 | 0 | 88.0 | 0 | 4,033 |
| 1967 Jun | 10,086 | 7,397 | 10,086 | $ 7,397.0 | 0.73 | 1 | 0.9814 | 10,278 | 0 | 0 | 125.0 | 0 | 10,153 |
| 1967 Jul | 15,950 | 9,169 | 15,950 | $ 9,625.0 | 0.54 | 1 | 0.9814 | 15,998 | 0 | 0 | 408.0 | 0 | 15,590 |
| 1967 Aug | 16,780 | 9,222 | 16,780 | $ 9,681.8 | 0.55 | 1 | 0.9814 | 16,780 | 0 | 0 | 154.0 | 0 | 16,626 |
| 1967 Sep | 18,344 | 10,608 | 18,344 | $ 9,686.4 | 0.54 | 1 | 0.9814 | 18,344 | 0 | 0 | 258.0 | 0 | 18,086 |
| 1967 Oct | 7,478 | 6,852 | 7,478 | $ 4,195.5 | 0.56 | 1 | 0.9814 | 7,478 | 0 | 0 | 688.0 | 0 | 6,790 |
| 1967 Nov | 3,965 | 3,185 | 2,865 | $ 2,968.4 | 1.03 | 1 | 0.9814 | 2,865 | 0 | 0 | 97.0 | 0 | 2,888 |
| 1967 Dec | 2,533 | 3,886 | 2,334 | $ 3,658.3 | 1.57 | 1 | 0.9814 | 2,334 | 0 | 0 | 150.0 | 0 | 2,184 |
| 1968 Jan | 1,260 | 1,356 | 1,260 | $ 1,206.7 | 1.01 | 1 | 0.9814 | 1,903 | 0 | 0 | 80.0 | 0 | 1,708 |
| 1968 Feb | 1,038 | 1,386 | 1,608 | $ 1,208.7 | 0.81 | 1 | 0.9814 | 1,608 | 0 | 0 | 94.0 | 0 | 1,514 |
| 1968 Mar | 1,702 | 1,547 | 1,702 | $ 1,456.0 | 0.86 | 1 | 0.9814 | 1,702 | 0 | 0 | 43.0 | 0 | 1,659 |
| 1968 Apr | 3,958 | 2,803 | 3,083 | $ 2,917.0 | 0.97 | 1 | 0.9814 | 3,066 | 0 | 0 | 106.0 | 0 | 2,960 |
| 1968 May | 4,044 | 4,118 | 4,044 | $ 3,576.7 | 0.78 | 1 | 0.9814 | 4,121 | 0 | 0 | 98.0 | 0 | 4,023 |
| 1968 Jun | 10,086 | 7,397 | 10,086 | $ 8,978.8 | 0.68 | 1 | 0.9814 | 10,278 | 0 | 0 | 125.0 | 0 | 10,153 |
| 1968 Jul | 16,950 | 9,169 | 15,950 | $ 9,625.0 | 0.54 | 1 | 0.9814 | 15,998 | 0 | 0 | 408.0 | 0 | 15,590 |
| 1968 Aug | 16,780 | 9,222 | 16,780 | $ 9,681.8 | 0.55 | 1 | 0.9814 | 16,780 | 0 | 0 | 154.0 | 0 | 16,626 |
| 1968 Sep | 18,344 | 10,608 | 18,344 | $ 9,686.4 | 0.54 | 1 | 0.9814 | 18,344 | 0 | 0 | 258.0 | 0 | 18,086 |
| 1968 Oct | 7,478 | 6,852 | 7,478 | $ 6,195.5 | 0.56 | 1 | 0.9814 | 7,478 | 0 | 0 | 688.0 | 0 | 6,790 |
| 1968 Nov | 3,965 | 3,185 | 3,865 | $ 2,968.4 | 1.03 | 1 | 0.9814 | 2,865 | 0 | 0 | 97.0 | 0 | 2,888 |
| 1968 Dec | 2,534 | 3,886 | 2,334 | $ 3,658.3 | 1.57 | 1 | 0.9814 | 2,334 | 0 | 0 | 150.0 | 0 | 2,184 |

| Data Source | EUROSTAT | EUROSTAT | Auto Calc | Auto Calc | Auto Calc | EUROSTAT | IMF | FAO/ZMP | FAO/ZMP | FAO/ZMP Estimates | FAO/ZMP | FAO/ZMP Estimates | Auto Calc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Units | Import MT | Import Value S$'000 | Adj. C.I.M.I. $/T | Adj. Value $'000 | CIF US$/Kg | Category '91 C.I.M.I. Cost | Ratio (EUR/US$) | Imports MT | Production MT | Losses MT | Exports MT | Processing MT | Consumption MT |
| 1987 Totals | 272,363 | 236,099 | 272,363 | $ 330,299.0 | 0.85 | 1 | 1.1930 | 272,363 | 33,545 | 5,377 | 6,080.0 | 2,375 | 296,494 |
| 1988 Totals | 253,253 | 288,838 | 253,253 | $ 268,584.0 | 0.88 | 1 | 1.1650 | 253,253 | 25,852 | 1,087 | 5,844.0 | 2,568 | 282,802 |
| 1989 Totals | 249,195 | 299,242 | 249,195 | $ 281,742.0 | 0.84 | 1 | 1.1930 | 249,195 | 46,854 | 1,343 | 2,198.0 | 2,695 | 293,025 |
| 1990 Totals | 307,558 | 315,382 | 307,558 | $ 315,397.0 | 1.00 | 1 | 1.0000 | 307,558 | 22,312 | 1,366 | 5,436.0 | 2,731 | 327,035 |
| 1991 Totals | 303,877 | 380,466 | 303,877 | $ 389,696.0 | 1.28 | 1 | 1.0000 | 303,877 | 11,078 | 569 | 5,016.0 | 1,320 | 307,591 |
| 1992 Totals | 280,218 | 355,819 | 280,218 | $ 355,819.0 | 0.41 | 1 | 1.0000 | 329,765 | 32,950 | 1,886 | 2,386.0 | 3,260 | 364,005 |
| 1993 Totals | 393,859 | 294,203 | 393,859 | $ 294,703.0 | 0.62 | 1 | 1.0000 | 280,218 | 20,000 | 1,000 | 6,384.0 | 2,000 | 295,434 |
| 1994 Totals | 298,859 | 226,929 | 298,859 | $ 226,929.0 | 0.76 | 1 | 1.0000 | 393,859 | 17,000 | 983 | 12,823.0 | 1,766 | 383,327 |
| 1995 Totals | 320,648 | 288,859 | 320,648 | $ 288,859.0 | 0.90 | 1 | 1.0000 | 298,859 | 21,000 | 1,034 | 5,471.0 | 2,000 | 311,413 |
| 1996 Totals | 257,926 | 276,829 | 257,926 | $ 276,829.0 | 1.07 | 1 | 1.0000 | 320,648 | 23,000 | 1,100 | 8,132.0 | 2,000 | 332,726 |
| 1997 Totals | 257,926 | 278,829 | 257,926 | $ 278,829.0 | 1.07 | 1 | 1.0000 | 257,926 | 12,000 | 600 | 8,161.0 | 1,000 | 260,065 |
| 1998 Jan | 3,886 | 1,790 | 3,886 | $ 1,223.8 | 0.32 | 1 | 0.9414 | 257,926 | 19,000 | 950 | 9,161.0 | 1,000 | 267,615 |
| 1998 Feb | 4,773 | 1,229 | 4,773 | $ 1,157.0 | 0.24 | 1 | 0.9414 | 3,886 | 0 | 0 | 90.0 | 0 | 3,796 |
| 1998 Mar | 922 | 2,040 | 922 | $ 1,858.5 | 2.02 | 1 | 0.9414 | 4,773 | 0 | 0 | 40.0 | 0 | 4,733 |
| 1998 Apr | 1,374 | 8,818 | 1,374 | $ 8,299.4 | 6.04 | 1 | 0.9414 | 922 | 0 | 0 | 5.0 | 0 | 917 |
| 1998 May | 8,565 | 25,883 | 8,565 | $ 24,796.5 | 2.90 | 1 | 0.9414 | 1,374 | 0 | 0 | 25.0 | 0 | 1,349 |
| 1998 Jun | 25,206 | 46,338 | 25,206 | $ 42,481.2 | 1.69 | 1 | 0.9414 | 8,565 | 0 | 0 | 250.0 | 0 | 8,315 |
| 1998 Jul | 48,536 | 50,216 | 48,536 | $ 47,275.2 | 0.97 | 1 | 0.9414 | 25,206 | 2,600 | 378 | 5,054.0 | 267 | 24,139 |
| 1998 Aug | 57,221 | 61,443 | 57,221 | $ 57,848.1 | 1.01 | 1 | 0.9414 | 48,536 | 6,200 | 910 | 654.0 | 625 | 52,885 |
| 1998 Sep | 86,193 | 25,842 | 86,193 | $ 24,322.2 | 0.28 | 1 | 0.9414 | 57,221 | 8,275 | 414 | 1,640.0 | 808 | 62,634 |
| 1998 Oct | 27,126 | 17,505 | 27,126 | $ 18,563.9 | 0.68 | 1 | 0.9414 | 86,193 | 6,200 | 310 | 1,000.0 | 675 | 89,408 |
| 1998 Nov | 19,416 | 26,161 | 19,416 | $ 25,714.4 | 1.32 | 1 | 0.9414 | 27,126 | 0 | 0 | 405.0 | 0 | 26,721 |
| 1998 Dec | 1,886 | 2,816 | 1,886 | $ 2,465.2 | 2.44 | 1 | 0.9414 | 19,416 | 0 | 0 | 385.0 | 0 | 19,031 |
| 1997 Jan | 3,886 | 1,790 | 3,886 | $ 1,223.8 | 0.32 | 1 | 0.9414 | 1,886 | 0 | 0 | 200.0 | 0 | 1,686 |
| 1997 Feb | 4,773 | 1,229 | 4,773 | $ 1,157.0 | 0.24 | 1 | 0.9414 | 3,886 | 0 | 0 | 90.0 | 0 | 3,796 |
| 1997 Mar | 922 | 2,040 | 922 | $ 1,858.5 | 2.02 | 1 | 0.9414 | 4,773 | 0 | 0 | 40.0 | 0 | 4,733 |
| 1997 Apr | 1,374 | 8,818 | 1,374 | $ 8,299.4 | 6.04 | 1 | 0.9414 | 922 | 0 | 0 | 5.0 | 0 | 917 |
| 1997 May | 8,565 | 25,883 | 8,565 | $ 24,796.5 | 2.90 | 1 | 0.9414 | 1,374 | 0 | 0 | 25.0 | 0 | 1,349 |
| 1997 Jun | 25,206 | 46,338 | 25,206 | $ 42,481.2 | 1.69 | 1 | 0.9414 | 8,565 | 0 | 0 | 250.0 | 0 | 8,315 |
| 1997 Jul | 48,536 | 50,216 | 48,536 | $ 47,275.2 | 0.97 | 1 | 0.9414 | 25,206 | 2,600 | 378 | 5,054.0 | 267 | 24,139 |
| 1997 Aug | 57,221 | 61,443 | 57,221 | $ 57,848.1 | 1.01 | 1 | 0.9414 | 48,536 | 6,200 | 910 | 654.0 | 625 | 52,885 |
| 1997 Sep | 86,193 | 25,842 | 86,193 | $ 24,322.2 | 0.28 | 1 | 0.9414 | 57,221 | 8,275 | 414 | 1,640.0 | 808 | 62,634 |
| 1997 Oct | 27,126 | 17,505 | 27,126 | $ 18,563.9 | 0.68 | 1 | 0.9414 | 86,193 | 6,200 | 310 | 1,000.0 | 675 | 89,408 |
| 1997 Nov | 19,416 | 26,161 | 19,416 | $ 25,714.4 | 1.32 | 1 | 0.9414 | 27,126 | 0 | 0 | 405.0 | 0 | 26,721 |
| 1997 Dec | 1,886 | 2,816 | 1,886 | $ 2,465.2 | 2.44 | 1 | 0.9414 | 19,416 | 0 | 0 | 385.0 | 0 | 19,031 |
| 1998 Jan | 3,886 | 1,790 | 3,886 | $ 1,223.8 | 0.32 | 1 | 0.9414 | 1,886 | 0 | 0 | 200.0 | 0 | 1,686 |
| 1998 Feb | 4,773 | 1,229 | 4,773 | $ 1,157.0 | 0.24 | 1 | 0.9414 | 3,886 | 0 | 0 | 90.0 | 0 | 3,796 |
| 1998 Mar | 922 | 2,040 | 922 | $ 1,858.5 | 2.02 | 1 | 0.9414 | 4,773 | 0 | 0 | 40.0 | 0 | 4,733 |
| 1998 Apr | 1,374 | 8,818 | 1,374 | $ 8,299.4 | 6.04 | 1 | 0.9414 | 922 | 0 | 0 | 5.0 | 0 | 917 |
| 1998 May | 8,565 | 25,883 | 8,565 | $ 24,796.5 | 2.90 | 1 | 0.9414 | 1,374 | 0 | 0 | 25.0 | 0 | 1,349 |
| 1998 Jun | 25,206 | 46,338 | 25,206 | $ 42,481.2 | 1.69 | 1 | 0.9414 | 8,565 | 0 | 0 | 250.0 | 0 | 8,315 |
| 1998 Jul | 48,536 | 50,216 | 48,536 | $ 47,275.2 | 0.97 | 1 | 0.9414 | 25,206 | 2,600 | 378 | 5,054.0 | 267 | 24,139 |
| 1998 Aug | 57,221 | 61,443 | 57,221 | $ 57,848.1 | 1.01 | 1 | 0.9414 | 48,536 | 6,200 | 910 | 654.0 | 625 | 52,885 |
| 1998 Sep | 86,193 | 25,842 | 86,193 | $ 24,322.2 | 0.28 | 1 | 0.9414 | 57,221 | 8,275 | 414 | 1,640.0 | 808 | 62,634 |
| 1998 Oct | 27,126 | 17,505 | 27,126 | $ 18,563.9 | 0.68 | 1 | 0.9414 | 86,193 | 6,200 | 310 | 1,000.0 | 675 | 89,408 |
| 1998 Nov | 19,416 | 26,161 | 19,416 | $ 25,714.4 | 1.32 | 1 | 0.9414 | 27,126 | 0 | 0 | 405.0 | 0 | 26,721 |
| 1998 Dec | 1,886 | 2,816 | 1,886 | $ 2,465.2 | 2.44 | 1 | 0.9414 | 19,416 | 0 | 0 | 385.0 | 0 | 19,031 |
| 1999 Jan | 3,886 | 1,790 | 3,886 | $ 1,223.8 | 0.32 | 1 | 0.9414 | 1,886 | 0 | 0 | 200.0 | 0 | 1,686 |
| 1999 Feb | 4,773 | 1,229 | 4,773 | $ 1,157.0 | 0.24 | 1 | 0.9414 | 3,886 | 0 | 0 | 90.0 | 0 | 3,796 |
| 1999 Mar | 922 | 2,040 | 922 | $ 1,858.5 | 2.02 | 1 | 0.9414 | 4,773 | 0 | 0 | 40.0 | 0 | 4,733 |
| 1999 Apr | 1,374 | 8,818 | 1,374 | $ 8,299.4 | 6.04 | 1 | 0.9414 | 922 | 0 | 0 | 5.0 | 0 | 917 |
| 1999 May | 8,565 | 25,883 | 8,565 | $ 24,796.5 | 2.90 | 1 | 0.9414 | 1,374 | 0 | 0 | 25.0 | 0 | 1,349 |
| 1999 Jun | 25,206 | 46,338 | 25,206 | $ 42,481.2 | 1.69 | 1 | 0.9414 | 8,565 | 0 | 0 | 250.0 | 0 | 8,315 |
| 1999 Jul | 48,536 | 50,216 | 48,536 | $ 47,275.2 | 0.97 | 1 | 0.9414 | 25,206 | 2,600 | 378 | 5,054.0 | 267 | 24,139 |
| 1999 Aug | 57,221 | 61,443 | 57,221 | $ 57,848.1 | 1.01 | 1 | 0.9414 | 48,536 | 6,200 | 910 | 654.0 | 625 | 52,885 |
| 1999 Sep | 86,193 | 25,842 | 86,193 | $ 24,322.2 | 0.28 | 1 | 0.9414 | 57,221 | 8,275 | 414 | 1,640.0 | 808 | 62,634 |
| 1999 Oct | 27,126 | 17,505 | 27,126 | $ 18,563.9 | 0.68 | 1 | 0.9414 | 86,193 | 6,200 | 310 | 1,000.0 | 675 | 89,408 |
| 1999 Nov | 19,416 | 26,161 | 19,416 | $ 25,714.4 | 1.32 | 1 | 0.9414 | 27,126 | 0 | 0 | 405.0 | 0 | 26,721 |
| 1999 Dec | 1,886 | 2,816 | 1,886 | $ 2,465.2 | 2.44 | 1 | 0.9414 | 19,416 | 0 | 0 | 385.0 | 0 | 19,031 |
| 1998 Jan | 3,886 | 1,790 | 3,886 | $ 1,223.8 | 0.32 | 1 | 0.9414 | 1,886 | 0 | 0 | 200.0 | 0 | 1,686 |
| 1998 Feb | 4,773 | 1,229 | 4,773 | $ 1,157.0 | 0.24 | 1 | 0.9414 | 3,886 | 0 | 0 | 90.0 | 0 | 3,796 |
| 1998 Mar | 922 | 2,040 | 922 | $ 1,858.5 | 2.02 | 1 | 0.9414 | 4,773 | 0 | 0 | 40.0 | 0 | 4,733 |
| 1998 Apr | 1,374 | 8,818 | 1,374 | $ 8,299.4 | 6.04 | 1 | 0.9414 | 922 | 0 | 0 | 5.0 | 0 | 917 |
| 1998 May | 8,565 | 25,883 | 8,565 | $ 24,796.5 | 2.90 | 1 | 0.9414 | 1,374 | 0 | 0 | 25.0 | 0 | 1,349 |
| 1998 Jun | 25,206 | 46,338 | 25,206 | $ 42,481.2 | 1.69 | 1 | 0.9414 | 8,565 | 0 | 0 | 250.0 | 0 | 8,315 |
| 1998 Jul | 48,536 | 50,216 | 48,536 | $ 47,275.2 | 0.97 | 1 | 0.9414 | 25,206 | 2,600 | 378 | 5,054.0 | 267 | 24,139 |
| 1998 Aug | 57,221 | 61,443 | 57,221 | $ 57,848.1 | 1.01 | 1 | 0.9414 | 48,536 | 6,200 | 910 | 654.0 | 625 | 52,885 |
| 1998 Sep | 86,193 | 25,842 | 86,193 | $ 24,322.2 | 0.28 | 1 | 0.9414 | 57,221 | 8,275 | 414 | 1,640.0 | 808 | 62,634 |
| 1998 Oct | 27,126 | 17,505 | 27,126 | $ 18,563.9 | 0.68 | 1 | 0.9414 | 86,193 | 6,200 | 310 | 1,000.0 | 675 | 89,408 |
| 1998 Nov | 19,416 | 26,161 | 19,416 | $ 25,714.4 | 1.32 | 1 | 0.9414 | 27,126 | 0 | 0 | 405.0 | 0 | 26,721 |
| 1998 Dec | 1,886 | 2,816 | 1,886 | $ 2,465.2 | 2.44 | 1 | 0.9414 | 19,416 | 0 | 0 | 385.0 | 0 | 19,031 |

| Data Source | EUROSTAT | EUROSTAT | Auto Calc | Auto Calc | Auto Calc | EUROSTAT | IMF | FAOSTAT | FAOSTAT | FAOSTAT Estimates | FAOSTAT | FAOSTAT Estimates | Auto Calc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Units | Import MT | Import Value $'000CIF Class | Adj. Q MT $ | Adj. Value $'000 | CIF US$/Kg | Category SITC(4) Code | Ratio (LCD/S) | Imports MT | Production MT | Losses MT | Exports MT | Processing MT | Consumption MT |
| 1967 Totals | 106,709 | 239,091 | 106,709 | $ 239,091.0 | 2.24 | 1 | 1.0000 | 106,709 | 90,253 | 4,512 | 3,204.0 | 9,024 | 181,912 |
| 1968 Totals | 100,300 | 215,876 | 100,300 | $ 215,876.0 | 2.15 | 1 | 1.0000 | 100,300 | 83,368 | 4,170 | 1,340.0 | 8,340 | 165,873 |
| 1969 Totals | 96,724 | 267,471 | 96,724 | $ 267,471.0 | 2.77 | 1 | 1.0000 | 96,724 | 85,068 | 4,253 | 1,573.0 | 8,506 | 167,451 |
| 1970 Totals | 94,029 | 230,143 | 94,029 | $ 230,143.0 | 2.44 | 1 | 1.0000 | 94,029 | 73,973 | 3,699 | 1,883.0 | 7,397 | 155,223 |
| 1971 Totals | 111,217 | 257,639 | 111,217 | $ 257,639.0 | 2.32 | 1 | 1.0000 | 111,217 | 53,485 | 2,674 | 2,881.0 | 5,349 | 154,018 |
| 1972 Totals | 96,949 | 278,618 | 96,949 | $ 278,618.0 | 2.87 | 1 | 1.0000 | 96,949 | 55,115 | 2,756 | 1,384.0 | 5,512 | 142,414 |
| 1973 Totals | 85,299 | 174,443 | 85,299 | $ 174,443.0 | 2.05 | 1 | 1.0000 | 85,299 | 58,805 | 2,825 | 1,416.0 | 8,851 | 130,813 |
| 1974 Totals | 138,286 | 251,971 | 126,276 | $ 251,971.0 | 1.96 | 1 | 1.0000 | 128,276 | 58,500 | 2,925 | 1,811.0 | 5,850 | 176,450 |
| 1975 Totals | 140,258 | 258,502 | 140,258 | $ 258,502.0 | 1.84 | 1 | 1.0000 | 140,258 | 46,780 | 3,439 | 2,439.0 | 8,878 | 188,281 |
| 1976 Totals | 129,776 | 268,288 | 129,776 | $ 268,288.0 | 1.91 | 1 | 1.0000 | 129,505 | 77,203 | 3,852 | 2,885.0 | 7,703 | 193,678 |
| 1977 Totals | 138,372 | 333,833 | 138,372 | $ 276,083.0 | 1.78 | 1 | 1.0000 | 138,372 | 76,877 | 3,844 | 2,717.0 | 7,688 | 202,796 |
| 1978 Totals | 138,372 | 339,503 | 138,372 | $ 239,503.0 | 1.73 | 1 | 1.0000 | 138,372 | 76,877 | 3,844 | 2,717.0 | 7,688 | 202,796 |
| 1975 Jan | 1,200 | 4,000 | 1,200 | $ 3,786.6 | 3.14 | 1 | 0.9614 | 1,200 | 0 | 0 | 91.0 | 0 | 1,109 |
| 1975 Feb | 2,208 | 5,000 | 2,208 | $ 6,810.3 | 2.80 | 1 | 0.9614 | 2,208 | 0 | 0 | 85.0 | 0 | 2,213 |
| 1975 Mar | 8,048 | 16,013 | 8,048 | $ 15,074.8 | 1.87 | 1 | 0.9614 | 8,048 | 5,408 | 135 | 276.0 | 344 | 16,699 |
| 1975 Apr | 27,001 | 50,228 | 27,001 | $ 47,277.1 | 1.75 | 1 | 0.9614 | 27,301 | 10,810 | 540 | 138.0 | 1,621 | 35,752 |
| 1975 May | 40,038 | 56,381 | 40,038 | $ 56,811.1 | 1.41 | 1 | 0.9614 | 40,038 | 13,768 | 688 | 966.0 | 1,376 | 51,082 |
| 1975 Jun | 28,515 | 98,648 | 28,515 | $ 85,872.4 | 3.01 | 1 | 0.9614 | 28,515 | 13,768 | 688 | 138.0 | 1,376 | 50,479 |
| 1975 Jul | 17,490 | 19,862 | 17,490 | $ 16,036.1 | 1.02 | 1 | 0.9614 | 17,490 | 11,013 | 551 | 248.0 | 1,652 | 26,013 |
| 1975 Aug | 8,541 | 8,544 | 8,541 | $ 8,994.7 | 1.05 | 1 | 0.9614 | 8,541 | 11,013 | 551 | 276.0 | 1,652 | 11,840 |
| 1975 Sep | 4,036 | 7,280 | 4,036 | $ 6,853.4 | 1.69 | 1 | 0.9614 | 4,036 | 8,675 | 541 | 552.0 | 668 | 3,855 |
| 1975 Oct | 1,325 | 2,713 | 1,325 | $ 2,554.0 | 1.93 | 1 | 0.9614 | 1,325 | 0 | 0 | 41.0 | 0 | 1,284 |
| 1975 Nov | 877 | 3,867 | 877 | $ 3,815.5 | 4.31 | 1 | 0.9614 | 877 | 0 | 0 | 13.0 | 0 | 864 |
| 1975 Dec | 454 | 2,000 | 454 | $ 1,685.8 | 3.14 | 1 | 0.9614 | 454 | 0 | 0 | 14.0 | 0 | 440 |
| 1976 Jan | 1,200 | 4,000 | 1,200 | $ 3,786.6 | 3.14 | 1 | 0.9614 | 1,200 | 0 | 0 | 90.0 | 0 | 1,110 |
| 1976 Feb | 2,208 | 6,000 | 2,208 | $ 6,501.3 | 2.80 | 1 | 0.9614 | 2,208 | 0 | 0 | 85.0 | 0 | 2,123 |
| 1976 Mar | 8,048 | 16,013 | 8,048 | $ 15,074.8 | 1.87 | 1 | 0.9614 | 8,048 | 5,408 | 135 | 276.0 | 344 | 16,699 |
| 1976 Apr | 27,301 | 50,228 | 27,301 | $ 47,277.1 | 1.73 | 1 | 0.9614 | 27,301 | 11,285 | 565 | 138.0 | 1,693 | 37,010 |
| 1976 May | 40,038 | 56,756 | 40,038 | $ 56,811.1 | 1.42 | 1 | 0.9614 | 40,038 | 13,768 | 688 | 966.0 | 1,376 | 51,082 |
| 1976 Jun | 28,515 | 98,648 | 28,515 | $ 85,872.4 | 3.01 | 1 | 0.9614 | 28,515 | 13,768 | 688 | 138.0 | 1,376 | 50,479 |
| 1976 Jul | 17,490 | 19,862 | 17,490 | $ 16,036.1 | 1.02 | 1 | 0.9614 | 17,490 | 11,013 | 551 | 248.0 | 1,652 | 26,013 |
| 1976 Aug | 8,541 | 8,544 | 8,541 | $ 8,994.7 | 1.05 | 1 | 0.9614 | 8,541 | 11,013 | 551 | 276.0 | 1,652 | 11,840 |
| 1976 Sep | 4,036 | 7,280 | 4,036 | $ 6,853.4 | 1.69 | 1 | 0.9614 | 4,036 | 8,675 | 541 | 552.0 | 668 | 3,855 |
| 1976 Oct | 1,325 | 2,713 | 1,325 | $ 2,554.0 | 1.93 | 1 | 0.9614 | 1,325 | 0 | 0 | 41.0 | 0 | 1,284 |
| 1976 Nov | 877 | 3,867 | 877 | $ 3,815.5 | 4.31 | 1 | 0.9614 | 877 | 0 | 0 | 13.0 | 0 | 864 |
| 1976 Dec | 454 | 2,000 | 454 | $ 1,685.8 | 3.14 | 1 | 0.9614 | 454 | 0 | 0 | 14.0 | 0 | 440 |
| 1977 Jan | 1,200 | 4,000 | 1,200 | $ 3,786.6 | 3.14 | 1 | 0.9614 | 1,200 | 0 | 0 | 90.0 | 0 | 1,110 |
| 1977 Feb | 2,208 | 6,000 | 2,208 | $ 6,501.3 | 2.80 | 1 | 0.9614 | 2,208 | 0 | 0 | 85.0 | 0 | 2,123 |
| 1977 Mar | 8,048 | 16,013 | 8,048 | $ 15,074.8 | 1.87 | 1 | 0.9614 | 8,048 | 5,408 | 135 | 276.0 | 344 | 16,699 |
| 1977 Apr | 27,301 | 50,228 | 27,301 | $ 47,277.1 | 1.73 | 1 | 0.9614 | 27,301 | 11,285 | 565 | 138.0 | 1,693 | 37,010 |
| 1977 May | 40,038 | 56,756 | 40,038 | $ 56,811.1 | 1.42 | 1 | 0.9614 | 40,038 | 13,768 | 688 | 966.0 | 1,376 | 51,082 |
| 1977 Jun | 28,515 | 98,648 | 28,515 | $ 85,872.4 | 3.01 | 1 | 0.9614 | 28,515 | 13,768 | 688 | 138.0 | 1,376 | 50,479 |
| 1977 Jul | 17,490 | 19,862 | 17,490 | $ 16,036.1 | 1.02 | 1 | 0.9614 | 17,490 | 11,013 | 551 | 248.0 | 1,652 | 26,013 |
| 1977 Aug | 8,541 | 8,544 | 8,541 | $ 8,994.7 | 1.05 | 1 | 0.9614 | 8,541 | 11,013 | 551 | 276.0 | 1,652 | 11,840 |
| 1977 Sep | 4,036 | 7,280 | 4,036 | $ 6,853.4 | 1.69 | 1 | 0.9614 | 4,036 | 8,675 | 541 | 552.0 | 668 | 3,855 |
| 1977 Oct | 1,325 | 2,713 | 1,325 | $ 2,554.0 | 1.93 | 1 | 0.9614 | 1,325 | 0 | 0 | 41.0 | 0 | 1,284 |
| 1977 Nov | 877 | 3,867 | 877 | $ 3,815.5 | 4.31 | 1 | 0.9614 | 877 | 0 | 0 | 13.0 | 0 | 864 |
| 1977 Dec | 454 | 2,000 | 454 | $ 1,685.8 | 3.14 | 1 | 0.9614 | 454 | 0 | 0 | 14.0 | 0 | 440 |
| 1978 Jan | 1,200 | 4,000 | 1,200 | $ 3,786.6 | 3.14 | 1 | 0.9614 | 1,200 | 0 | 0 | 90.0 | 0 | 1,110 |
| 1978 Feb | 2,208 | 6,000 | 2,208 | $ 6,501.3 | 2.80 | 1 | 0.9614 | 2,208 | 0 | 0 | 85.0 | 0 | 2,123 |
| 1978 Mar | 8,048 | 16,013 | 8,048 | $ 15,074.8 | 1.87 | 1 | 0.9614 | 8,048 | 5,408 | 135 | 276.0 | 344 | 16,699 |
| 1978 Apr | 27,301 | 50,228 | 27,301 | $ 47,277.1 | 1.73 | 1 | 0.9614 | 27,301 | 11,285 | 565 | 138.0 | 1,693 | 37,010 |
| 1978 May | 40,038 | 56,756 | 40,038 | $ 56,811.1 | 1.42 | 1 | 0.9614 | 40,038 | 13,768 | 688 | 966.0 | 1,376 | 51,082 |
| 1978 Jun | 28,515 | 98,648 | 28,515 | $ 85,872.4 | 3.01 | 1 | 0.9614 | 28,515 | 13,768 | 688 | 138.0 | 1,376 | 50,479 |
| 1978 Jul | 17,490 | 19,862 | 17,490 | $ 16,036.1 | 1.02 | 1 | 0.9614 | 17,490 | 11,013 | 551 | 248.0 | 1,652 | 26,013 |
| 1978 Aug | 8,541 | 8,544 | 8,541 | $ 8,994.7 | 1.05 | 1 | 0.9614 | 8,541 | 11,013 | 551 | 276.0 | 1,652 | 11,840 |
| 1978 Sep | 4,036 | 7,280 | 4,036 | $ 6,853.4 | 1.69 | 1 | 0.9614 | 4,036 | 8,675 | 541 | 552.0 | 668 | 3,855 |
| 1978 Oct | 1,325 | 2,713 | 1,325 | $ 2,554.0 | 1.93 | 1 | 0.9614 | 1,325 | 0 | 0 | 41.0 | 0 | 1,284 |
| 1978 Nov | 877 | 3,867 | 877 | $ 3,815.5 | 4.31 | 1 | 0.9614 | 877 | 0 | 0 | 13.0 | 0 | 864 |
| 1978 Dec | 454 | 2,000 | 454 | $ 1,685.8 | 3.14 | 1 | 0.9614 | 454 | 0 | 0 | 14.0 | 0 | 440 |

| | | Imports MT | Production MT | Losses MT | Exports MT | Processing MT | Consumption MT | Export Breakeven MT | Month | CIF Import Price US$ | Export Breakeven CIF US$ | Demand Volume MT | Total Fixed Demand US$ | Total Net Return US$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4Yr Ave | Jan | 12,345 | 30 | 1 | 1,012.00 | 2.01 | 11,337.1 | 1750.0 | Jan | 0.45 | 0.49 | 0.457.9 | 4 810.8 | 1322 |
| 4Yr Ave | Feb | 10,539 | 40 | 2 | 1,910.00 | 4.02 | 13,6xx.2 | 1750.0 | Feb | 0.45 | 0.49 | 3 994.8 | 1,898.8 | 3 |
| 4Yr Ave | Mar | 10,568 | 40 | 2 | 1,6xx.00 | 4.02 | 17,8xx.2 | 1750.0 | Mar | 0.24 | 0.49 | | | 0 |
| 4Yr Ave | Apr | 25,469 | 40 | 2 | 2,307.00 | 4.02 | 23,208.2 | 1750.0 | Apr | 0.79 | 0.49 | | | 0 |
| 4Yr Ave | May | 39,478 | 40 | 2 | 1,206.00 | 4.02 | 37,786.2 | 1750.0 | May | 0.38 | 0.49 | | | 0 |
| 4Yr Ave | Jun | 24,573 | 60 | 3 | 2,106.00 | 6.03 | 20,618.5 | 1750.0 | Jun | 0.38 | 0.49 | | | 0 |
| 4Yr Ave | Jul | 23,291 | 80 | 3 | 2,841.00 | 8.03 | 20,474.5 | 1750.0 | Jul | 0.41 | 0.49 | | | 0 |
| 4Yr Ave | Aug | 19,604 | 40 | 2 | 1,040.00 | 4.02 | 18,188.2 | 1750.0 | Aug | 0.35 | 0.49 | | | 0 |
| 4Yr Ave | Sep | 18,786 | 40 | 2 | 2,047.00 | 4.02 | 14,753.2 | 1750.0 | Sep | 0.28 | 0.49 | | | 0 |
| 4Yr Ave | Oct | 16,045 | 20 | 1 | 4,472.00 | 2.01 | 12,490.1 | 1750.0 | Oct | 0.22 | 0.49 | | | 0 |
| 4Yr Ave | Nov | 14,145 | | | 5,434.00 | | 10,713.0 | 1750.0 | Nov | 0.52 | 0.49 | 7 099.0 | 3,718.1 | 2557 |
| 4Yr Ave | Dec | 12,378 | 0 | 0 | 2,018.00 | - | 10,360.0 | 1750.0 | Dec | 0.61 | 0.49 | 2,865.0 | 4,561.5 | 3716 |

| | | Imports MT | Production MT | Losses MT | Exports MT | Processing MT | Consumption MT | Export Breakeven MT | Month | CIF Import Price US$ | Export Breakeven Cut-off US$ | Fixed Demand Volume MT | Total Fixed Demand US$ | Total Net Return US$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4Yr Ave | Jan | 10,452 | 7,051 | 353 | 521.00 | Pot. | 28,252.53 | 2,000.1 | Jan | 0.95 | 0.68 | 5,000.0 | 3,750.0 | 3,021 |
| 4Yr Ave | Feb | 9,041 | 0 | 0 | 200.00 | 0 | 31,012.18 | 2,000.1 | Feb | 1.08 | 0.68 | 14,000.1 | 10,500.1 | 7,795 |
| 4Yr Ave | Mar | 10,446 | 0 | 0 | 50.00 | 0 | 41,612.18 | 2,000.1 | Mar | 1.08 | 0.68 | 11,000.1 | 8,250.1 | 6,053 |
| 4Yr Ave | Apr | 7,783 | 0 | 0 | 1,841.00 | 0 | 47,613.18 | 2,000.1 | Apr | 0.93 | 0.68 | 14,000.1 | 10,500.1 | 8,835 |
| 4Yr Ave | May | 8,954 | 6,035 | 227 | 0[illegible] | 4[illegible] | 52,xxx.18 | 2,000.1 | May | 1.04 | 0.68 | 8,000.0 | 6,000.0 | 4,917 |
| 4Yr Ave | Jun | 8,003 | 28,000 | 1,400 | 2,071.00 | 0 rec | 76,xx7.00 | 2,000.1 | Jun | 0.89 | 0.68 | | | 0 |
| 4Yr Ave | Jul | 9,403 | 39,000 | 1,950 | 1,481.00 | 0 rec | 97,xx9.68 | 2,000.1 | Jul | 0.91 | 0.68 | | | 0 |
| 4Yr Ave | Aug | 8,800 | 38,626 | 1,931 | 1,263.00 | 0 rec | 38,xx9.54 | 2,000.1 | Aug | 0.91 | 0.68 | | | 0 |
| 4Yr Ave | Sep | 8,077 | 37,018 | 1,851 | 1,683.00 | 0 rec | 31,xx9.07 | 2,000.1 | Sep | 0.91 | 0.68 | | | 0 |
| 4Yr Ave | Oct | 8,895 | 27,813 | 1,391 | 2,683.00 | 2,783 | 28,452.41 | 2,000.1 | Oct | 0.91 | 0.68 | | | 0 |
| 4Yr Ave | Nov | 8,184 | 21,082 | 1,054 | 3,251.00 | 2,108 | 23,052.52 | 2,000.1 | Nov | 1.02 | 0.68 | | | 0 |
| 4Yr Ave | Dec | 7,027 | 14,979 | 749 | 254.00 | 1,998 | 20,108.67 | 2,000.1 | Dec | 1.14 | 0.68 | | | 0 |

| | | Imports MT | Production MT | Losses MT | Exports MT | Processing MT | Consumption MT | Export Breakeven MT | Month | CIF Import Price US$ | Export Breakeven Cut-off US$ | Fixed Demand Volume MT | Total Fixed Demand US$ | Total Net Return US$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4Yr Ave | Jan | 621 | 4,812 | 241 | 451.0 | 462 | 4,885.77 | 4855.6 | Jan | 2.21 | 1.17 | 300.0 | 240.0 | 418 |
| 4Yr Ave | Feb | 713 | 4,812 | 241 | 98.0 | 462 | 4,842.77 | 4855.6 | Feb | 2.51 | 1.17 | 312.5 | 250.0 | 295 |
| 4Yr Ave | Mar | 751 | 2,359 | 118 | 13.0 | 231 | 2,700.55 | 4855.6 | Mar | 1.68 | 1.17 | 2,100.2 | 1,680.1 | 1809 |
| 4Yr Ave | Apr | 1,598 | 0 | 0 | 63.0 | 0 | 5,531.61 | 4855.6 | Apr | 1.82 | 1.17 | 5,327.5 | 4,262.0 | 3974 |
| 4Yr Ave | May | 1,859 | 0 | 0 | 29.0 | 0 | 7,361.61 | 4855.6 | May | 2.32 | 1.17 | 9,000.0 | 7,200.0 | 6815 |
| 4Yr Ave | Jun | 2,298 | 0 | 0 | 1,45.0 | 0 | 2,xxx.xx | 4855.6 | Jun | 1.72 | 1.17 | 2,500.0 | 2,000.0 | 1857 |
| 4Yr Ave | Jul | 2,130 | 4,812 | 241 | 65.0 | 462 | 6,xxx.77 | 4855.6 | Jul | 2.19 | 1.17 | | | 0 |
| 4Yr Ave | Aug | 2,130 | 0 [illegible] | 346 | 151.0 | 693 | 6,xx0.15 | 4855.6 | Aug | 1.88 | 1.17 | | | 0 |
| 4Yr Ave | Sep | 1,448 | 0 [illegible] | 346 | 48.0 | 693 | 7,xx5.15 | 4855.6 | Sep | 1.88 | 1.17 | | | 0 |
| 4Yr Ave | Oct | 2,197 | 0 [illegible] | 346 | 928.0 | 693 | 7,xx0.15 | 4855.6 | Oct | 1.85 | 1.17 | | | 0 |
| 4Yr Ave | Nov | 1,961 | 4,812 | 241 | 12.0 | 462 | 6,xx2.77 | 4855.6 | Nov | 1.70 | 1.17 | | | 0 |
| 4Yr Ave | Dec | 1,560 | 4,812 | 241 | 1,128.0 | 462 | 6,xx1.77 | 4855.6 | Dec | 1.98 | 1.17 | | | 0 |

| | | Imports MT | Production MT | Losses MT | Exports MT | Processing MT | Consumption MT | Egypt Breakeven MT | Month | CIF Import Price US$ | Egypt Breakeven CIF US$ | Prof. Demand Volume MT | Total Prof. Demand US$ | Total Net Return US$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4Yr Ave | Jan | 8,910 | 25,061 | 1,253 | 154.00 | 2,506 | 30,052.49 | 29914.4 | Jan | 0.30 | 0.37 | - | - | 0 |
| 4Yr Ave | Feb | 8,445 | 25,061 | 1,253 | 215.00 | 2,506 | 29,535.49 | 29914.4 | Feb | 0.34 | 0.37 | - | - | 0 |
| 4Yr Ave | Mar | 8,129 | 25,061 | 1,253 | 200.00 | 2,506 | 27,265.49 | 29914.4 | Mar | 0.62 | 0.37 | - | - | 0 |
| 4Yr Ave | Apr | 9,429 | 37,591 | 1,880 | 211.00 | 3,759 | 37,155.01 | 29914.4 | Apr | 0.59 | 0.37 | - | - | 0 |
| 4Yr Ave | May | 7,556 | 37,591 | 1,880 | 244.00 | 3,759 | 39,208.01 | 29914.4 | May | 0.43 | 0.37 | - | - | 0 |
| 4Yr Ave | Jun | 2,078 | 37,591 | 1,880 | 269.00 | 3,759 | 38,779.01 | 29914.4 | Jun | 0.45 | 0.37 | - | - | 0 |
| 4Yr Ave | Jul | 6,098 | 37,591 | 1,880 | 257.00 | 3,759 | 37,755.01 | 29914.4 | Jul | 0.57 | 0.37 | - | - | 0 |
| 4Yr Ave | Aug | 2,340 | 25,061 | 1,253 | 262.00 | 2,506 | 26,220.49 | 29914.4 | Aug | 0.58 | 0.37 | - | - | 0 |
| 4Yr Ave | Sep | 5,620 | 0 | 0 | 241.00 | 0 | 5,379.00 | 29914.4 | Sep | 0.63 | 0.37 | 18,195.4 | 11,482.1 | 6543 |
| 4Yr Ave | Oct | 8,595 | 0 | 0 | 278.00 | 0 | 8,857.00 | 29914.4 | Oct | 0.62 | 0.37 | 18,407.4 | 9,561.0 | 615.0 |
| 4Yr Ave | Nov | 2,754 | 0 | 0 | 314.00 | 0 | 5,626.00 | 29914.4 | Nov | 1.04 | 0.37 | 21,044.4 | 24,573.7 | 2853.0 |
| 4Yr Ave | Dec | 2,731 | 0 | 0 | 276.00 | 0 | 5,650.00 | 29914.4 | Dec | 1.04 | 0.37 | 21,011.4 | 24,449.1 | 2886.0 |

| | | Imports MT | Production MT | Losses MT | Exports MT | Processing MT | Consumption MT | Egypt Breakeven MT | Month | CIF Import Price US$ | Egypt Breakeven CIF US$ | Prof. Demand Volume MT | Total Prof. Demand US$ | Total Net Return US$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4Yr Ave | Jan | 500 | 0 | 0 | 15.00 | 0 | 485.00 | 1013.5 | Jan | 1.22 | 0.61 | 543.0 | 716.3 | 304 |
| 4Yr Ave | Feb | 863 | 0 | 0 | 37.00 | 0 | 468.00 | 1013.5 | Feb | 1.25 | 0.61 | 557.0 | 719.9 | 264 |
| 4Yr Ave | Mar | 1,34 | 0 | 0 | 16.00 | 0 | 1,08.00 | 1013.5 | Mar | 1.25 | 0.61 | 557.0 | 1,018.5 | 1063 |
| 4Yr Ave | Apr | 1,84 | 0 | 0 | 34.00 | 0 | 1,80.00 | 1013.5 | Apr | 1.23 | 0.61 | 9,013.5 | 1,080.4 | 1010 |
| 4Yr Ave | May | 1,48 | 0 | 0 | 43.00 | 0 | 1,61.00 | 1013.5 | May | 1.16 | 0.61 | 9,013.5 | 1,080.4 | 1010 |
| 4Yr Ave | Jun | 85 | 0 | 0 | 11.00 | 0 | 74.00 | 1013.5 | Jun | 1.05 | 0.61 | 9,013.5 | 1,772.6 | 1180 |
| 4Yr Ave | Jul | 81 | 0 | 0 | 27.00 | 0 | 1,0.00 | 1013.5 | Jul | 1.04 | 0.61 | 1,013.5 | 1,082.6 | 1082 |
| 4Yr Ave | Aug | 171 | 0 | 0 | 95.00 | 0 | 1,00.00 | 1013.5 | Aug | 1.02 | 0.61 | 9,013.5 | 1,772.6 | 1180 |
| 4Yr Ave | Sep | 1,17 | 0 | 0 | 41.00 | 0 | 980.00 | 1013.5 | Sep | 1.04 | 0.61 | 1,013.5 | 1,082.6 | 1082 |
| 4Yr Ave | Oct | 1,57 | 0 | 0 | 116.00 | 0 | 454.00 | 1013.5 | Oct | 0.80 | 0.61 | 9,013.5 | 1,772.6 | 1180 |
| 4Yr Ave | Nov | 1,083 | 0 | 0 | 144.00 | 0 | 939.00 | 1013.5 | Nov | 0.67 | 0.61 | 9,013.5 | 1,772.6 | 1180 |
| 4Yr Ave | Dec | 833 | 0 | 0 | 36.00 | 0 | 754.00 | 1013.5 | Dec | 0.63 | 0.61 | 9,013.5 | 1,772.6 | 1180 |

| | | Imports MT | Production MT | Losses MT | Exports MT | Processing MT | Consumption MT | Egypt Breakeven MT | Month | CIF Import Price US$ | Egypt Breakeven CIF US$ | Prof. Demand Volume MT | Total Prof. Demand US$ | Total Net Return US$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4Yr Ave | Jan | 69,594 | 0 | 0 | 1,495.00 | 0 | 68,099.00 | 40582.9 | Jan | 0.45 | 0.45 | - | - | 0 |
| 4Yr Ave | Feb | 67,548 | 0 | 0 | 1,488.00 | 0 | 66,060.00 | 40582.9 | Feb | 0.45 | 0.45 | - | - | 0 |
| 4Yr Ave | Mar | 63,450 | 0 | 0 | 3,012.00 | 0 | 60,438.00 | 40582.9 | Mar | 0.46 | 0.45 | - | - | 0 |
| 4Yr Ave | Apr | 63,226 | 0 | 0 | 2,512.00 | 0 | 57,594.00 | 40582.9 | Apr | 0.47 | 0.45 | - | - | 0 |
| 4Yr Ave | May | 63,107 | 0 | 0 | 1,212.00 | 0 | 58,695.00 | 40582.9 | May | 0.48 | 0.45 | 1,897.9 | 910.7 | 91 |
| 4Yr Ave | Jun | 20,712 | 0 | 0 | 944.00 | 0 | 19,768.00 | 40582.9 | Jun | 0.48 | 0.45 | 20,814.9 | 9,975.4 | 798 |
| 4Yr Ave | Jul | 19,588 | 0 | 0 | 1,042.00 | 0 | 9,546.00 | 40582.9 | Jul | 0.47 | 0.45 | 31,208.9 | 14,619.8 | 732 |
| 4Yr Ave | Aug | 11,286 | 0 | 0 | 1,173.00 | 0 | 10,112.00 | 40582.9 | Aug | 0.53 | 0.45 | 30,488.9 | 15,537.8 | 1398 |
| 4Yr Ave | Sep | 14,378 | 0 | 0 | 2,098.00 | 0 | 12,018.00 | 40582.9 | Sep | 0.55 | 0.45 | 20,289.9 | 16,286.8 | 3674 |
| 4Yr Ave | Oct | 19,812 | 0 | 0 | 3,410.00 | 0 | 16,402.00 | 40582.9 | Oct | 0.60 | 0.45 | 24,188.9 | 10,668.8 | 1334 |
| 4Yr Ave | Nov | 30,011 | 0 | 0 | 3,187.00 | 0 | 26,824.00 | 40582.9 | Nov | 0.47 | 0.45 | 12,758.9 | 8,468.9 | 1340 |
| 4Yr Ave | Dec | 63,207 | 0 | 0 | 3,113.00 | 0 | 60,094.00 | 40582.9 | Dec | 0.40 | 0.45 | - | - | 0 |

| | | Imports MT | Production MT | Losses MT | Exports MT | Processing MT | Consumption MT | Egypt Breakeven MT | Month | CIF Import Price US$ | Egypt Breakeven EGP/US$ | Prod Demand Volume MT | Total Prod Demand US$ | Total Fish Demand US$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4Yr Ave | Jan | 66,021 | 0 | 0 | 2,750.09 | 0 | 63,521.09 | 25925.2 | Jan | 0.71 | 0.45 | - | - | 0 |
| 4Yr Ave | Feb | 66,326 | 0 | 0 | 2,500.09 | 0 | 63,270.09 | 25925.2 | Feb | 0.72 | 0.45 | - | - | 0 |
| 4Yr Ave | Mar | 99,595 | 0 | 0 | 5,059.09 | 0 | 94,471.09 | 25925.2 | Mar | 0.75 | 0.45 | - | - | 0 |
| 4Yr Ave | Apr | 96,615 | 0 | 0 | 2,459.09 | 0 | 94,157.09 | 25925.2 | Apr | 0.68 | 0.45 | 5,605.2 | 3,813.8 | 1714 |
| 4Yr Ave | May | 8,493 | 0 | 0 | 328.09 | 0 | 8,157.09 | 25925.2 | May | 0.73 | 0.45 | 24,605.2 | 15,747.3 | 6017 |
| 4Yr Ave | Jun | 3,594 | 0 | 0 | 600.09 | 0 | 2,894.09 | 25925.2 | Jun | 0.68 | 0.45 | 27,599.2 | 18,427.5 | 6,915 |
| 4Yr Ave | Jul | 1,738 | 0 | 0 | 579.09 | 0 | 1,179.09 | 25925.2 | Jul | 0.68 | 0.45 | 28,886.2 | 25,150.3 | 12,647 |
| 4Yr Ave | Aug | 2,219 | 0 | 0 | 343.09 | 0 | 1,227.09 | 25925.2 | Aug | 0.69 | 0.45 | 28,570.2 | 25,738.5 | 12569 |
| 4Yr Ave | Sep | 3,854 | 0 | 0 | 218.09 | 0 | 3,645.09 | 25925.2 | Sep | 0.74 | 0.45 | 20,177.2 | 18,395.1 | 8622 |
| 4Yr Ave | Oct | 21,858 | 0 | 0 | 2,527.09 | 0 | 19,331.09 | 25925.2 | Oct | 0.77 | 0.45 | 10,274.2 | 6,529.0 | 1846 |
| 4Yr Ave | Nov | 65,113 | 0 | 0 | 4,875.09 | 0 | 60,658.09 | 25925.2 | Nov | 0.87 | 0.45 | - | - | 0 |
| 4Yr Ave | Dec | 81,434 | 0 | 0 | 8,063.09 | 0 | 73,371.09 | 25925.2 | Dec | 0.85 | 0.45 | - | - | 0 |

| | | Imports MT | Production MT | Losses MT | Exports MT | Processing MT | Consumption MT | Egypt Breakeven MT | Month | CIF Import Price US$ | Egypt Breakeven EGP/US$ | Prod Demand Volume MT | Total Prod Demand US$ | Total Fish Demand US$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4Yr Ave | Jan | 306 | 0 | 0 | 30 | 0 | 276 | 25925.2 | Jan | 1.26 | 0.77 | 41,511.2 | 52,344.2 | 26,944 |
| 4Yr Ave | Feb | 15,017 | 0 | 0 | 675 | 0 | 14,342 | 25925.2 | Feb | 1.05 | 0.77 | 37,836.2 | 39,728.0 | 19,861 |
| 4Yr Ave | Mar | 8,265 | 0 | 0 | 135 | 0 | 8,130 | 25925.2 | Mar | 1.01 | 0.77 | 41,851.2 | 42,269.7 | 21,135 |
| 4Yr Ave | Apr | 20,961 | 0 | 0 | 945 | 0 | 20,016 | 25925.2 | Apr | 1.12 | 0.77 | 41,196.2 | 46,139.4 | 24,193 |
| 4Yr Ave | May | 16,470 | 0 | 0 | 675 | 0 | 15,795 | 25925.2 | May | 1.18 | 0.77 | 38,481.2 | 45,427.3 | 23,843 |
| 4Yr Ave | Jun | 6,030 | 0 | 0 | 1,170 | 0 | 4,860 | 25925.2 | Jun | 1.45 | 0.77 | 40,095.2 | 58,138.0 | 30,947 |
| 4Yr Ave | Jul | 13,821 | 50,813 | 1,691 | 968 | 8,291 | 40,365 | 25925.2 | Jul | 1.21 | 0.77 | 9,854.2 | 11,923.2 | 6,919 |
| 4Yr Ave | Aug | 17,731 | 74,218 | 3,713 | 5,176 | 7,420 | 75,641 | 25925.2 | Aug | 0.85 | 0.77 | - | - | 0 |
| 4Yr Ave | Sep | 24,736 | 86,418 | 4,932 | 2,241 | 9,864 | 95,164 | 25925.2 | Sep | 0.90 | 0.77 | - | - | 0 |
| 4Yr Ave | Oct | 67,211 | 69,031 | 3,477 | 2,268 | 8,951 | 124,224 | 25925.2 | Oct | 0.74 | 0.77 | - | - | 0 |
| 4Yr Ave | Nov | 59,827 | 49,215 | 2,461 | 614 | 4,922 | 101,845 | 25925.2 | Nov | 0.81 | 0.77 | - | - | 0 |
| 4Yr Ave | Dec | 18,865 | 0 | 0 | 540 | 0 | 18,325.09 | 25925.2 | Dec | 0.96 | 0.77 | 31,836.2 | 35,110.0 | 18,094 |

| | | Imports MT | Production MT | Losses MT | Exports MT | Processing MT | Consumption MT | Egypt Breakeven MT | Month | CIF Import Price US$ | Egypt Breakeven EGP/US$ | Prod Demand Volume MT | Total Prod Demand US$ | Total Fish Demand US$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4Yr Ave | Jan | 1,951 | 0 | 0 | 80.0 | 0 | 1,871 | 25925.2 | Jan | 1.08 | 0.78 | 5,805.2 | 6,157.2 | 3,665 |
| 4Yr Ave | Feb | 1,909 | 0 | 0 | 94.0 | 0 | 1,814 | 25925.2 | Feb | 0.88 | 0.78 | 5,511.2 | 4,722.2 | 2812 |
| 4Yr Ave | Mar | 1,702 | 0 | 0 | 41.0 | 0 | 1,661 | 25925.2 | Mar | 0.88 | 0.78 | 5,388.2 | 4,752.0 | 2,828 |
| 4Yr Ave | Apr | 3,966 | 0 | 0 | 102.0 | 0 | 3,864 | 25925.2 | Apr | 0.87 | 0.78 | 4,961.2 | 3,580.5 | 2,131 |
| 4Yr Ave | May | 4,044 | 0 | 0 | 96.0 | 0 | 3,948 | 25925.2 | May | 0.78 | 0.78 | - | - | 0 |
| 4Yr Ave | Jun | 10,905 | 0 | 0 | 345.0 | 0 | 9,855 | 25925.2 | Jun | 0.68 | 0.78 | - | - | 0 |
| 4Yr Ave | Jul | 15,997 | 0 | 0 | 498.0 | 0 | 15,498 | 25925.2 | Jul | 0.64 | 0.78 | - | - | 0 |
| 4Yr Ave | Aug | 18,784 | 0 | 0 | 574.0 | 0 | 18,210 | 25925.2 | Aug | 0.62 | 0.78 | - | - | 0 |
| 4Yr Ave | Sep | 18,366 | 0 | 0 | 546.0 | 0 | 17,820 | 25925.2 | Sep | 0.63 | 0.78 | - | - | 0 |
| 4Yr Ave | Oct | 7,470 | 0 | 0 | 638.0 | 0 | 6,832 | 25925.2 | Oct | 0.66 | 0.78 | - | - | 0 |
| 4Yr Ave | Nov | 2,964 | 0 | 0 | 91.0 | 0 | 2,873 | 25925.2 | Nov | 1.02 | 0.78 | 4,756.2 | 4,851.2 | 2,772 |
| 4Yr Ave | Dec | 2,139 | 0 | 0 | 70.0 | 0 | 2,069 | 25925.2 | Dec | 1.01 | 0.78 | 4,951.2 | 4,998.2 | 2,856 |

| | | Import MT | Production MT | Losses MT | | Exports MT | Processing MT | Consumption MT | Egypt Breakdown MT | Month | Gulf Import Price US$ | Egypt Breakdown Diff US$ | Prod. Demand Volume MT | Total Prod. Demand US$ | Total Net Return US$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4Yr Ave | Jan | 3,883 | 0 | 0 | $ | 38.0 | 0 | 3,656 | 21578.2 | Jan | 0.83 | 1.84 | - | | 0 |
| 4Yr Ave | Feb | 4,725 | 0 | 0 | $ | 16.0 | 0 | 4,791 | 21578.2 | Feb | 0.48 | 0.84 | - | | 0 |
| 4Yr Ave | Mar | 982 | 0 | 0 | $ | 6.0 | 0 | 919 | 21578.2 | Mar | 1.04 | 0.84 | 20,659.2 | 21,551.2 | 4992 |
| 4Yr Ave | Apr | 1,925 | 0 | 0 | $ | 26.0 | 0 | 1,749 | 21578.2 | Apr | 3.02 | 2.84 | 20,227.2 | 61,090.9 | 54153 |
| 4Yr Ave | May | 6,548 | 0 | 0 | $ | 207.0 | 0 | 6,038 | 21578.2 | May | 1.88 | 0.84 | 16,248.2 | 26,298.1 | 15502 |
| 4Yr Ave | Jun | 23,818 | 811 | 20 | $ | 1,604.0 | 53 | 22,493 | 21578.2 | Jun | 0.92 | 0.84 | - | - | 0 |
| 4Yr Ave | Jul | 48,536 | 1,652 | 39 | $ | 926.0 | 165 | 48,529 | 21578.2 | Jul | 0.48 | 0.84 | - | - | 0 |
| 4Yr Ave | Aug | 57,221 | 2,088 | 50 | $ | 1,965.0 | 207 | 57,372 | 21578.2 | Aug | 0.51 | 0.84 | - | - | 0 |
| 4Yr Ave | Sep | 56,193 | 1,912 | 38 | $ | 1,036.0 | 155 | 56,458 | 21578.2 | Sep | 0.14 | 0.84 | - | - | 0 |
| 4Yr Ave | Oct | 22,178 | 0 | 0 | $ | 466.0 | 0 | 20,721 | 21578.2 | Oct | 0.51 | 0.84 | - | - | 0 |
| 4Yr Ave | Nov | 13,416 | 0 | 0 | $ | 305.0 | 0 | 13,518 | 21578.2 | Nov | 1.02 | 0.84 | 7,750.2 | 8,265.1 | 1651 |
| 4Yr Ave | Dec | 1,886 | 0 | 0 | $ | 185.0 | 0 | 554.00 | 21578.2 | Dec | 1.83 | 0.84 | 20,502.2 | 35,108.1 | 20758 |

| | | Import MT | Production MT | Losses MT | | Exports MT | Processing MT | Consumption MT | Egypt Breakdown MT | Month | Gulf Import Price US$ | Egypt Breakdown Diff US$ | Prod. Demand Volume MT | Total Prod. Demand US$ | Total Net Return US$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4Yr Ave | Jan | 1,200 | 0 | 0 | $ | 76.0 | 0 | 1,140 | 16745.6 | Jan | 1.11 | 2.05 | 15,575.6 | 46,626.0 | 9322 |
| 4Yr Ave | Feb | 3,548 | 0 | 0 | $ | 16.0 | 0 | 3,210 | 16745.6 | Feb | 0.69 | 0.64 | 14,529.6 | 43,108.6 | 7865 |
| 4Yr Ave | Mar | 8,048 | 3,352 | 134 | $ | 227.0 | 180 | 13,061 | 16745.6 | Mar | 1.87 | 2.05 | - | - | 0 |
| 4Yr Ave | Apr | 27,361 | 11,401 | 539 | $ | 136.0 | 1,710 | 93,648 | 16745.6 | Apr | 1.79 | 1.74 | - | - | 0 |
| 4Yr Ave | May | 40,026 | 16,678 | 729 | $ | 668.0 | 1,668 | 92,366 | 16745.6 | May | 1.48 | 2.04 | - | - | 0 |
| 4Yr Ave | Jun | 35,618 | 35,188 | 769 | $ | 732.0 | 1,566 | 41,670 | 16745.6 | Jun | 1.24 | 2.04 | - | - | 0 |
| 4Yr Ave | Jul | 17,486 | 17,381 | 573 | $ | 548.0 | 1,139 | 28,924 | 16745.6 | Jul | 1.17 | 2.04 | - | - | 0 |
| 4Yr Ave | Aug | 8,541 | 13,981 | 521 | $ | 279.0 | 1,139 | 15,864 | 16745.6 | Aug | 1.17 | 2.54 | - | - | 0 |
| 4Yr Ave | Sep | 4,036 | 7,594 | 380 | $ | 109.0 | 758 | 10,458 | 16745.6 | Sep | 1.58 | 2.54 | - | - | 0 |
| 4Yr Ave | Oct | 1,339 | 0 | 0 | $ | 72.0 | 0 | 1,305 | 16745.6 | Oct | 1.58 | 2.54 | - | - | 0 |
| 4Yr Ave | Nov | 677 | 0 | 0 | $ | 18.0 | 0 | 658 | 16745.6 | Nov | 4.01 | 2.54 | 16,887.6 | 85,291.7 | 29,852 |
| 4Yr Ave | Dec | 464 | 0 | 0 | $ | 44.0 | 0 | 410.01 | 16745.6 | Dec | 4.15 | 3.94 | 16,335.6 | 87,847.7 | 26288 |

## GERMANY — Total Monthly Profitable Demand Estimates

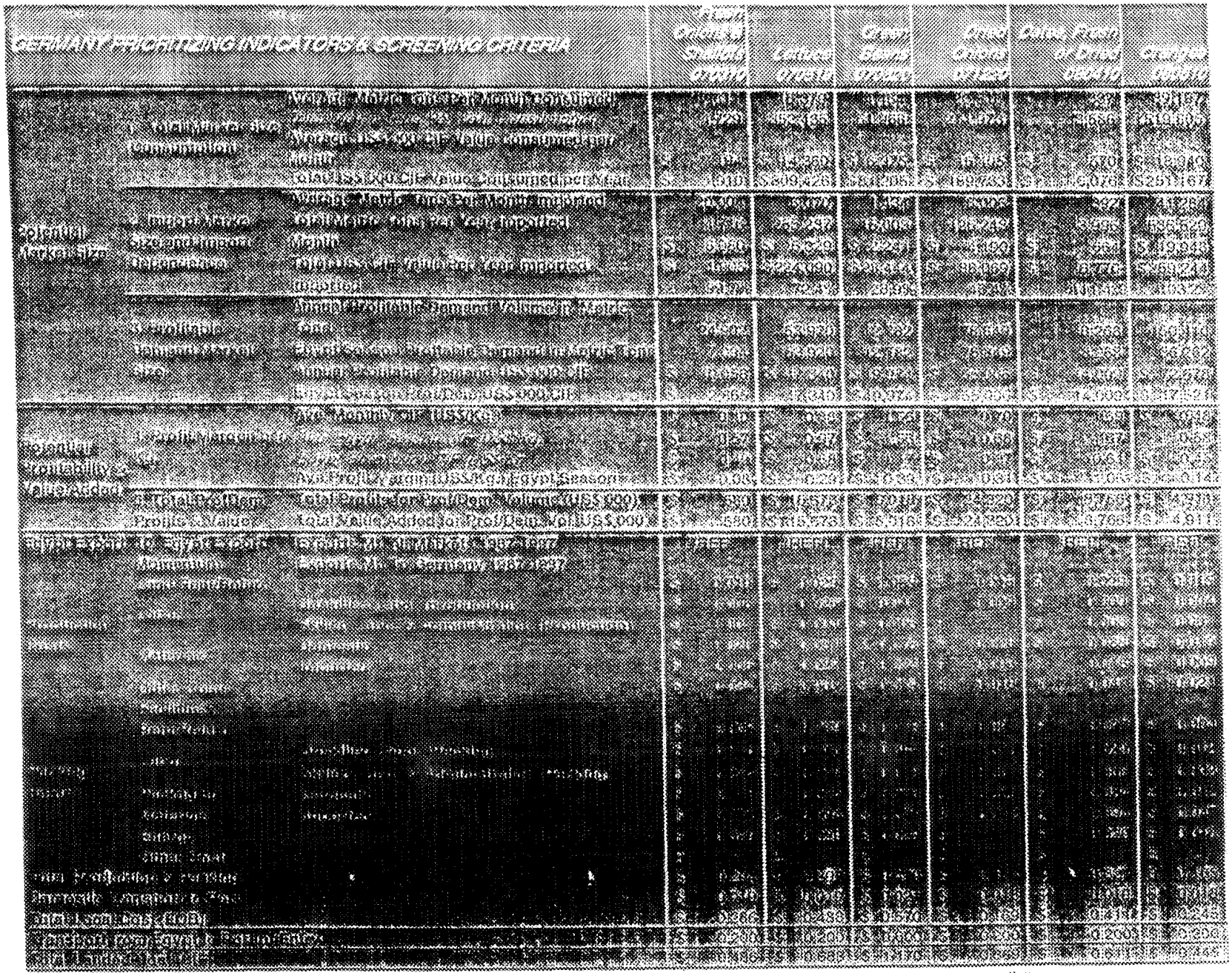
| Profitable Demand Mt | Onions | Lettuce | Green Beans | Dried Onions | Oranges | Mandarins | Grapes | Melons | Peaches | Strawberries | Dates | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jan | 6,456 | 5,639 | 329 | 0 | 0 | 0 | 43,712 | 5,807 | 0 | 15,576 | 544 | |
| Feb | 3,895 | 12,876 | 313 | 0 | 0 | 0 | 37,240 | 5,513 | 0 | 14,503 | 508 | |
| Mar | 0 | 11,080 | 2,155 | 0 | 0 | 0 | 41,813 | 5,368 | 20,856 | 0 | 928 | |
| Apr | 0 | 14,365 | 3,103 | 0 | 0 | 5,568 | 52,065 | 4,061 | 26,228 | 0 | 964 | |
| May | 0 | 9,386 | 3,656 | 0 | 1,098 | 21,268 | 34,482 | 0 | 15,248 | 0 | 806 | |
| Jun | 0 | 0 | 2,767 | 0 | 20,816 | 27,179 | 45,084 | 0 | 0 | 0 | 962 | |
| Jul | 0 | 0 | 0 | 0 | 31,737 | 28,686 | 9,878 | 0 | 0 | 0 | 1,019 | |
| Aug | 0 | 0 | 0 | 0 | 30,481 | 28,650 | 0 | 0 | 0 | 0 | 868 | |
| Sep | 0 | 0 | 0 | 18,365 | 26,276 | 26,177 | 0 | 0 | 0 | 0 | 838 | |
| Oct | 0 | 0 | 0 | 18,437 | 24,181 | 10,724 | 0 | 0 | 0 | 0 | 826 | |
| Nov | 7,094 | 0 | 0 | 21,044 | 13,758 | 0 | 0 | 4,153 | 2,864 | 16,068 | 65 | |
| Dec | 7,465 | 0 | 0 | 21,011 | 0 | 0 | 35,437 | 4,643 | 28,903 | 16,536 | 283 | |
| Total | 25,075 | 53,352 | 12,762 | 78,849 | 150,410 | 148,693 | 361,596 | 29,758 | 79,721 | 82,731 | 8,268 | |

## GERMANY — Total Monthly Profitable Demand Estimates

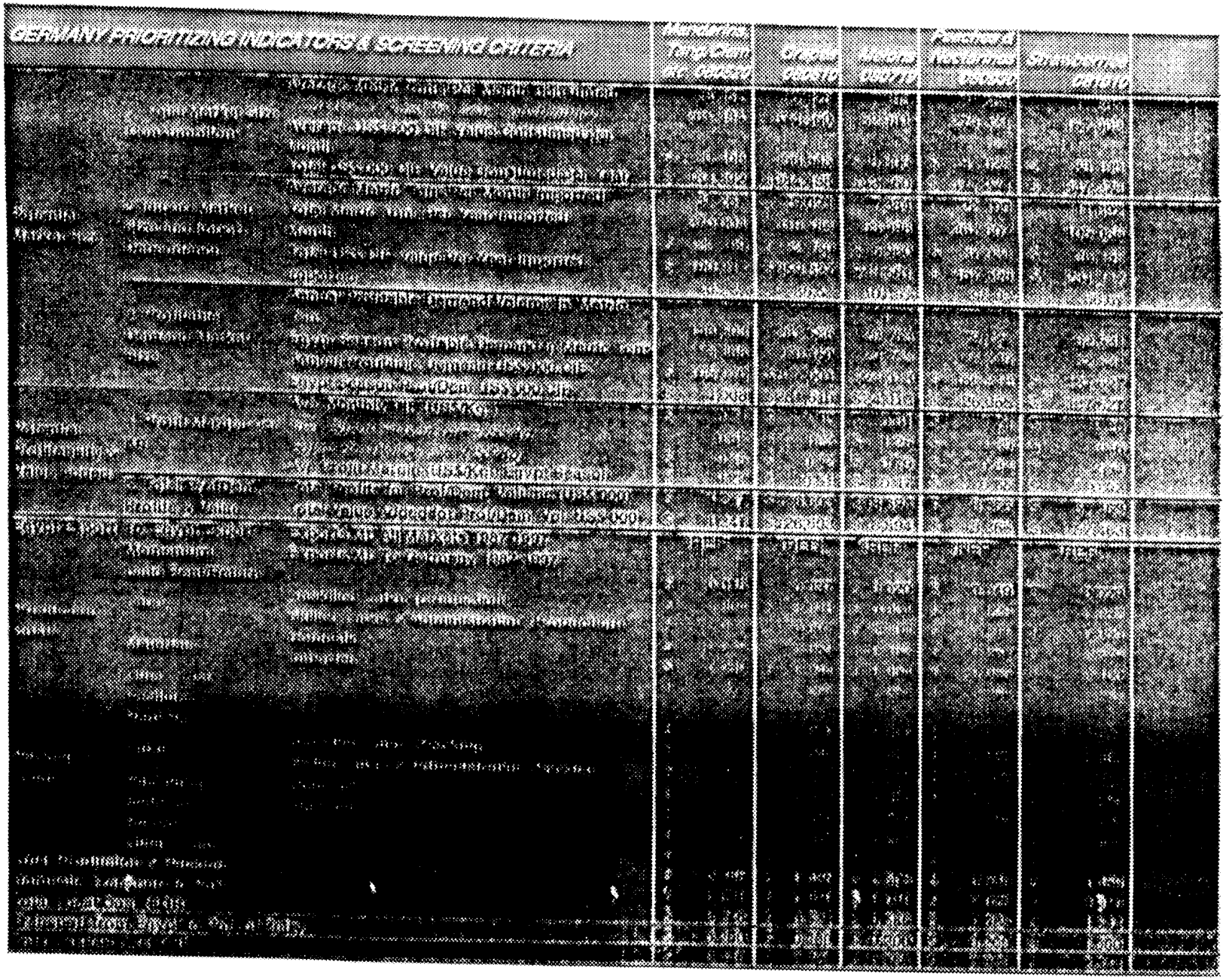
| Profitable Demand US$ | Onions | Lettuce | Green Beans | Dried Onions | Oranges | Mandarins | Grapes | Melons | Peaches | Strawberries | Dates | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jan | $ 4,901 | 5,056 | 440 | - | - | - | 52,756 | 6,150 | 0 | 48,876 | 416 | |
| Feb | $ 1,891 | 16,636 | 980 | - | - | - | 36,535 | 5,512 | 0 | 42,078 | 411 | |
| Mar | $ - | 12,175 | 4,190 | - | - | - | 50,494 | 4,781 | 21,514 | - | 1,020 | |
| Apr | $ - | 16,258 | 4,962 | - | - | 3,845 | 68,625 | 5,630 | 51,993 | - | 1,060 | |
| May | $ - | 7,844 | 9,026 | - | 937 | 15,247 | 47,247 | 0 | 28,258 | - | 1,014 | |
| Jun | $ - | - | 4,803 | - | 9,975 | 18,473 | 65,784 | 0 | 0 | - | 1,178 | |
| Jul | $ - | - | - | - | 14,994 | 25,196 | 12,856 | 0 | 0 | - | 1,193 | |
| Aug | $ - | - | - | - | 15,837 | 26,726 | - | 0 | 0 | - | 1,067 | |
| Sep | $ - | - | - | 11,432 | 18,208 | 19,956 | - | 0 | 0 | - | 959 | |
| Oct | $ - | - | - | 8,091 | 12,985 | 6,159 | - | 0 | 0 | - | 1,013 | |
| Nov | $ 3,718 | - | - | 34,521 | 8,468 | - | - | 4,437 | 3,570 | 60,291 | 718 | |
| Dec | $ 4,564 | - | - | 34,836 | - | - | 30,316 | 7,204 | 38,128 | 67,847 | 568 | |
| Total | $ 14,630 | $ 59,969 | $ 24,872 | $ 89,844 | $ 75,813 | $ 115,267 | $ 365,897 | $ 33,687 | $ 152,484 | $ 229,035 | $ 13,097 | |

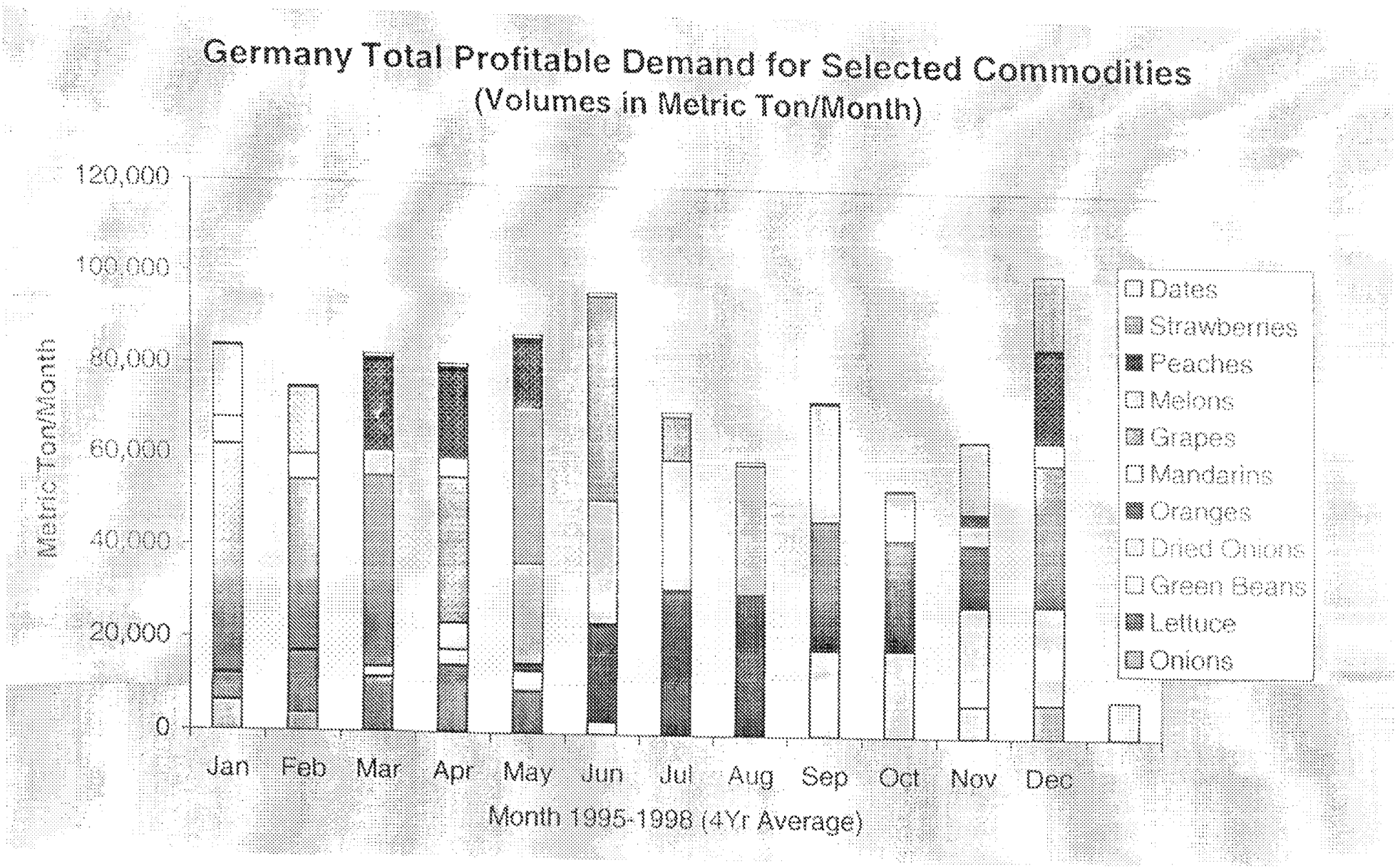
## GERMANY — Total Monthly Profitable Demand Estimates, 1Ha 2008

| Net Profit US$ | Onions | Lettuce | Green Beans | Dried Onions | Oranges | Mandarins | Grapes | Melons | Peaches | Strawberries | Dates | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jan | $ 1,922 | 1,523 | 408 | - | - | - | 26,576 | 1,068 | 0 | 9,030 | 384 | |
| Feb | $ 0 | 7,776 | 294 | - | - | - | 9,750 | 869 | 0 | 9,065 | 364 | |
| Mar | $ - | 4,857 | 1,668 | - | - | - | 31,964 | 521 | 8,256 | 0 | 1,053 | |
| Apr | $ - | 4,445 | 1,072 | - | - | 1,913 | 29,558 | 536 | 44,145 | 0 | 1,015 | |
| May | $ - | 1,410 | 4,815 | - | 80 | 8,076 | 22,859 | 0 | 15,522 | 0 | 856 | |
| Jun | $ | - | 1,856 | - | 703 | 6,365 | 32,656 | 0 | 0 | 0 | 1,150 | |
| Jul | $ | | | - | 722 | 12,347 | 5,913 | 0 | 0 | 0 | 840 | |
| Aug | $ | | | - | 1,960 | 12,985 | | 0 | 0 | 0 | 826 | |
| Sep | $ | | | 4,651 | 1,611 | 7,621 | | 0 | 0 | 0 | 662 | |
| Oct | $ | - | - | 2,712 | 1,313 | 1,833 | | 0 | 0 | 0 | 1,056 | |
| Nov | $ 2,501 | - | | 28,810 | 340 | | | 931 | 1,101 | 26,802 | 157 | |
| Dec | $ 976 | - | | 26,088 | | | 7,468 | 2,594 | 26,708 | 26,038 | 787 | |
| Total | $ 5,401 | $ 19,811 | $ 9,815 | $ 63,862 | $ 6,731 | $ 48,046 | $ 166,884 | $ 7,042 | $ 95,831 | $ 69,935 | $ 8,053 | |

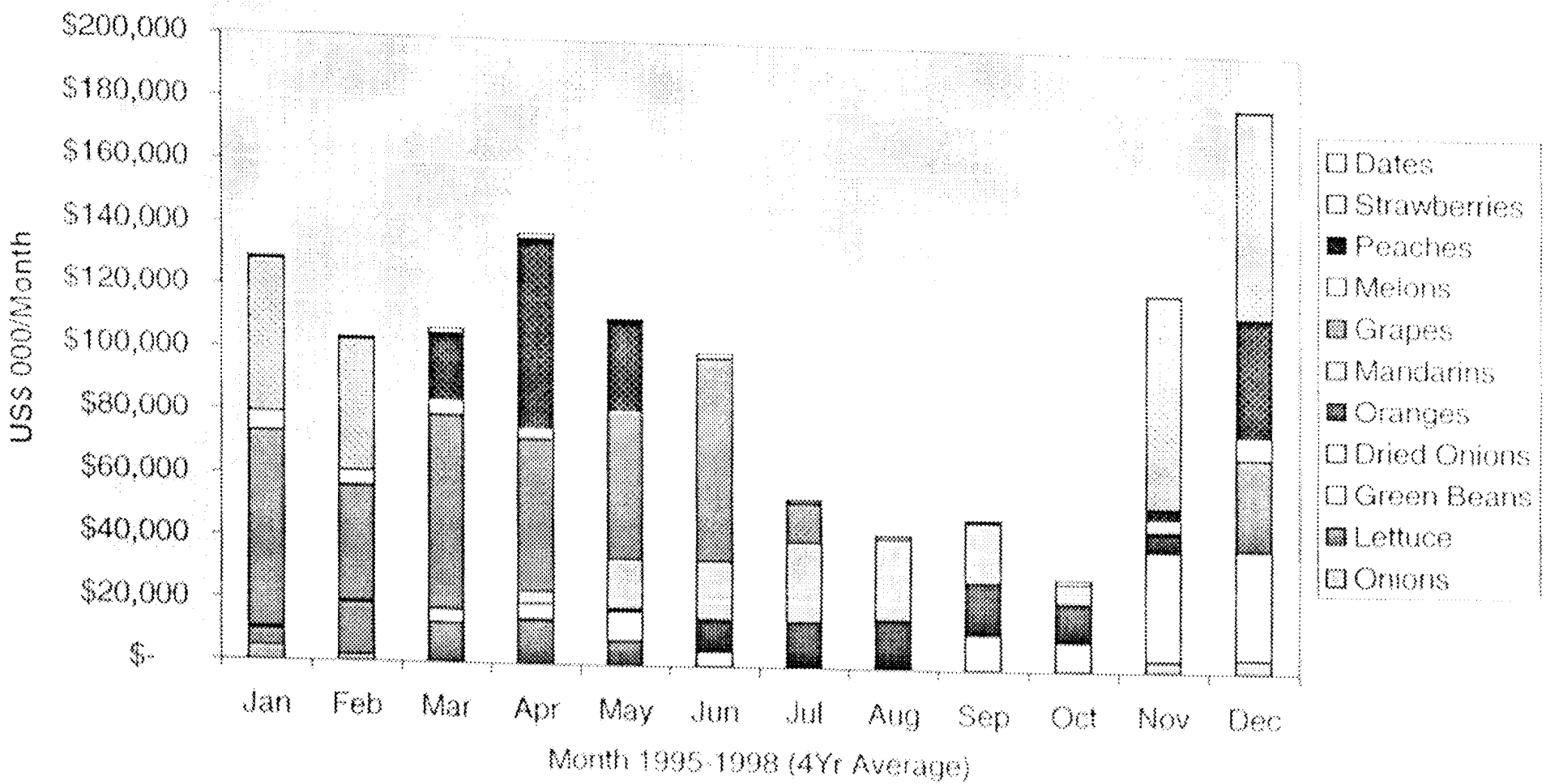


GERMANY PRIORITIZING INDICATORS & SCREENING CRITERIA

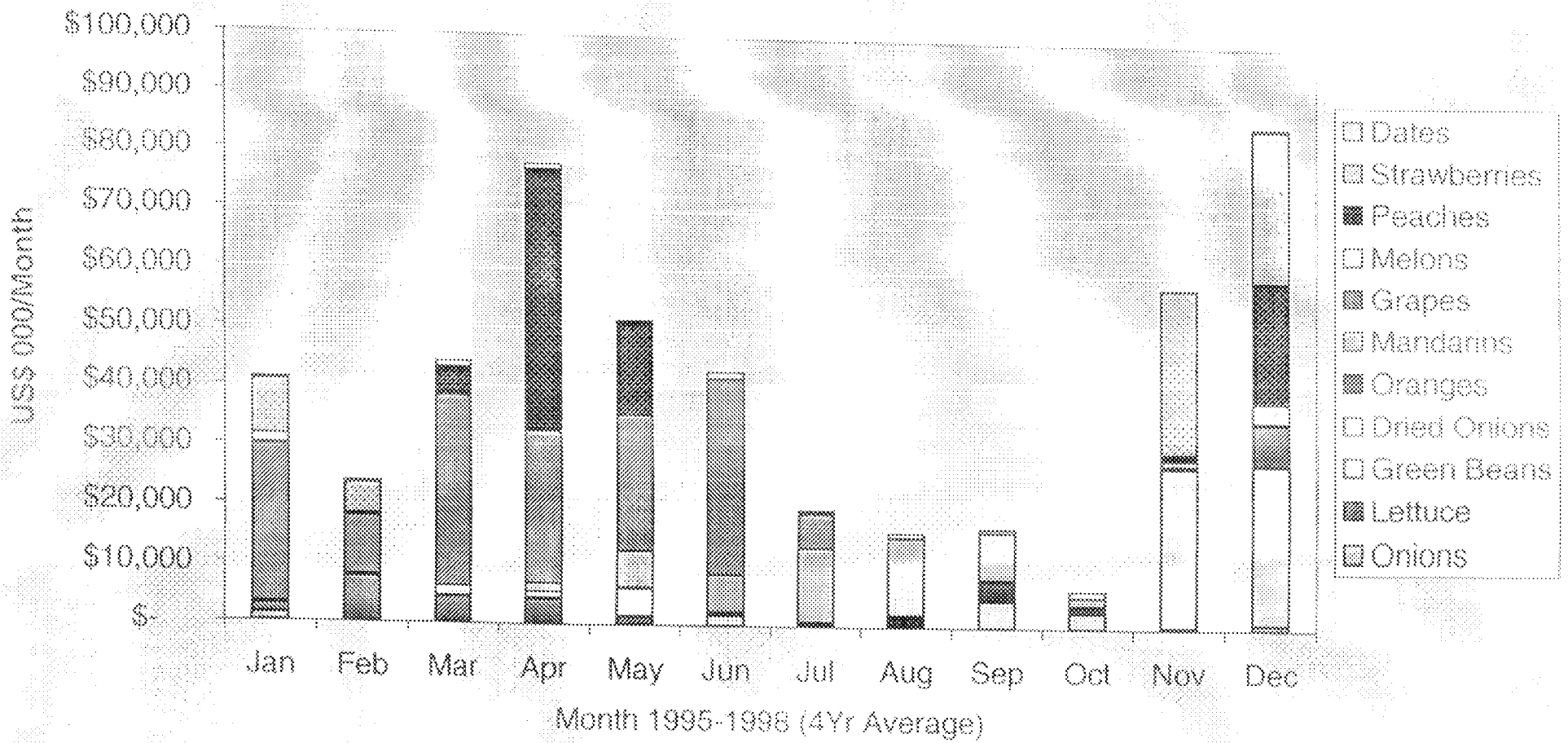

GERMANY PRIORITIZING INDICATORS & SCREENING CRITERIA

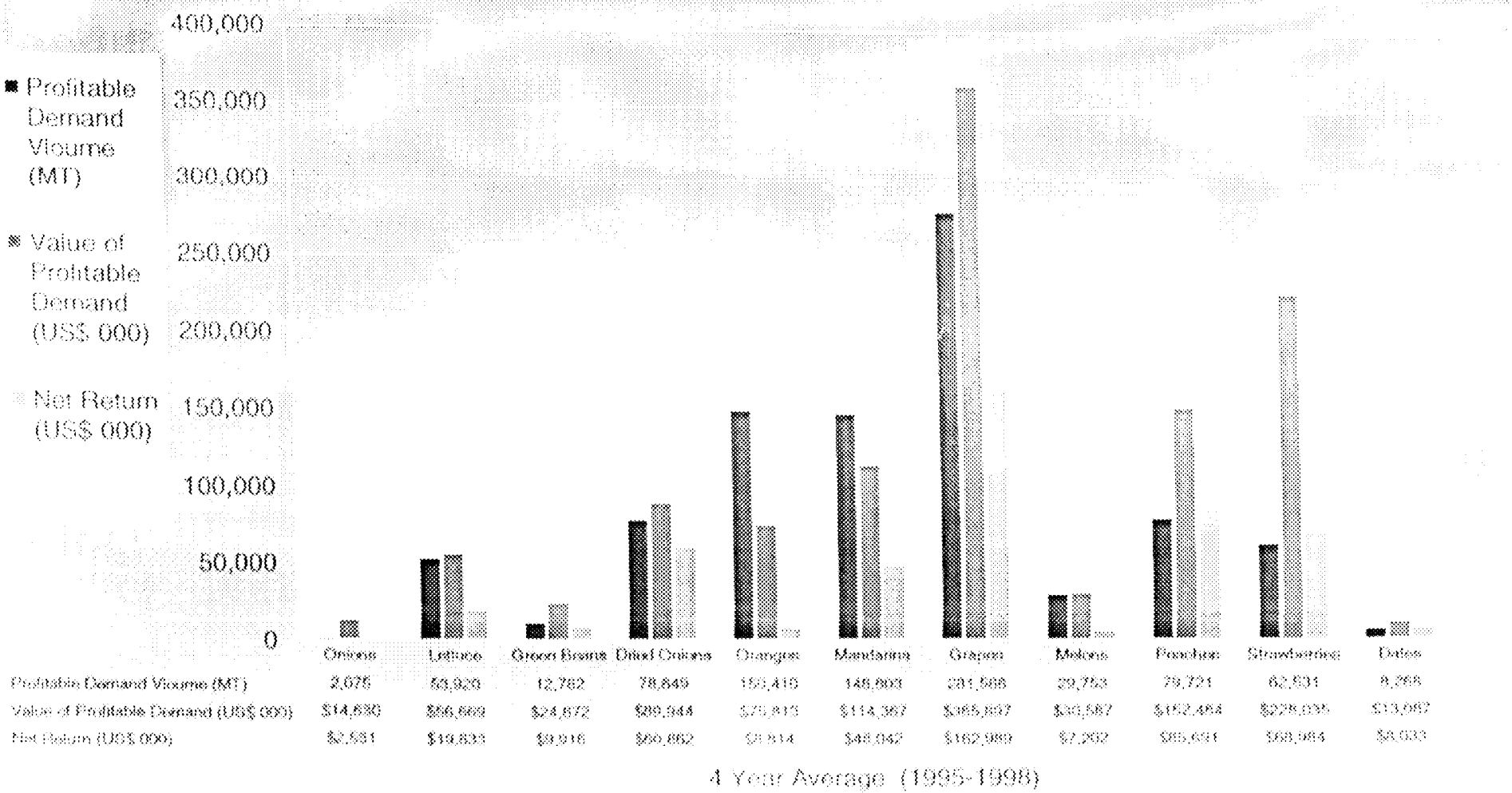

Germany Total Profitable Demand for Selected Commodities
(Volumes in Metric Ton/Month)
120,000
100,000
80,000
60,000
40,000
20,000
0
Metric Ton/Month
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Month 1995-1998 (4Yr Average)
Dates
Strawberries
Peaches
Melons
Grapes
Mandarins
Oranges
Dried Onions
Green Beans
Lettuce
Onions

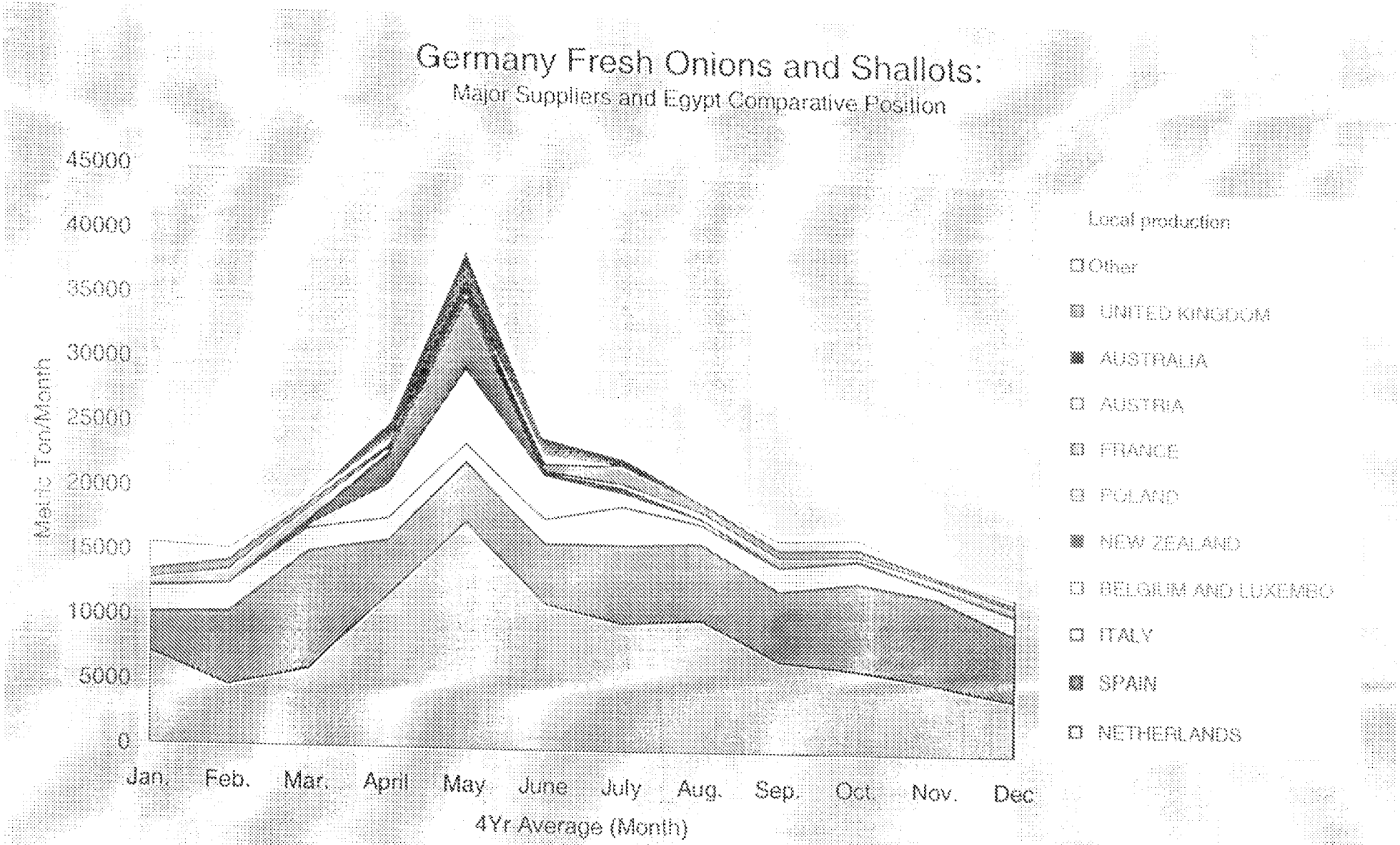
## Germany Total Profitable Demand for Selected Commodities
(Value in US$ 000/Month)



## Germany Total Profitable Demand for Selected Commodities
(Net Return in US$ 000/Month)
Excluding all shipping cost.

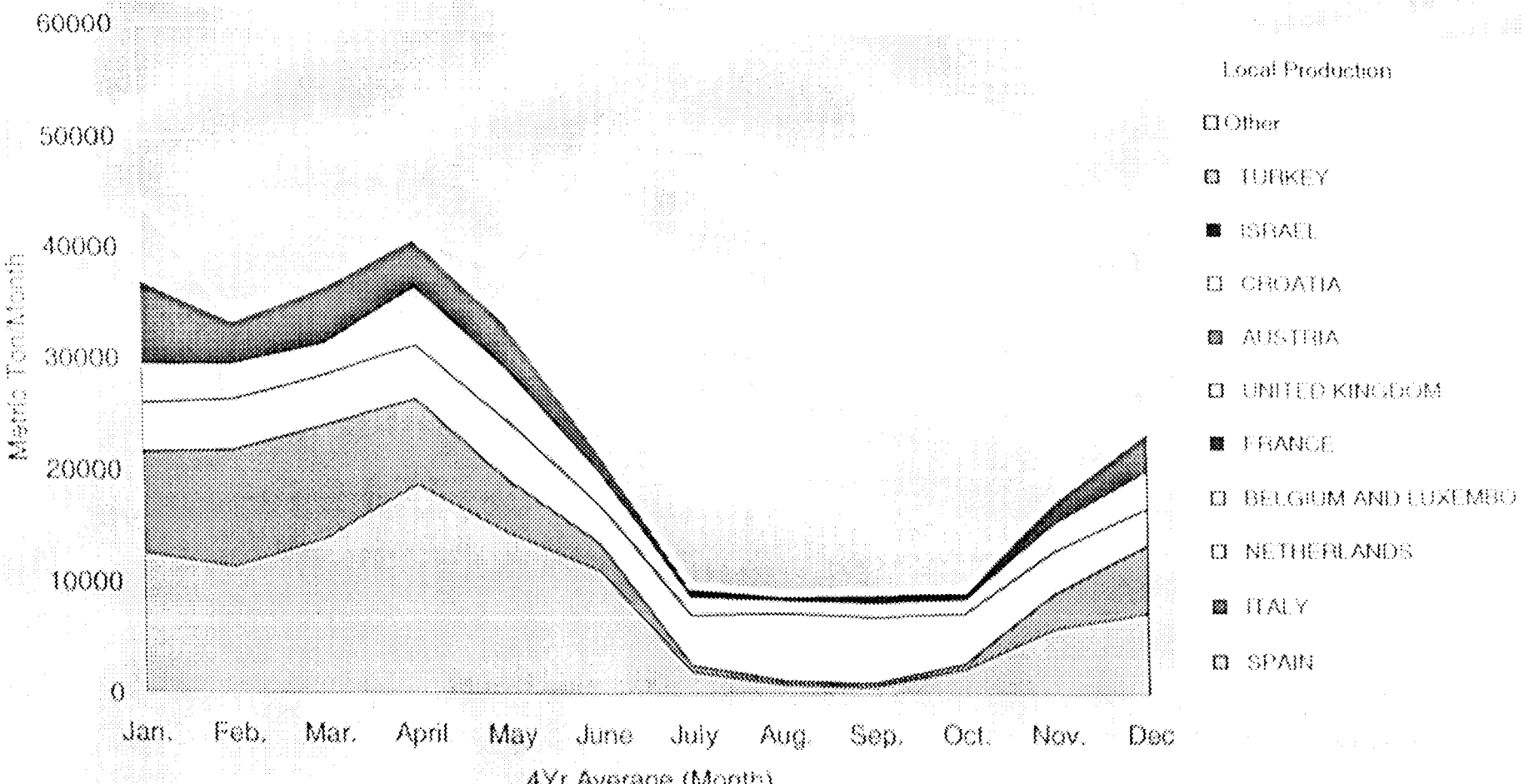


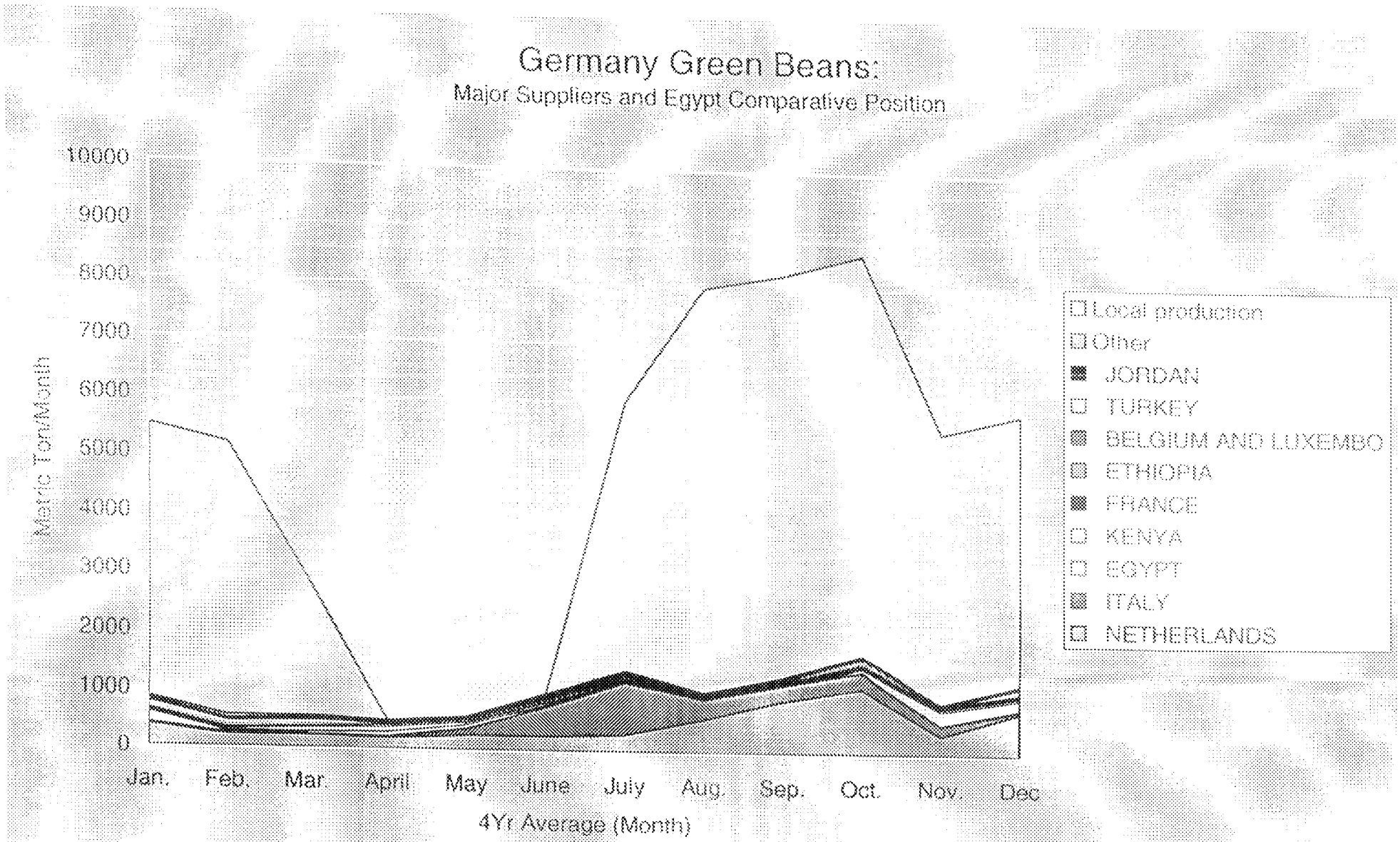

Profitable Demand Vloume (MT)
Value of Profitable Demand (US$ 000)
Net Return (US$ 000)
400,000
350,000
300,000
250,000
200,000
150,000
100,000
50,000
0
Onions
Lettuce
Green Beans
Dried Onions
Oranges
Mandarins
Grapes
Melons
Peaches
Strawberries
Dates
Profitable Demand Vloume (MT) 2,075 58,920 12,762 78,849 150,410 148,803 281,588 29,753 79,721 62,931 8,265
Value of Profitable Demand (US$ 000) $14,630 $56,669 $24,672 $80,944 $75,815 $114,367 $365,807 $30,587 $152,484 $229,035 $13,087
Net Return (US$ 000) $2,581 $19,835 $8,916 $50,862 $1,514 $48,042 $162,989 $7,202 $85,691 $68,984 $8,033
4 Year Average (1995-1998)

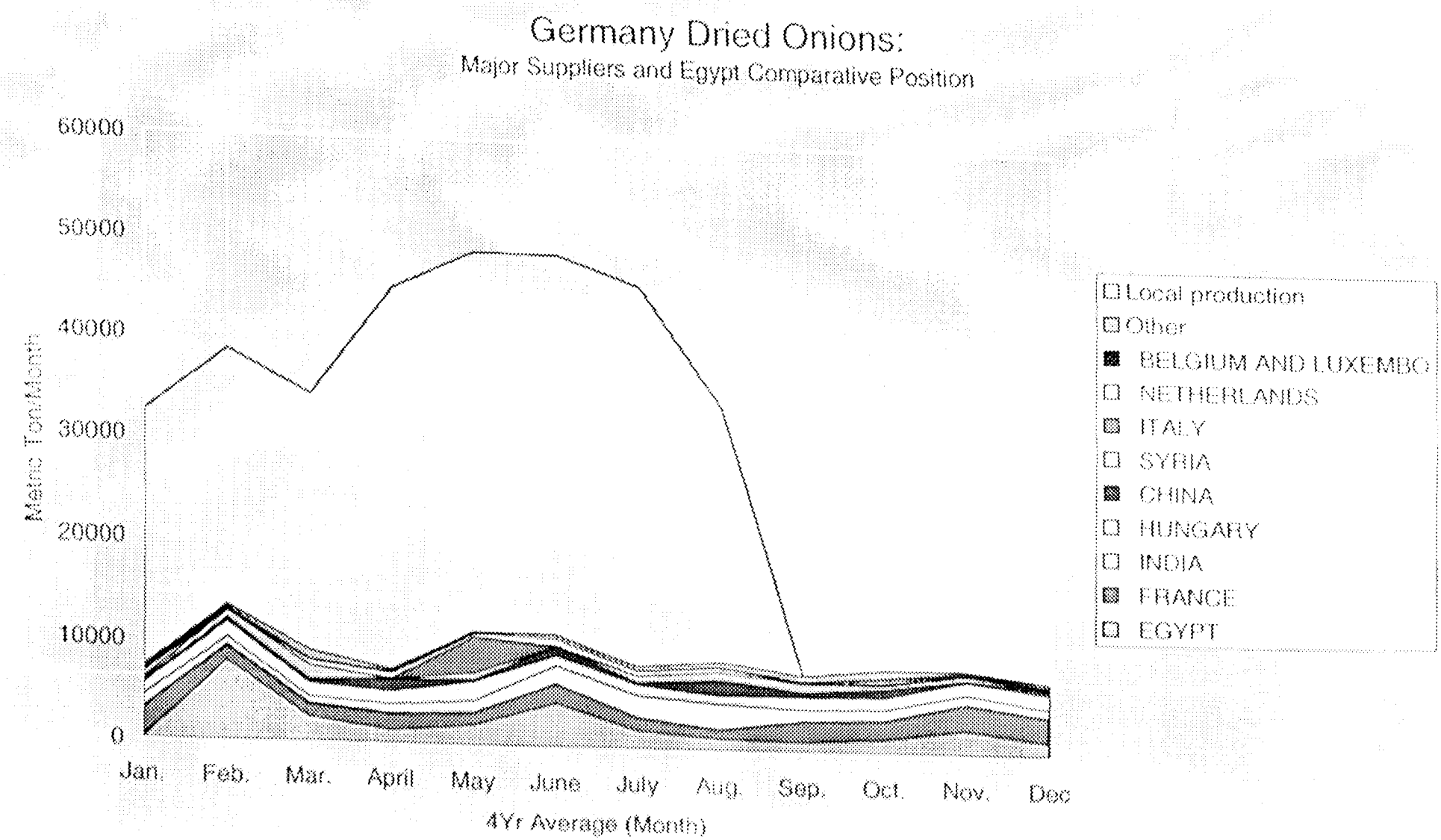

Germany Fresh Onions and Shallots:
Major Suppliers and Egypt Comparative Position
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
Metric Ton/Month
Jan.
Feb.
Mar.
April
May
June
July
Aug.
Sep.
Oct.
Nov.
Dec
4Yr Average (Month)
Local production
Other
UNITED KINGDOM
AUSTRALIA
AUSTRIA
FRANCE
POLAND
NEW ZEALAND
BELGIUM AND LUXEMBO
ITALY
SPAIN
NETHERLANDS

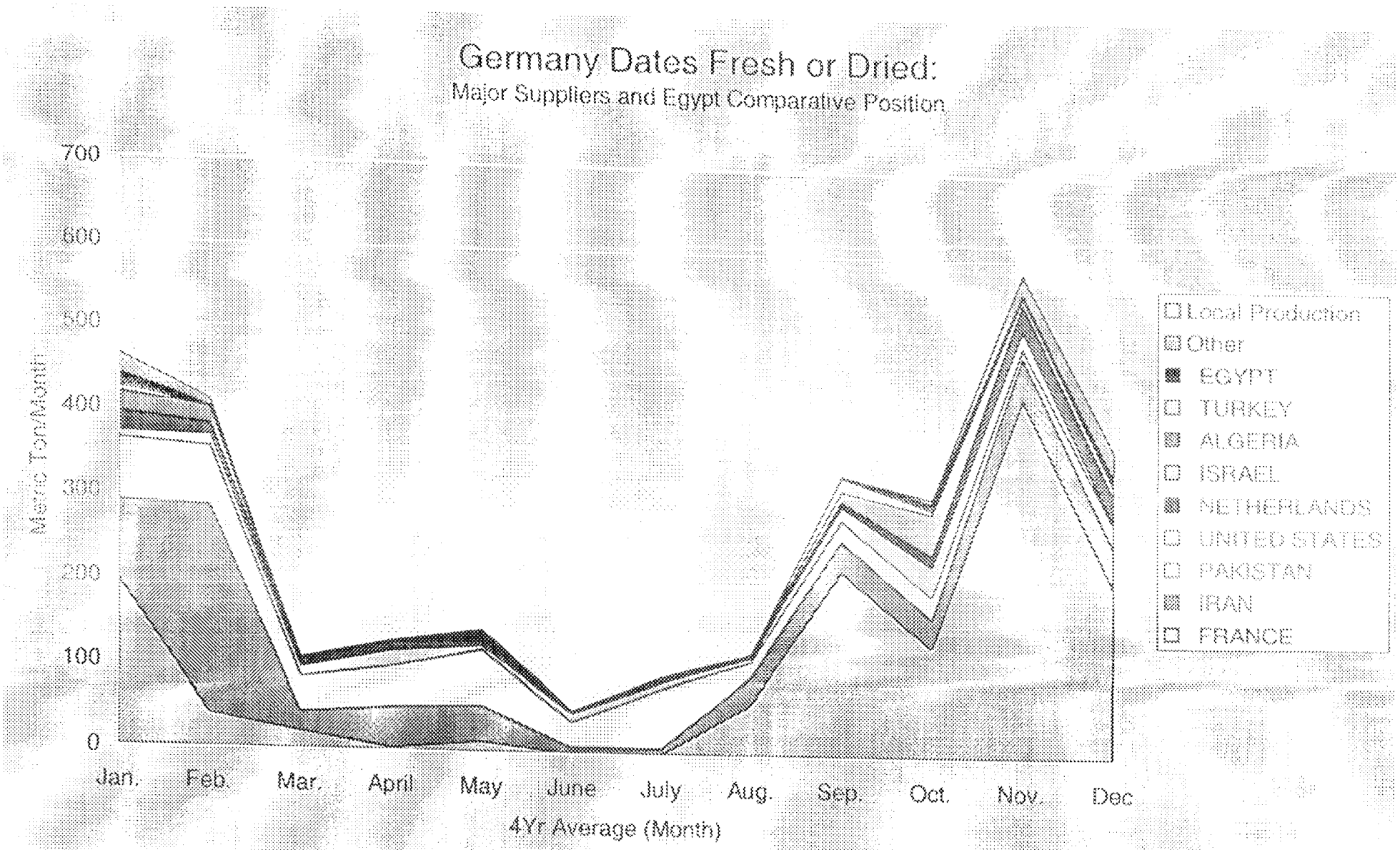
# Germany Lettuce:

## Major Suppliers and Egypt Comparative Position



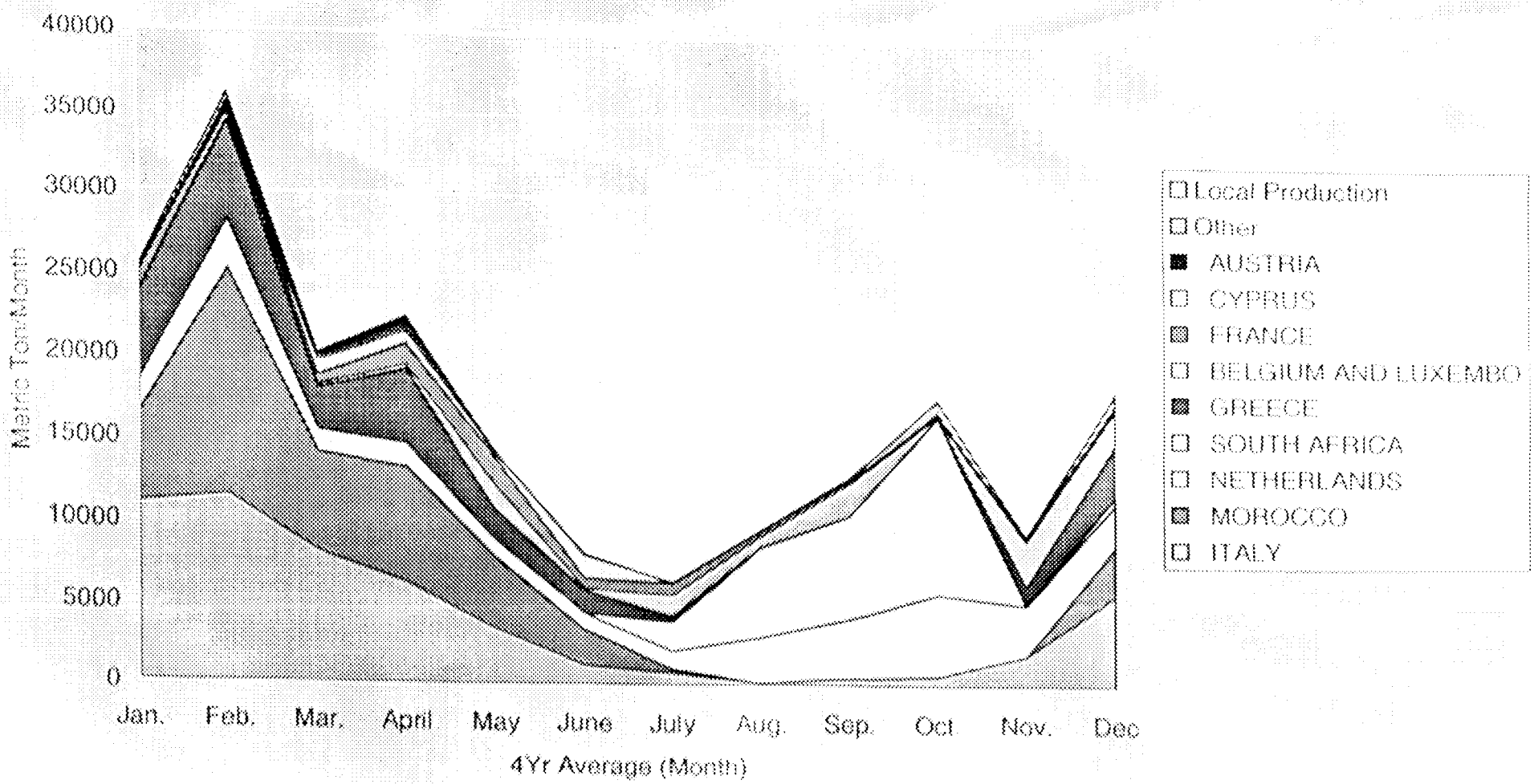

Germany Green Beans:
Major Suppliers and Egypt Comparative Position
Metric Ton/Month
10000
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
Jan.
Feb.
Mar.
April
May
June
July
Aug.
Sep.
Oct.
Nov.
Dec
4Yr Average (Month)
Local production
Other
JORDAN
TURKEY
BELGIUM AND LUXEMBO
ETHIOPIA
FRANCE
KENYA
EGYPT
ITALY
NETHERLANDS

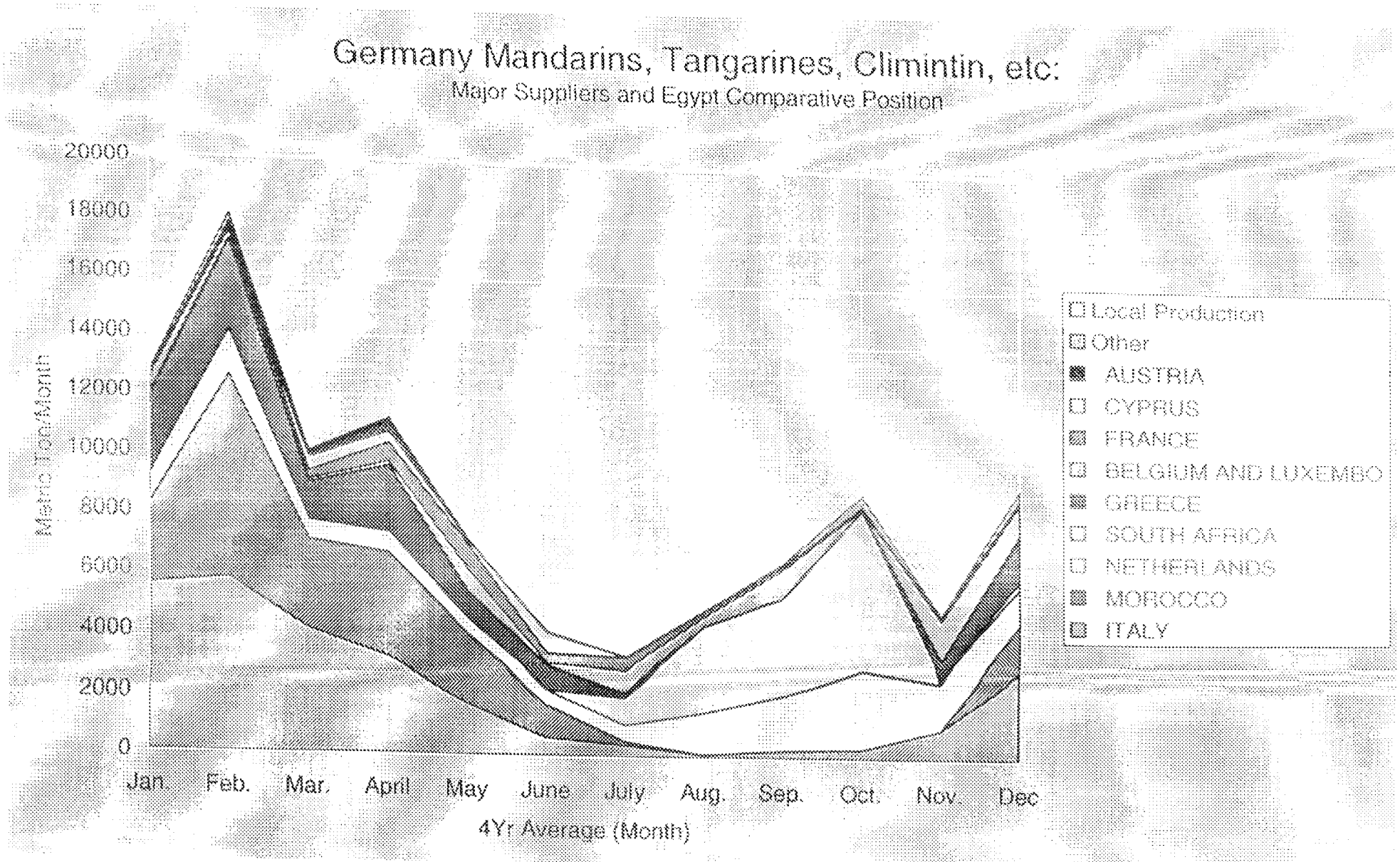

Germany Dried Onions:
Major Suppliers and Egypt Comparative Position
60000
50000
40000
30000
20000
10000
0
Metric Ton/Month
Jan.
Feb.
Mar.
April
May
June
July
Aug.
Sep.
Oct.
Nov.
Dec
4Yr Average (Month)
Local production
Other
BELGIUM AND LUXEMBO
NETHERLANDS
ITALY
SYRIA
CHINA
HUNGARY
INDIA
FRANCE
EGYPT


Germany Dates Fresh or Dried:
Major Suppliers and Egypt Comparative Position
Metric Ton/Month
700
600
500
400
300
200
100
0
Jan.
Feb.
Mar.
April
May
June
July
Aug.
Sep.
Oct.
Nov.
Dec
4Yr Average (Month)
Local Production
Other
EGYPT
TURKEY
ALGERIA
ISRAEL
NETHERLANDS
UNITED STATES
PAKISTAN
IRAN
FRANCE

# Germany Oranges:

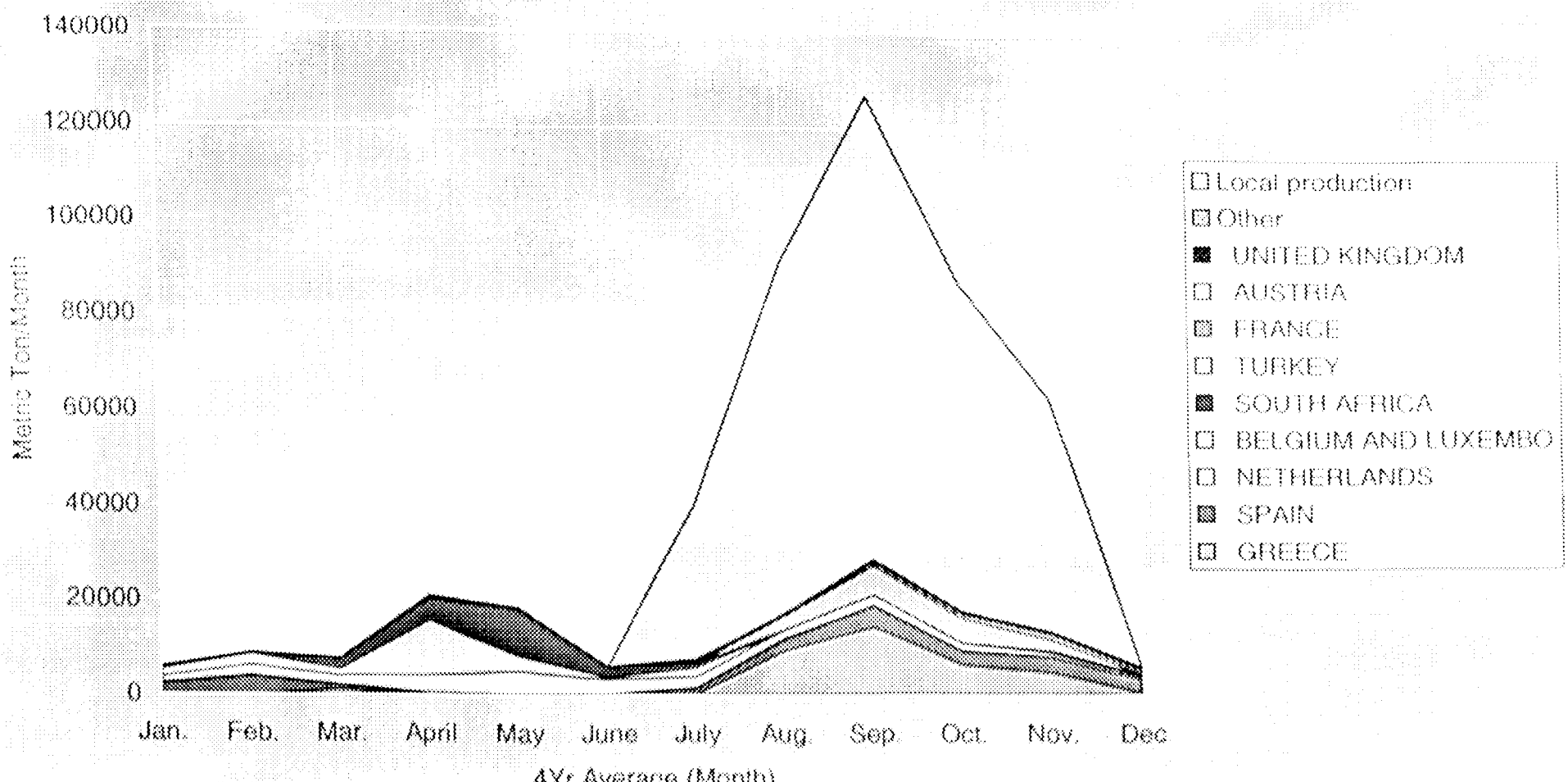
## Major Suppliers and Egypt Comparative Position

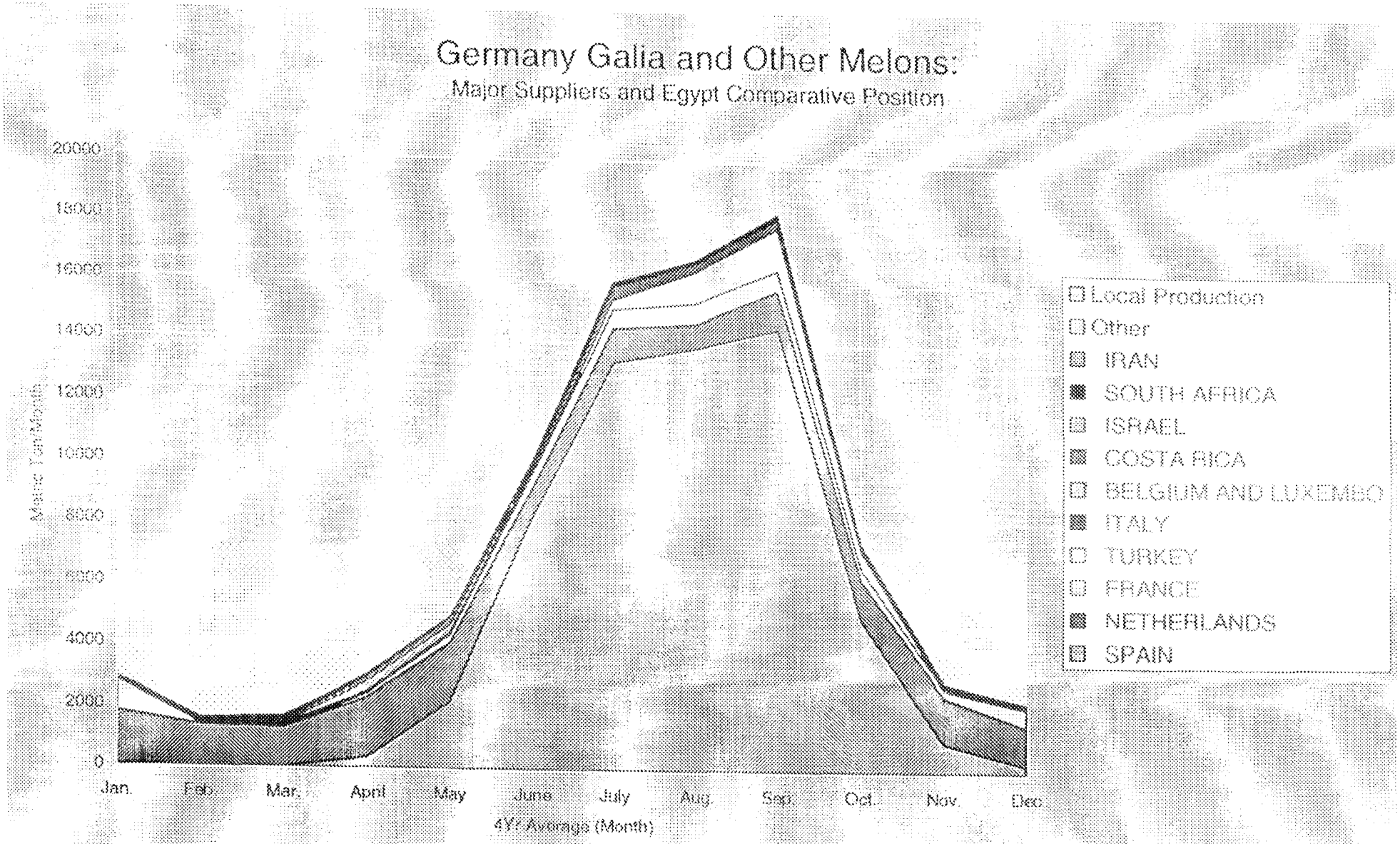



Germany Mandarins, Tangarines, Climintin, etc:
Major Suppliers and Egypt Comparative Position
Metric Ton/Month
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
Jan.
Feb.
Mar.
April
May
June
July
Aug.
Sep.
Oct.
Nov.
Dec
4Yr Average (Month)
Local Production
Other
AUSTRIA
CYPRUS
FRANCE
BELGIUM AND LUXEMBO
GREECE
SOUTH AFRICA
NETHERLANDS
MOROCCO
ITALY

# Germany Fresh Table Grapes:

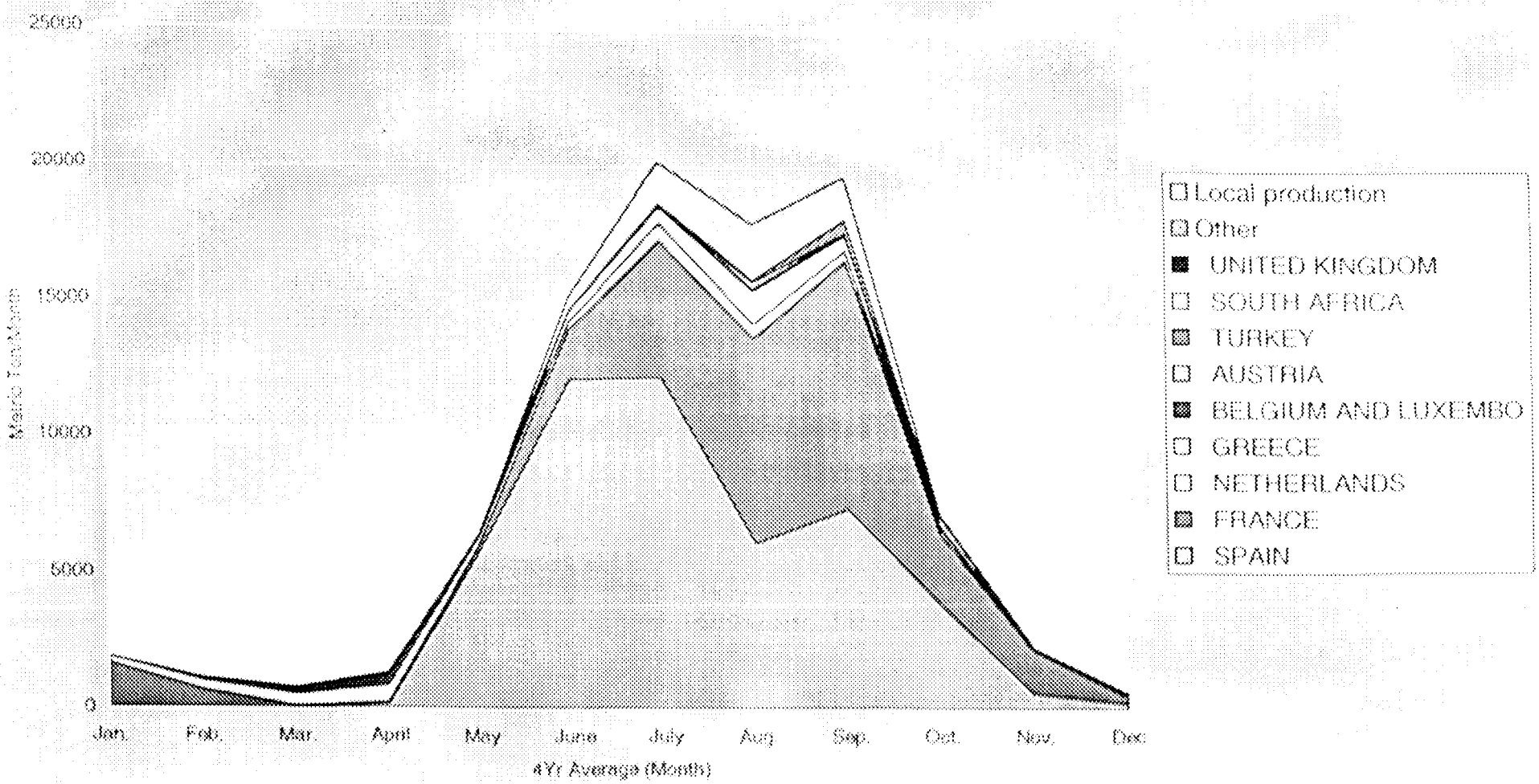
## Major Suppliers and Egypt Comparative Position

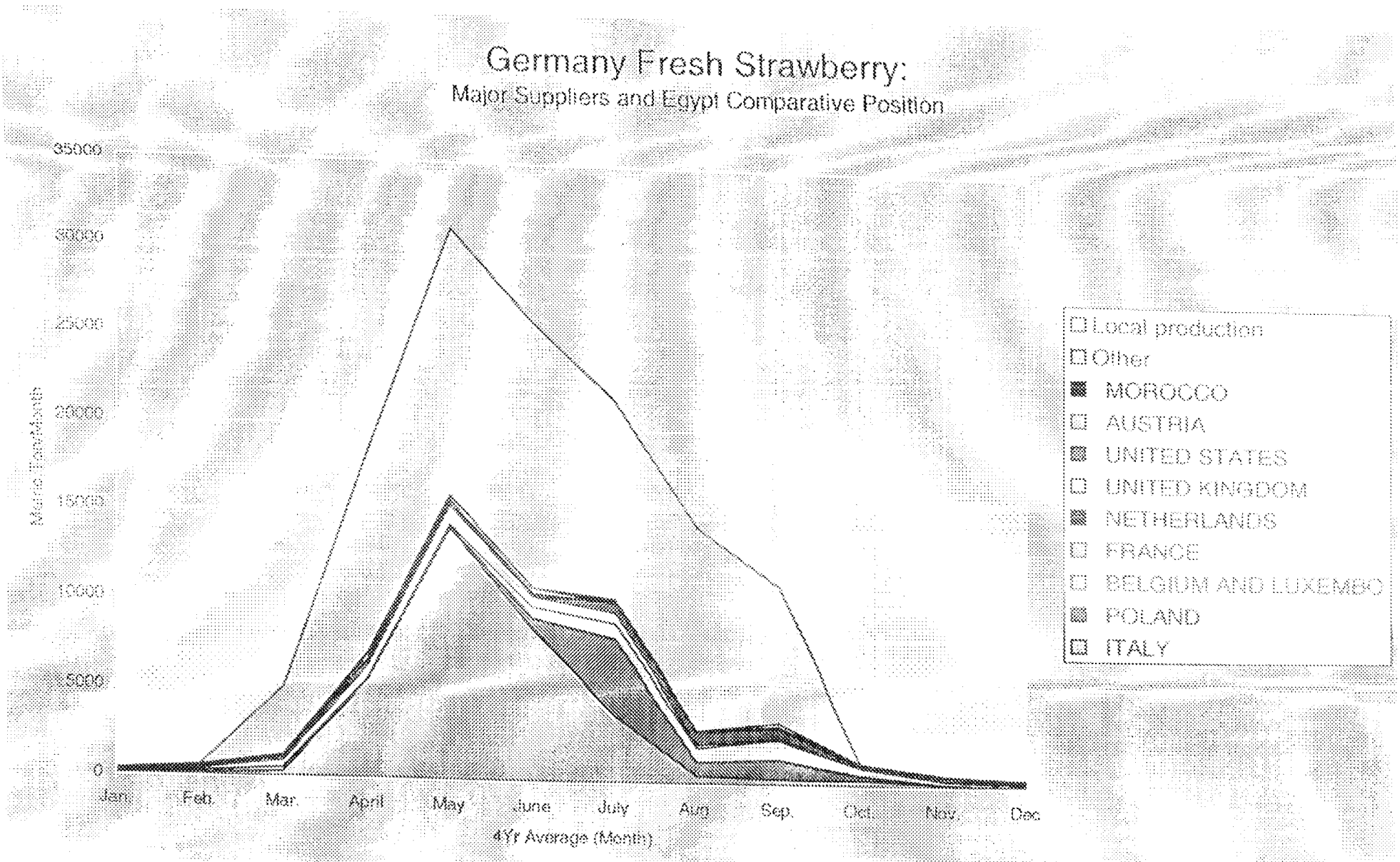


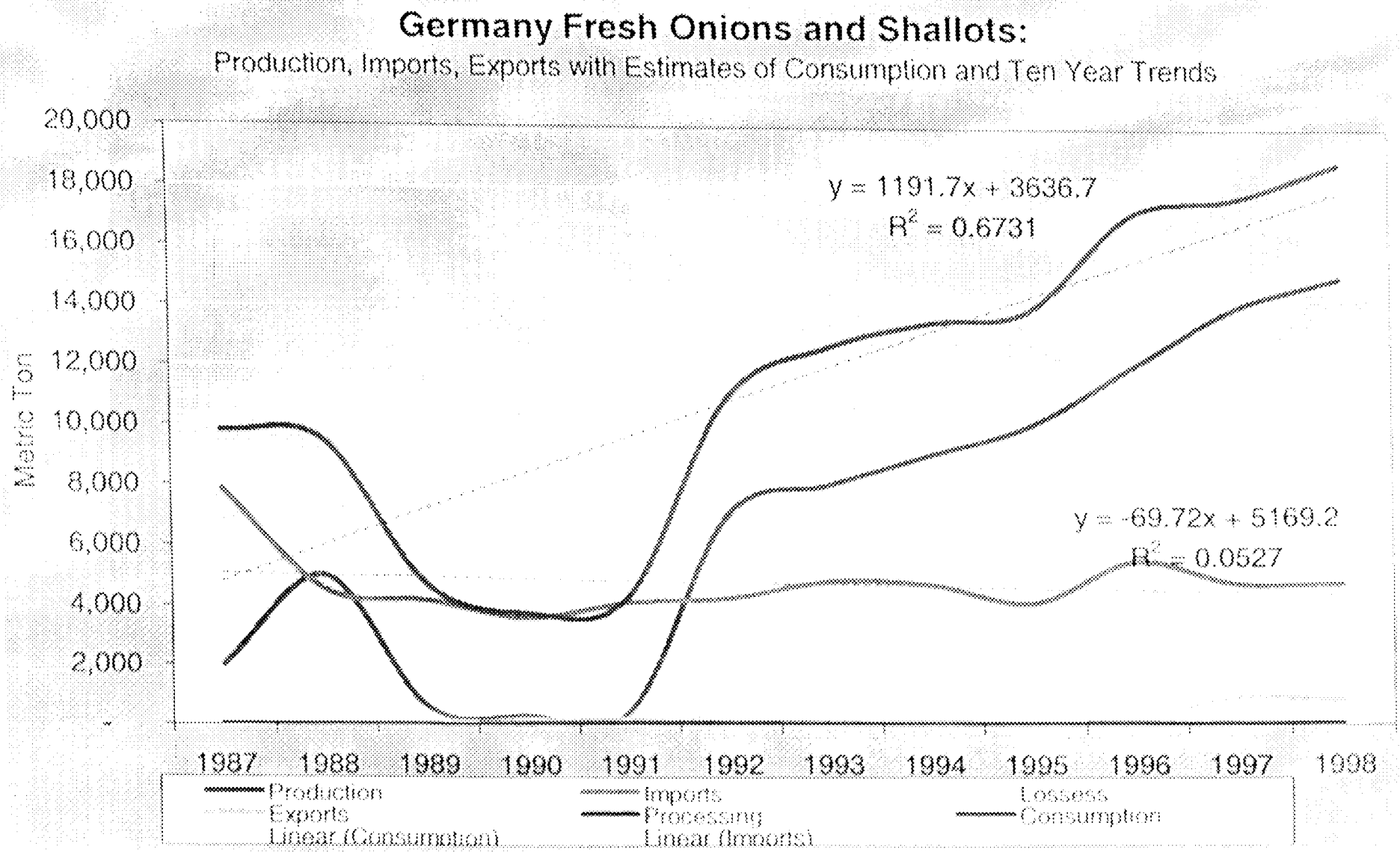

Germany Galia and Other Melons:
Major Suppliers and Egypt Comparative Position
Metric Ton Months
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
Jan.
Feb.
Mar.
April
May
June
July
Aug.
Sep.
Oct.
Nov.
Dec.
4Yr Average (Month)
Local Production
Other
IRAN
SOUTH AFRICA
ISRAEL
COSTA RICA
BELGIUM AND LUXEMBO
ITALY
TURKEY
FRANCE
NETHERLANDS
SPAIN

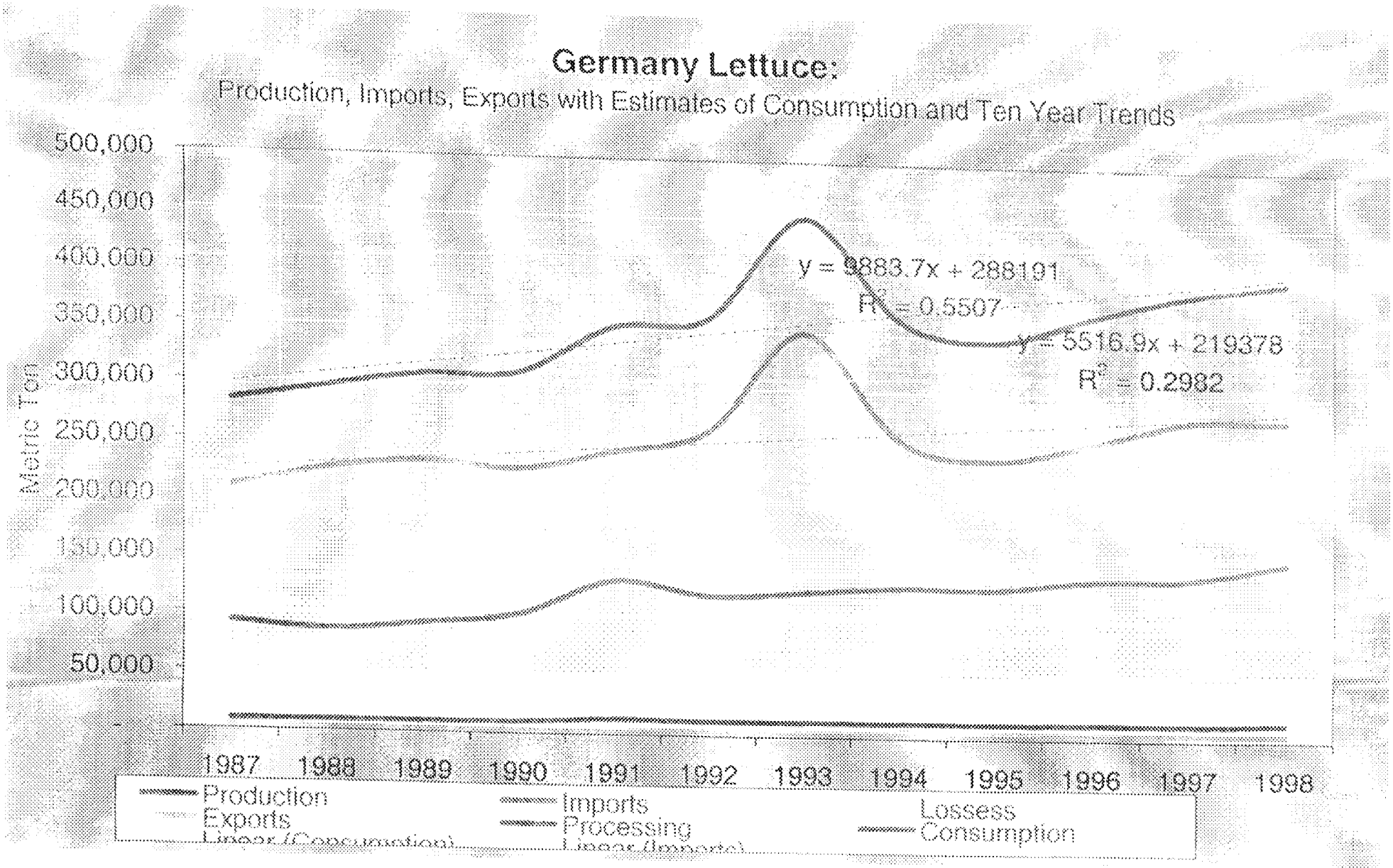
# Germany Peaches and Nectarins:

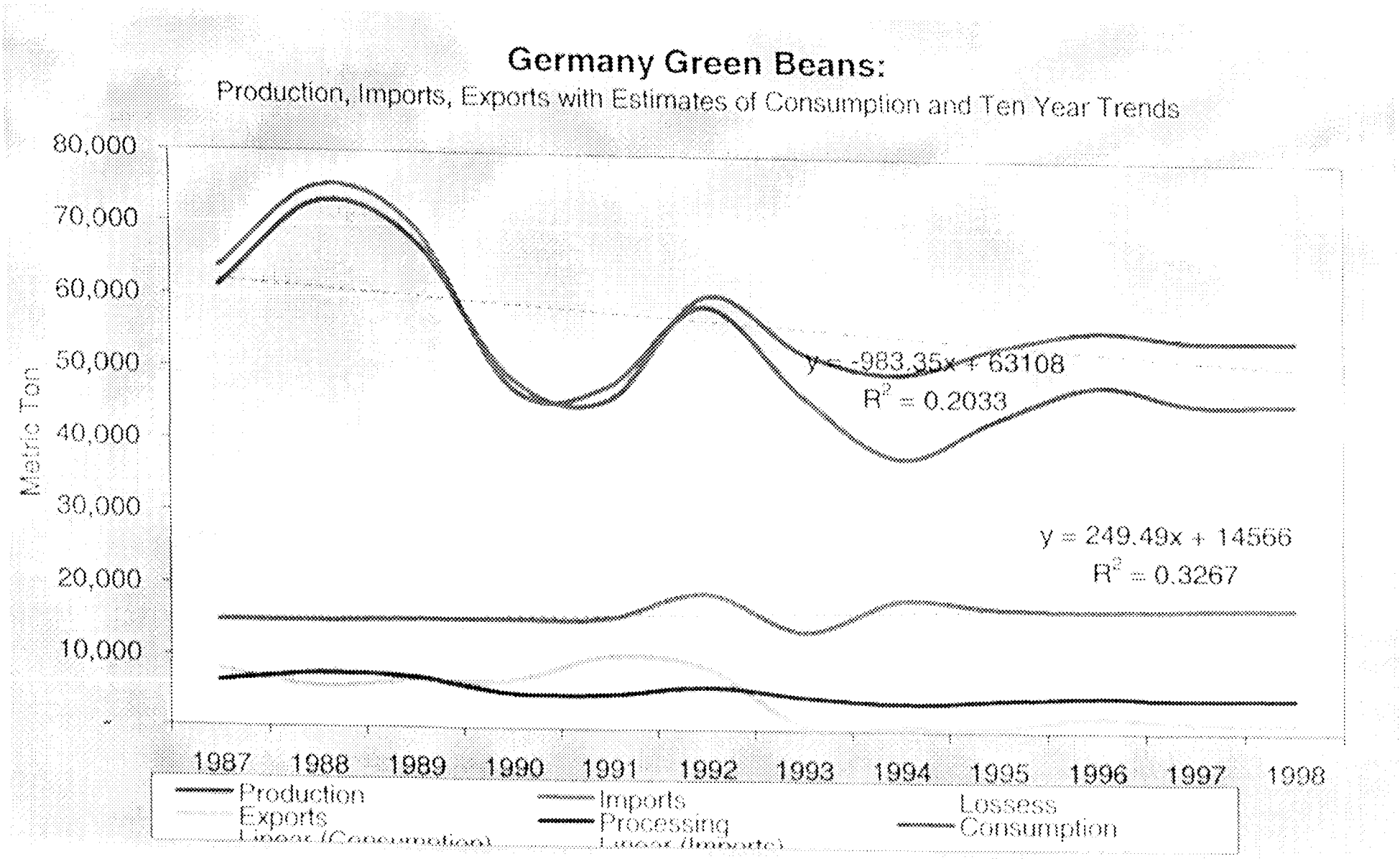
## Major Suppliers and Egypt Comparative Position

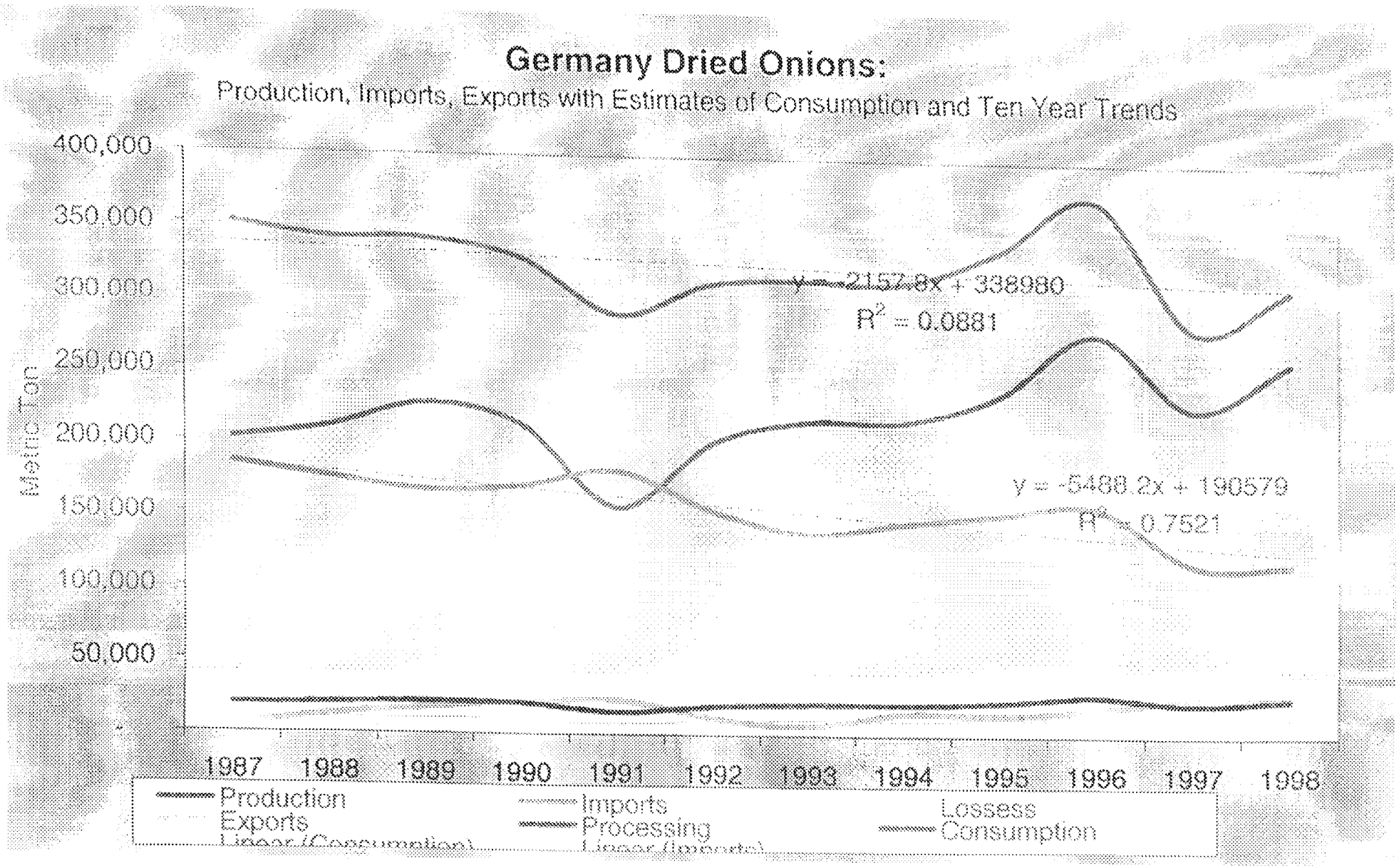


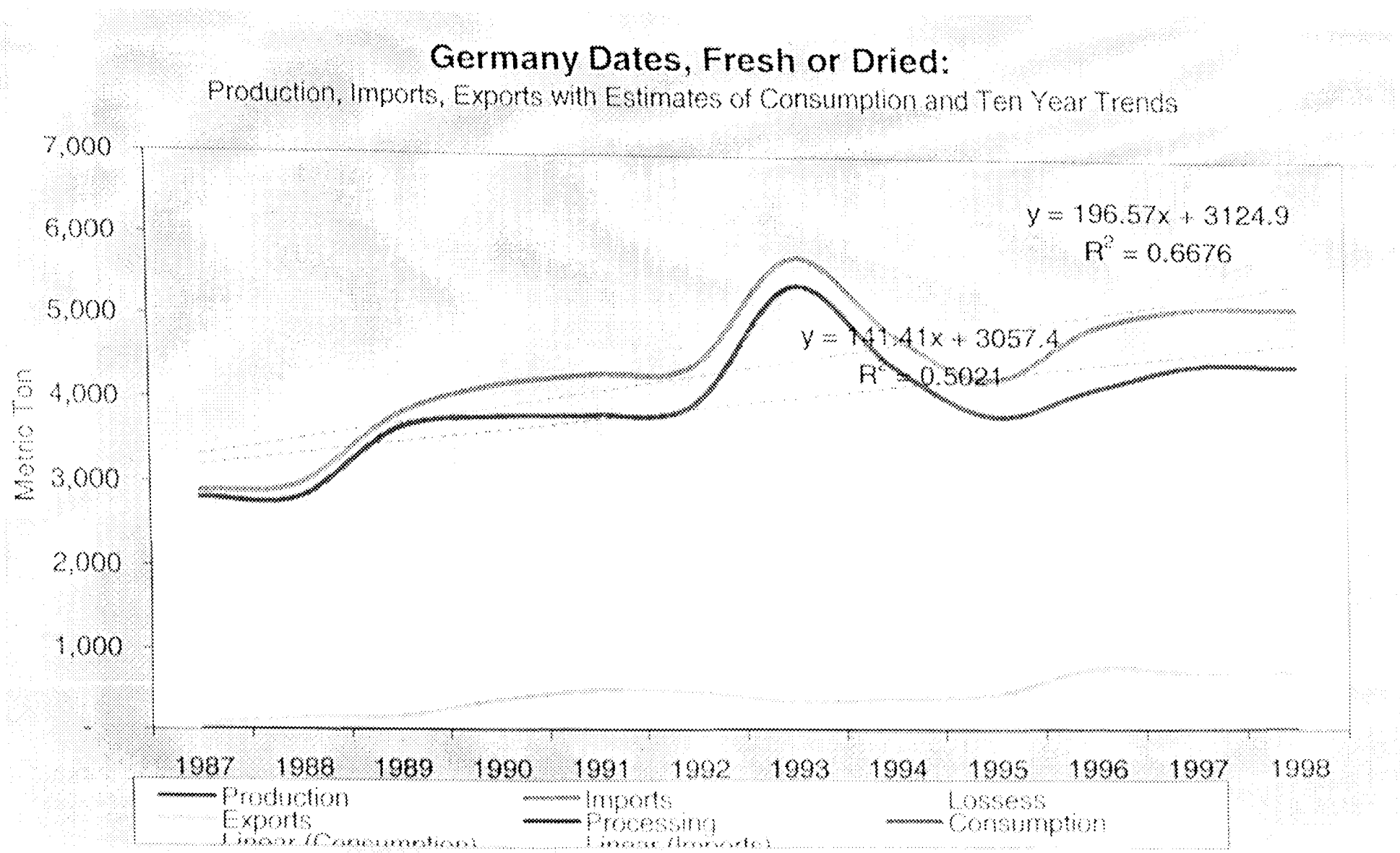

Germany Fresh Strawberry:
Major Suppliers and Egypt Comparative Position
35000
30000
25000
20000
15000
10000
5000
0
Metric Ton/Month
Jan.
Feb.
Mar.
April
May
June
July
Aug.
Sep.
Oct.
Nov.
Dec.
4Yr Average (Month)
Local production
Other
MOROCCO
AUSTRIA
UNITED STATES
UNITED KINGDOM
NETHERLANDS
FRANCE
BELGIUM AND LUXEMBO
POLAND
ITALY

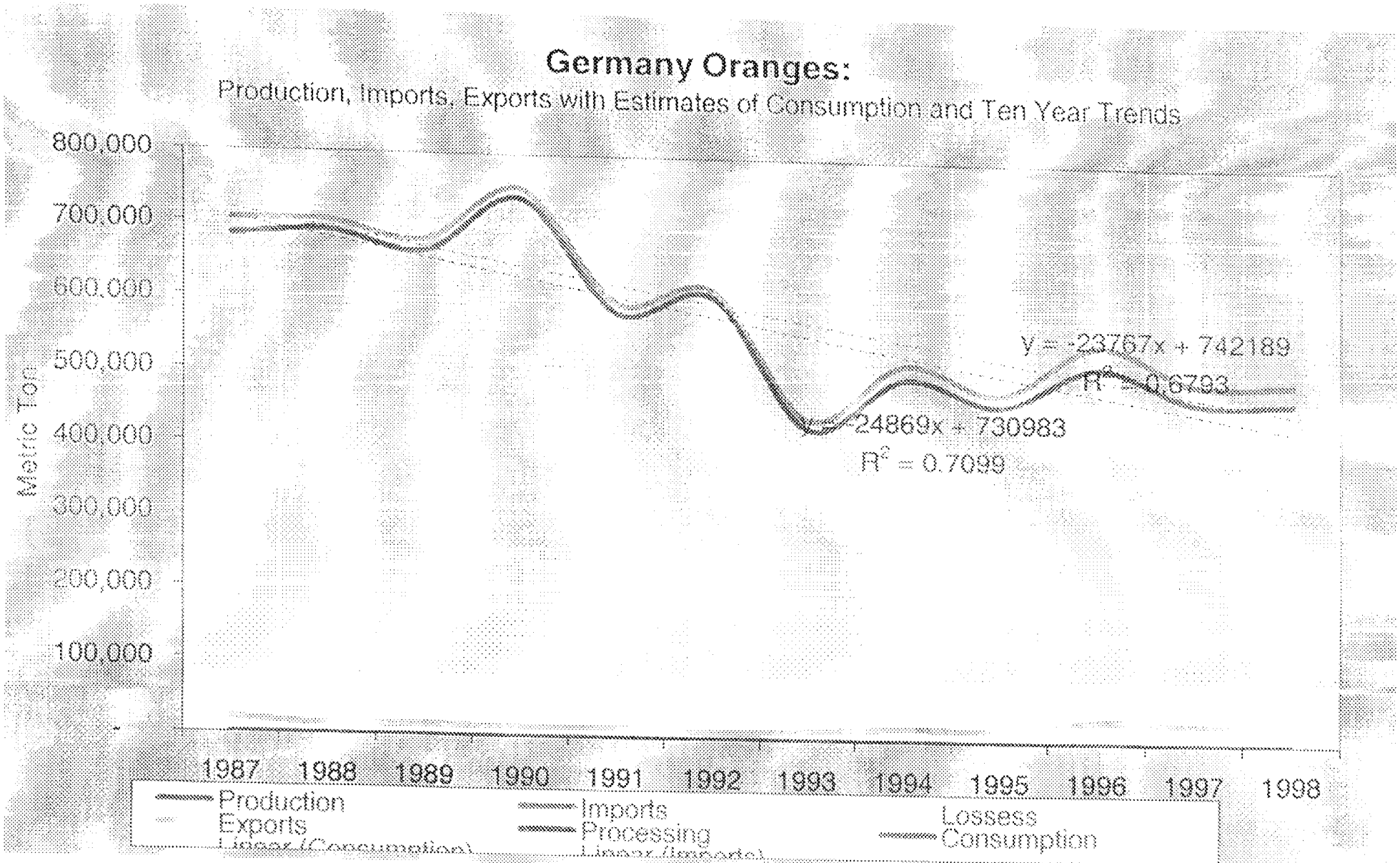

Germany Fresh Onions and Shallots:
Production, Imports, Exports with Estimates of Consumption and Ten Year Trends
Metric Ton
20,000
18,000
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
-
y = 1191.7x + 3636.7
R² = 0.6731
y = -69.72x + 5169.2
R² = 0.0527
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
Production
Imports
Losses
Exports
Processing
Consumption
Linear (Consumption)
Linear (Imports)

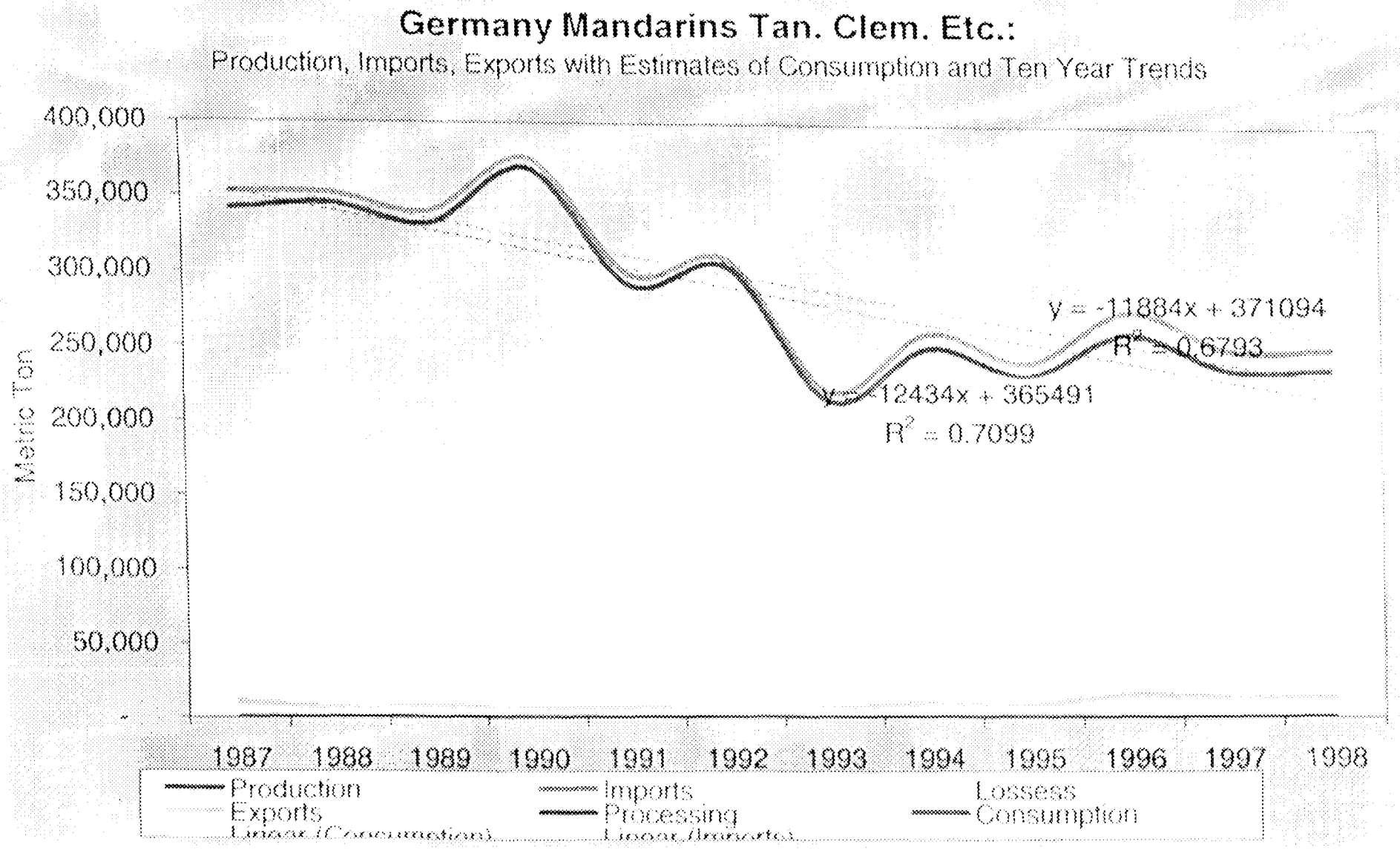

Germany Lettuce:
Production, Imports, Exports with Estimates of Consumption and Ten Year Trends
Metric Ton
500,000
450,000
400,000
350,000
300,000
250,000
200,000
150,000
100,000
50,000
-
y = 9883.7x + 288191
R² = 0.5507
y = 5516.9x + 219378
R² = 0.2982
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
Production
Exports
Linear (Consumption)
Imports
Processing
Linear (Imports)
Lossess
Consumption


Germany Green Beans:
Production, Imports, Exports with Estimates of Consumption and Ten Year Trends
Metric Ton
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
-
y = -983.35x + 63108
R² = 0.2033
y = 249.49x + 14566
R² = 0.3267
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
Production
Exports
Imports
Processing
Losses
Consumption


Germany Dried Onions:
Production, Imports, Exports with Estimates of Consumption and Ten Year Trends
Metric Ton
400,000
350,000
300,000
250,000
200,000
150,000
100,000
50,000
y = 2157.8x + 338980
R² = 0.0881
y = -5468.2x + 190579
R² = 0.7521
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
Production
Exports
Imports
Processing
Lossess
Consumption

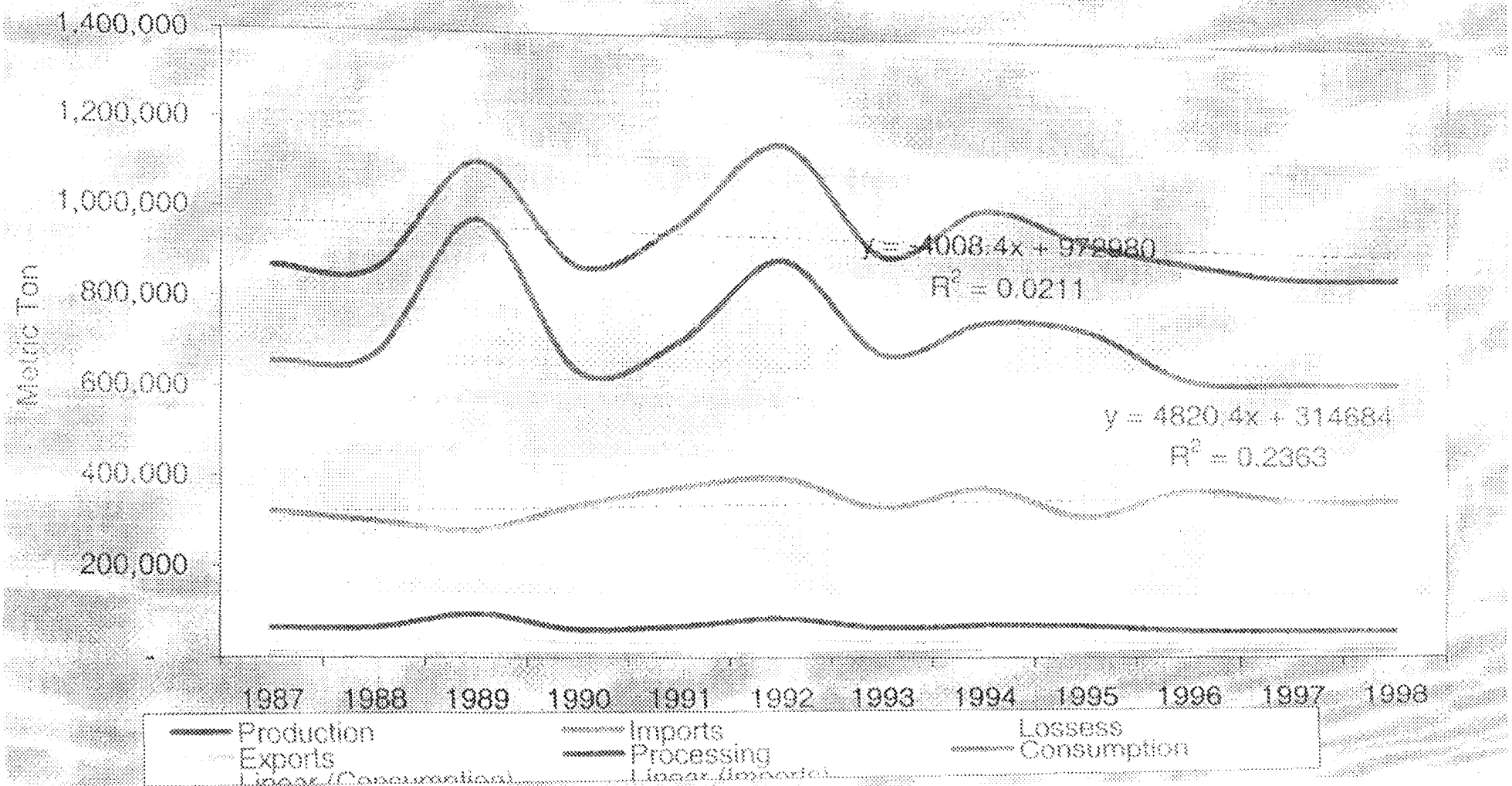

Germany Dates, Fresh or Dried:
Production, Imports, Exports with Estimates of Consumption and Ten Year Trends
Metric Ton
7,000
6,000
5,000
4,000
3,000
2,000
1,000
-
y = 196.57x + 3124.9
R² = 0.6676
y = 141.41x + 3057.4
R² = 0.5021
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
Production
Imports
Losses
Exports
Processing
Consumption

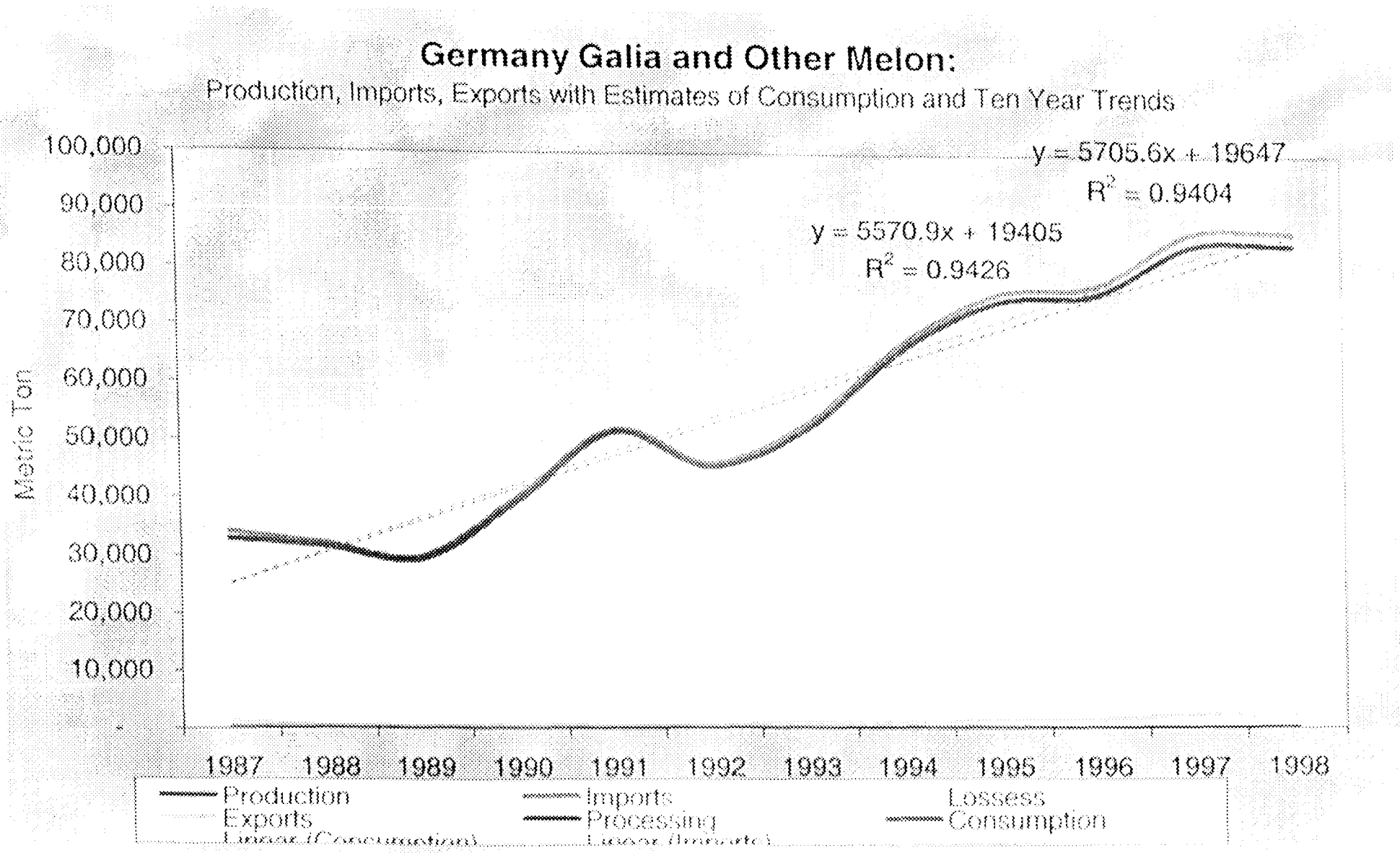

Germany Oranges:
Production, Imports, Exports with Estimates of Consumption and Ten Year Trends
Metric Ton
800,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000
-
y = -23767x + 742189
R² = 0.6793
y = -24869x + 730983
R² = 0.7099
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
Production
Exports
Linear (Consumption)
Imports
Processing
Linear (Imports)
Lossess
Consumption

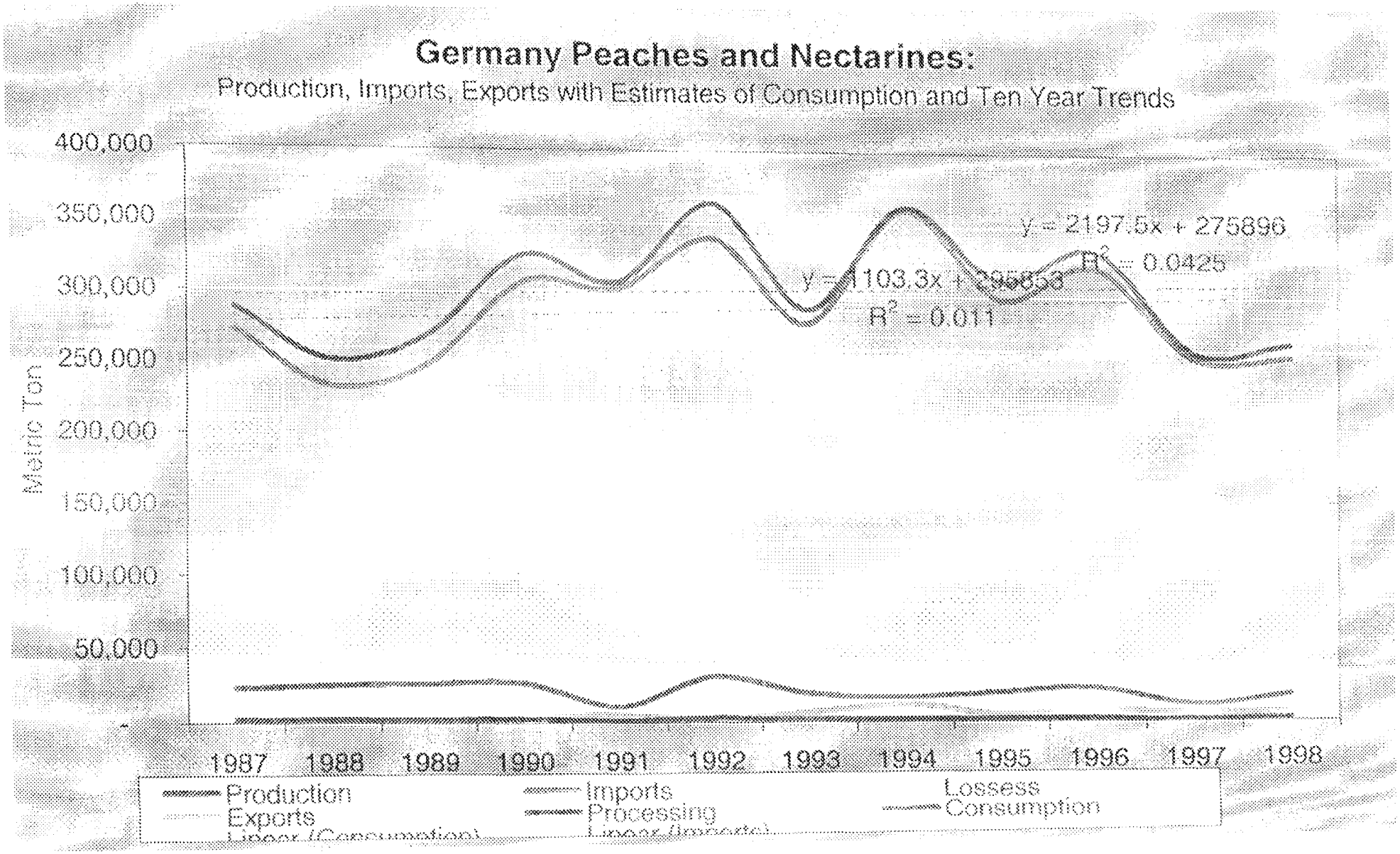

Germany Mandarins Tan. Clem. Etc.:
Production, Imports, Exports with Estimates of Consumption and Ten Year Trends
Metric Ton
400,000
350,000
300,000
250,000
200,000
150,000
100,000
50,000
y = -11884x + 371094
R² = 0.6793
y = -12434x + 365491
R² = 0.7099
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
Production
Imports
Losses
Exports
Processing
Consumption
Linear (Consumption)
Linear (Imports)

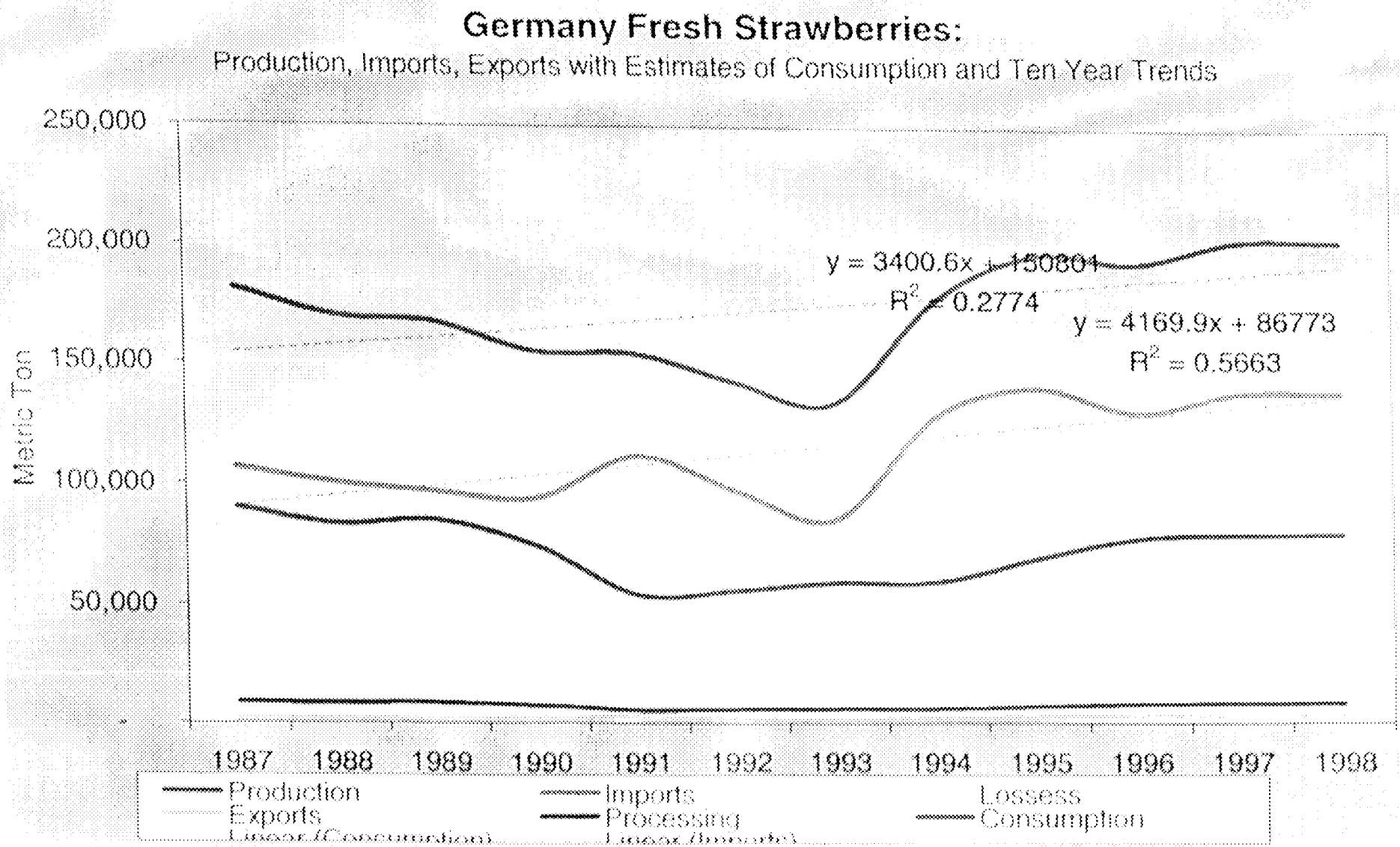
## Germany Table Grape:

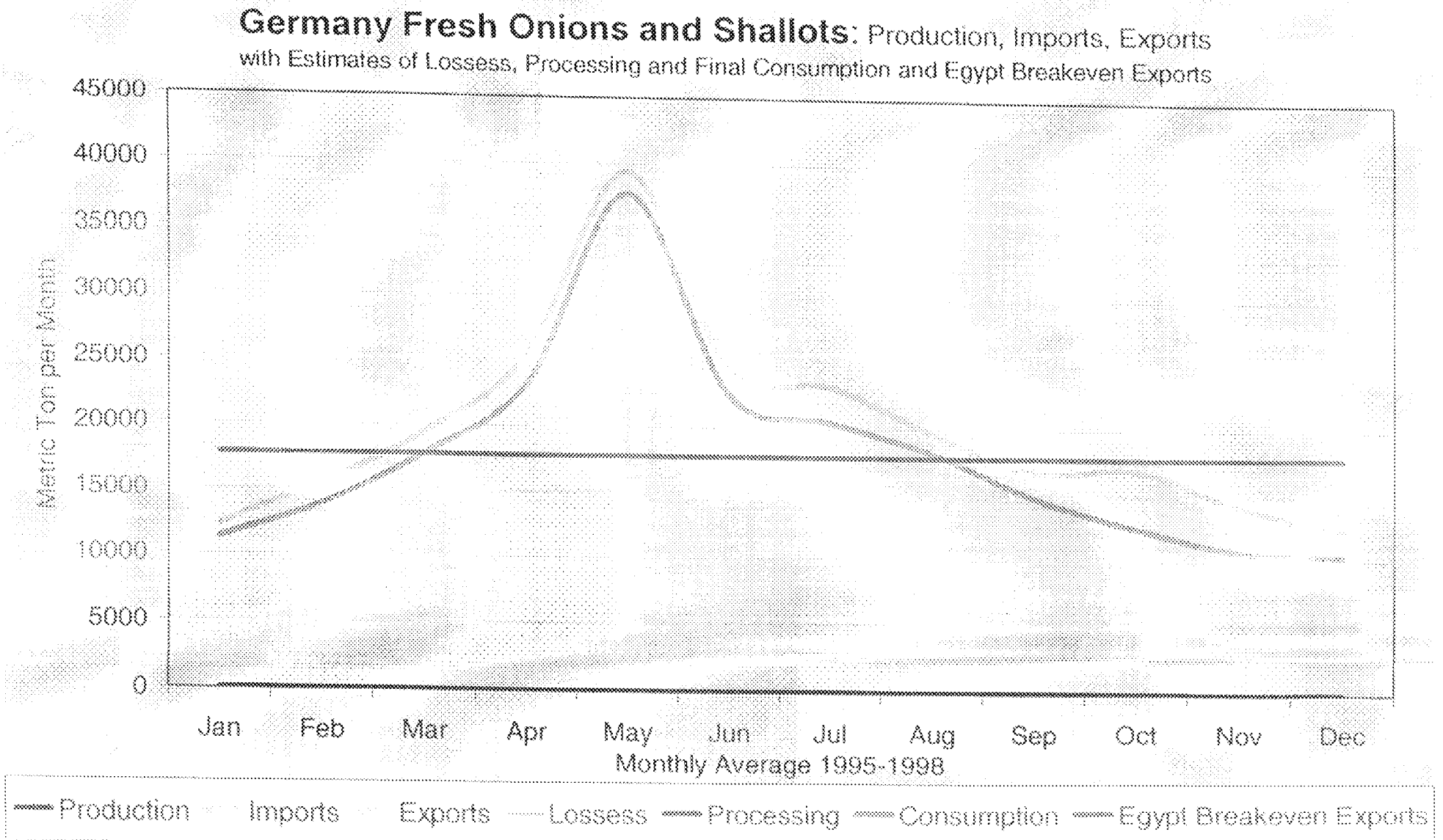
Production, Imports, Exports with Estimates of Consumption and Ten Year Trends

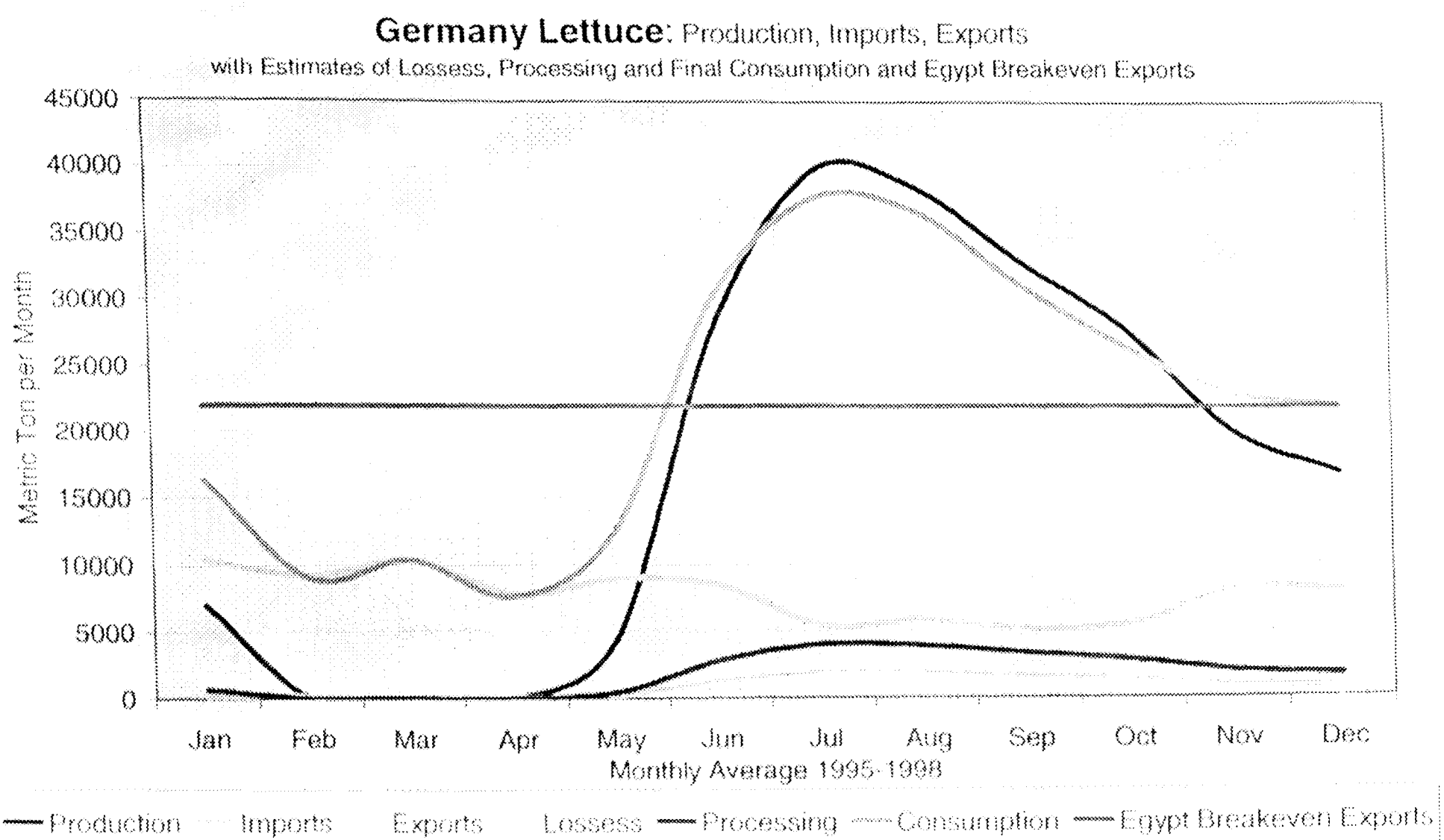


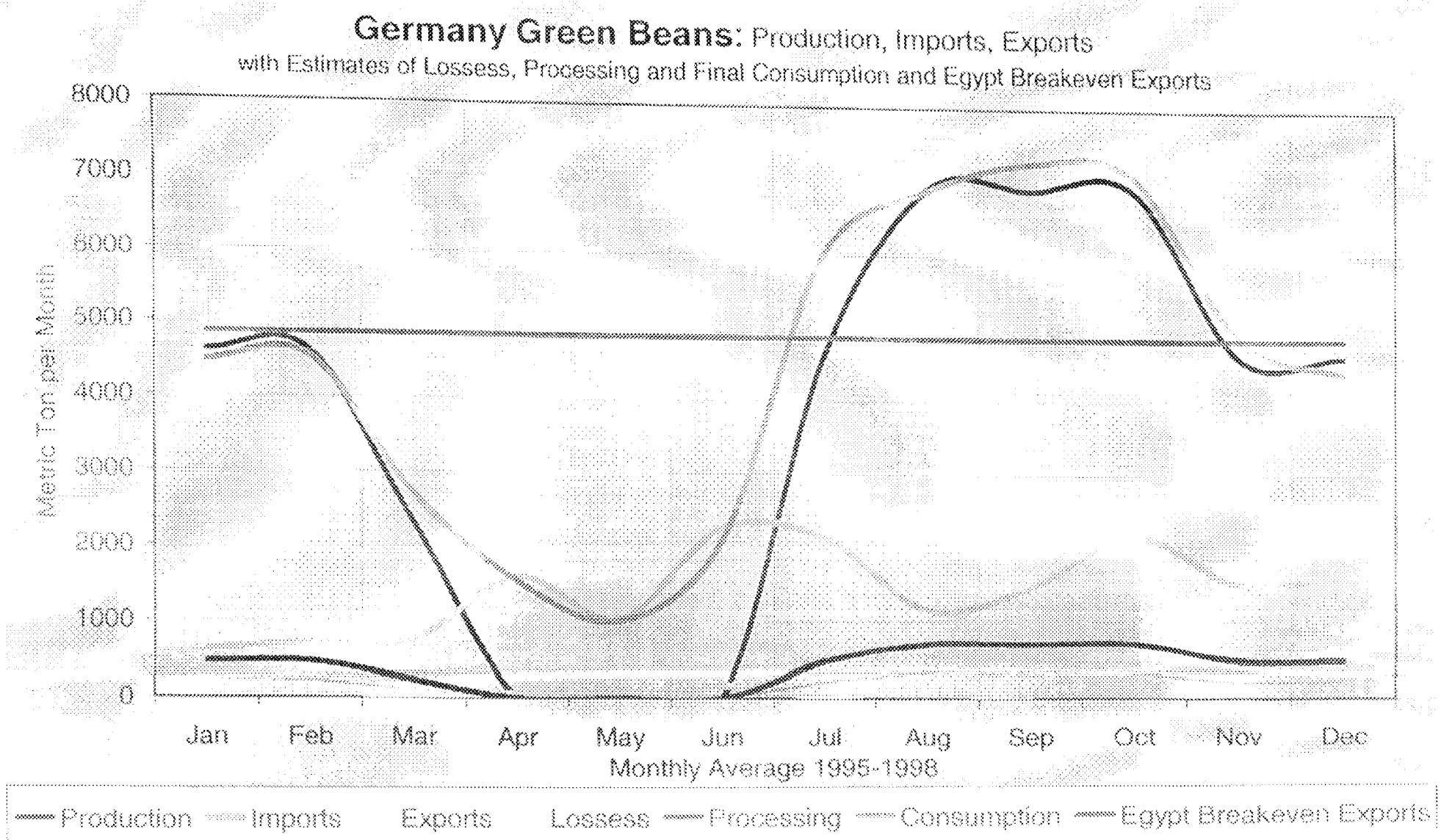

Germany Galia and Other Melon:
Production, Imports, Exports with Estimates of Consumption and Ten Year Trends
y = 5705.6x + 19647
R² = 0.9404
y = 5570.9x + 19405
R² = 0.9426
Metric Ton
100,000
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
-
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
Production
Imports
Losses
Exports
Processing
Consumption

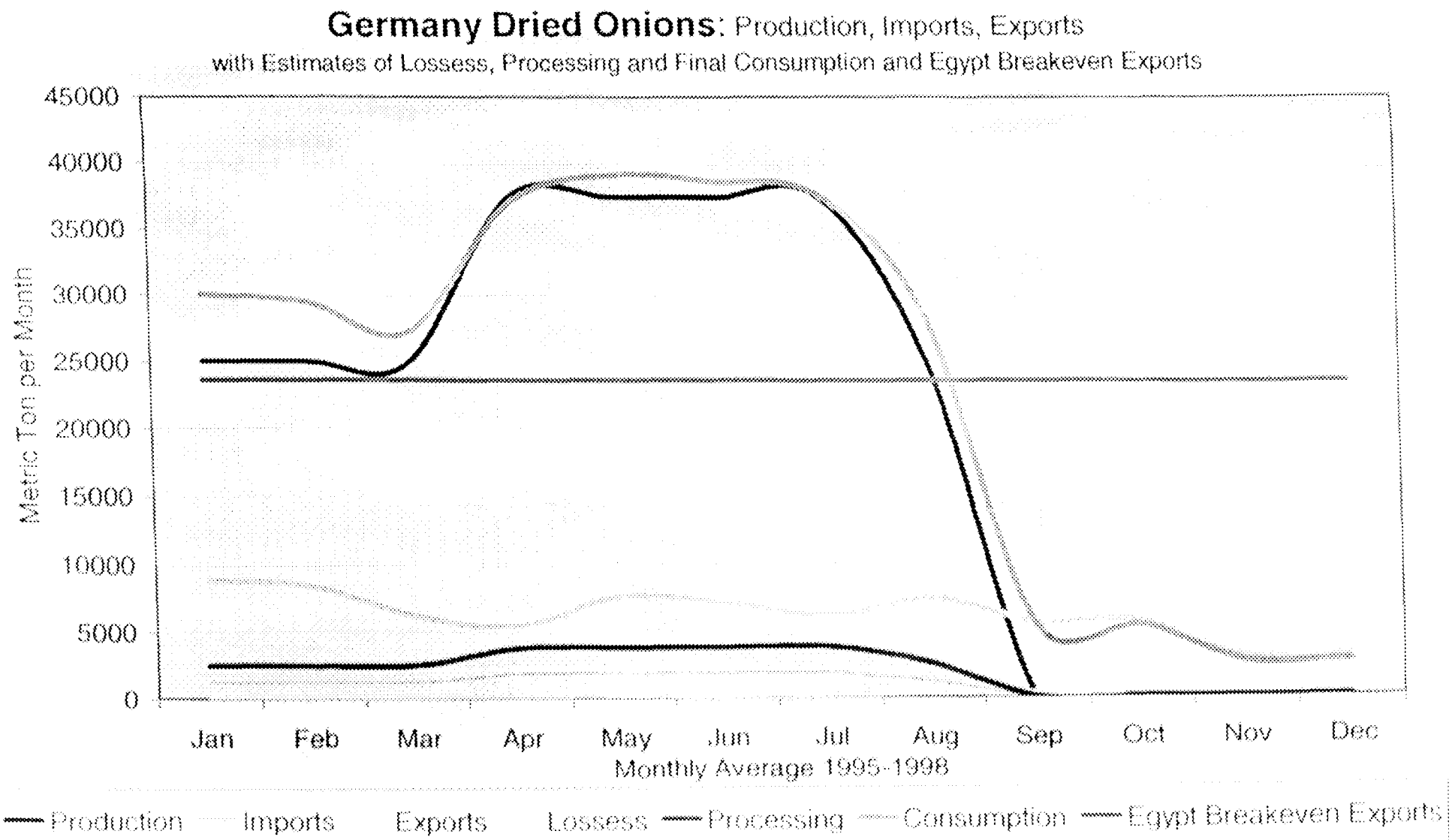

Germany Peaches and Nectarines:
Production, Imports, Exports with Estimates of Consumption and Ten Year Trends
400,000
350,000
300,000
250,000
200,000
150,000
100,000
50,000
Metric Ton
y = 2197.5x + 275896
R² = 0.0425
y = 1103.3x + 295853
R² = 0.011
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
Production
Exports
Imports
Processing
Lossess
Consumption

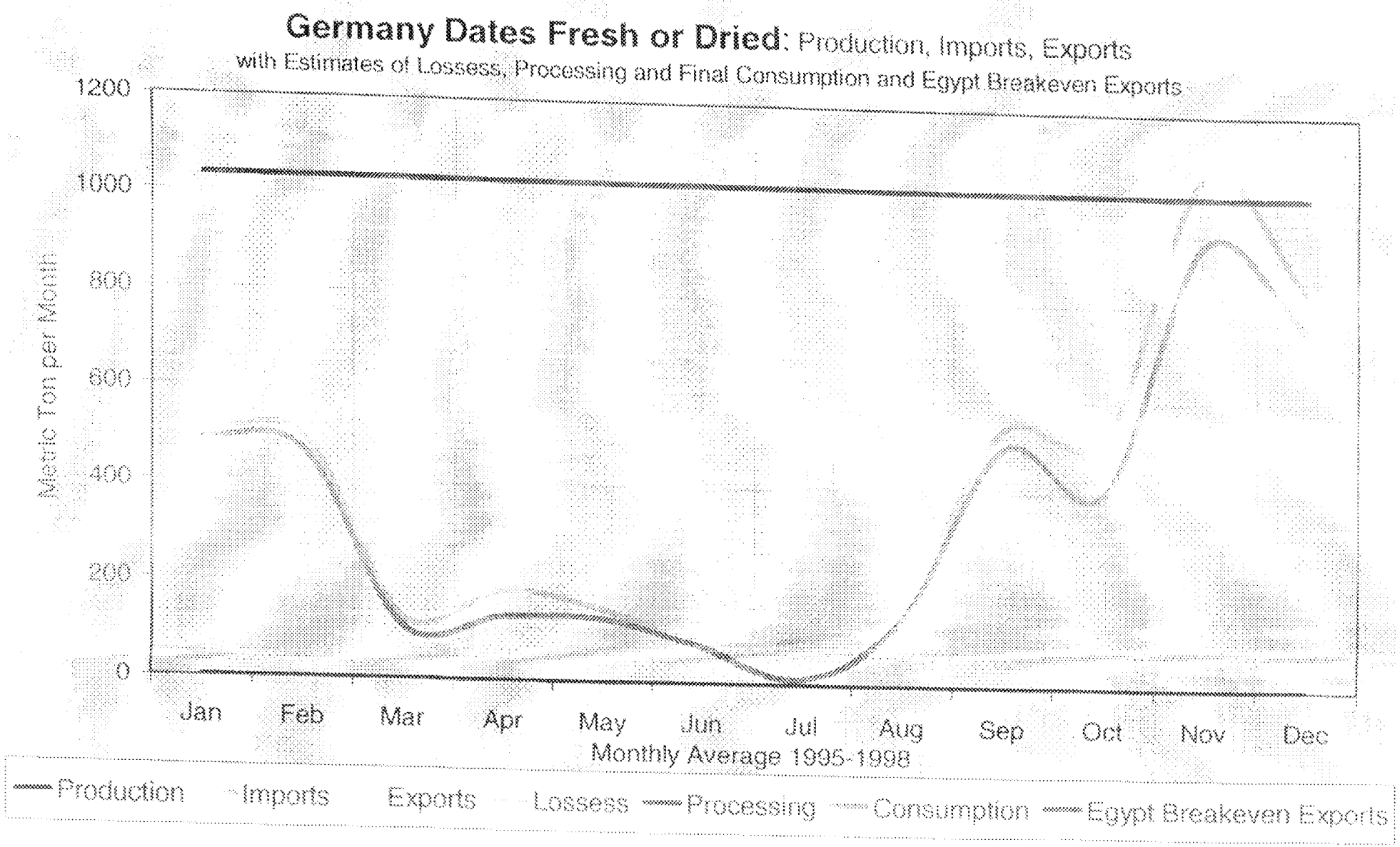

Germany Fresh Strawberries:
Production, Imports, Exports with Estimates of Consumption and Ten Year Trends
250,000
200,000
150,000
100,000
50,000
Metric Ton
y = 3400.6x + 150801
R² = 0.2774
y = 4169.9x + 86773
R² = 0.5663
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
Production
Imports
Lossess
Exports
Processing
Consumption

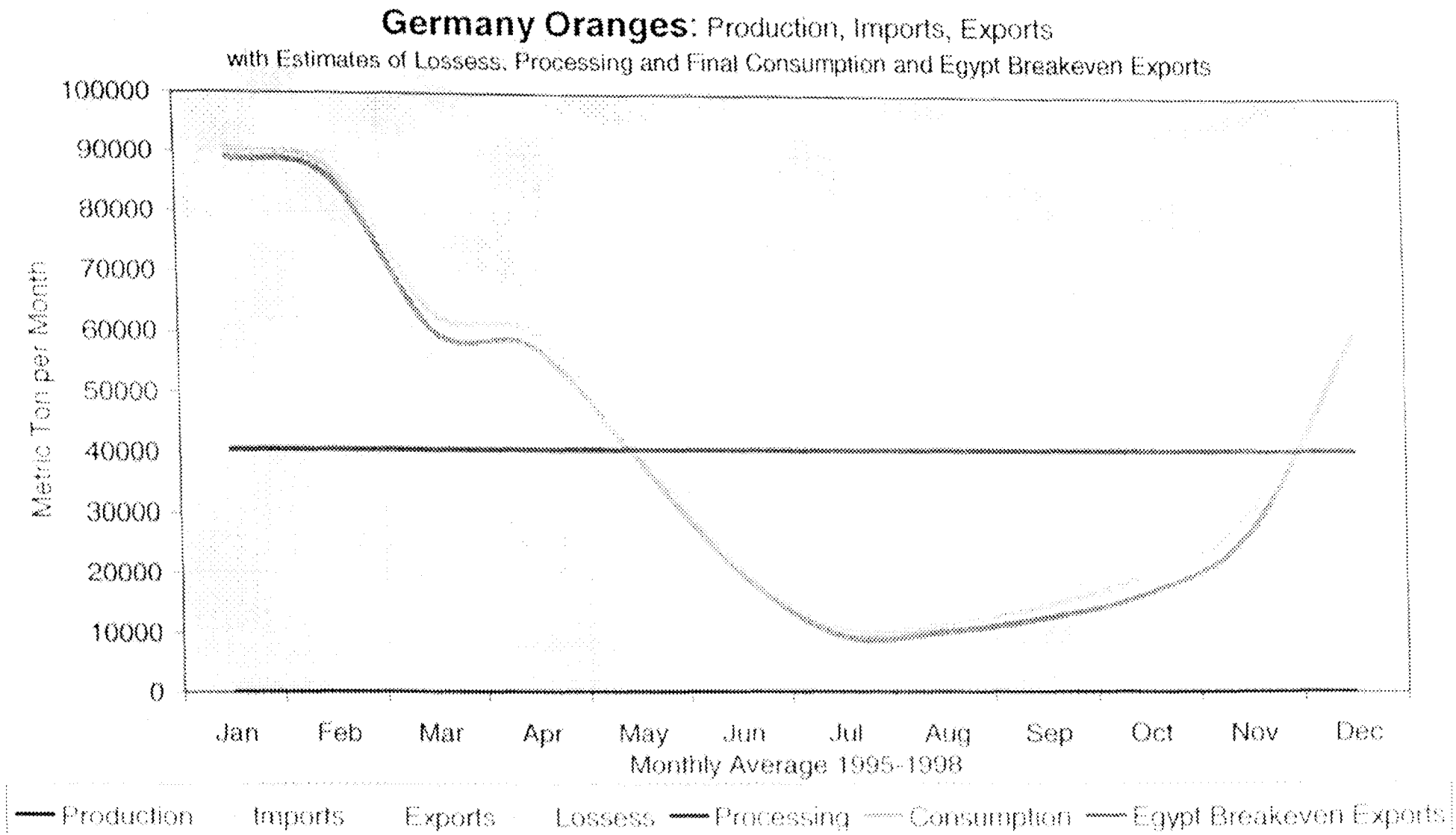

Germany Fresh Onions and Shallots: Production, Imports, Exports
with Estimates of Lossess, Processing and Final Consumption and Egypt Breakeven Exports
Metric Ton per Month
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Monthly Average 1995-1998
Production
Imports
Exports
Lossess
Processing
Consumption
Egypt Breakeven Exports

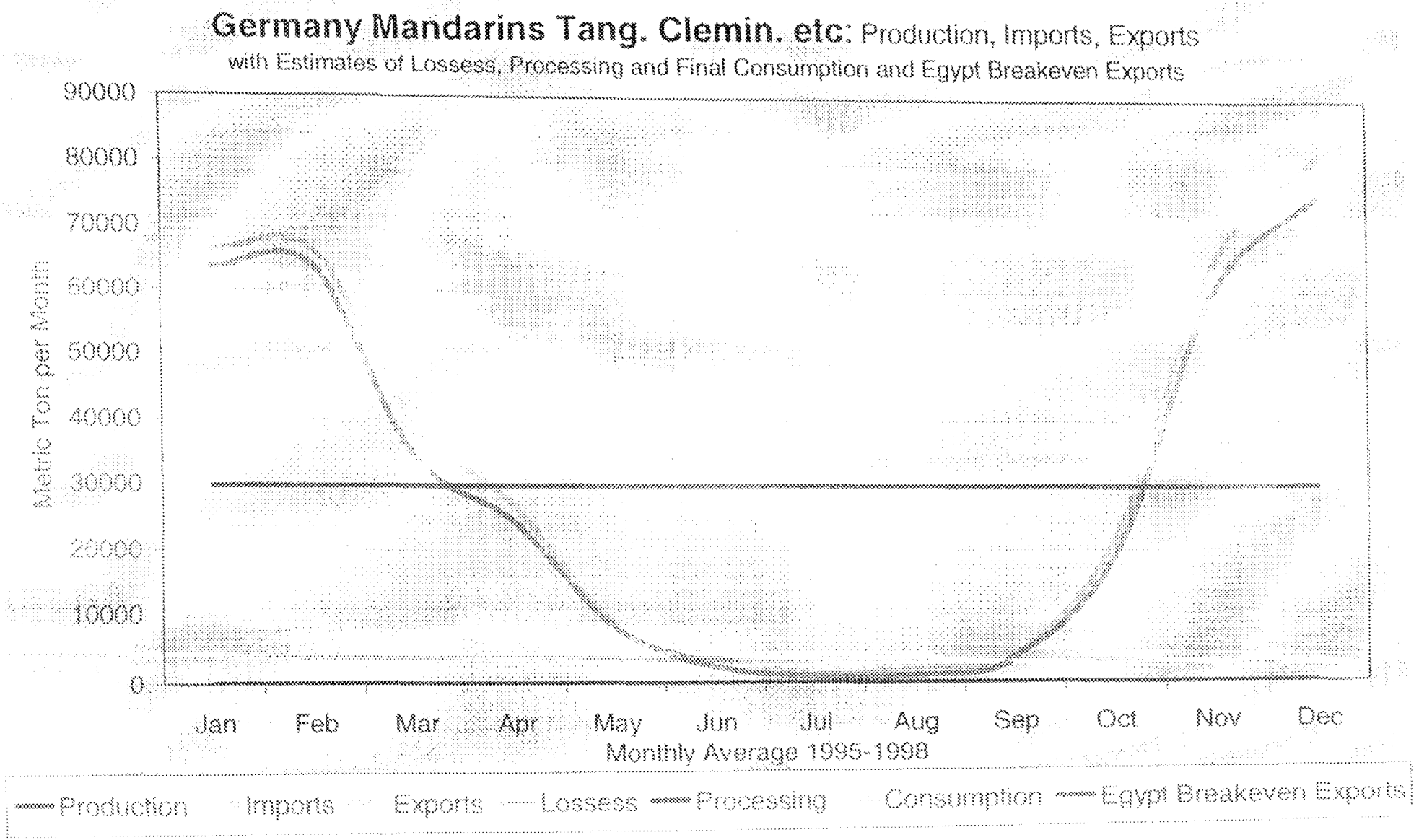

Germany Lettuce: Production, Imports, Exports
with Estimates of Lossess, Processing and Final Consumption and Egypt Breakeven Exports
Metric Ton per Month
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Monthly Average 1995-1998
Production
Imports
Exports
Lossess
Processing
Consumption
Egypt Breakeven Exports

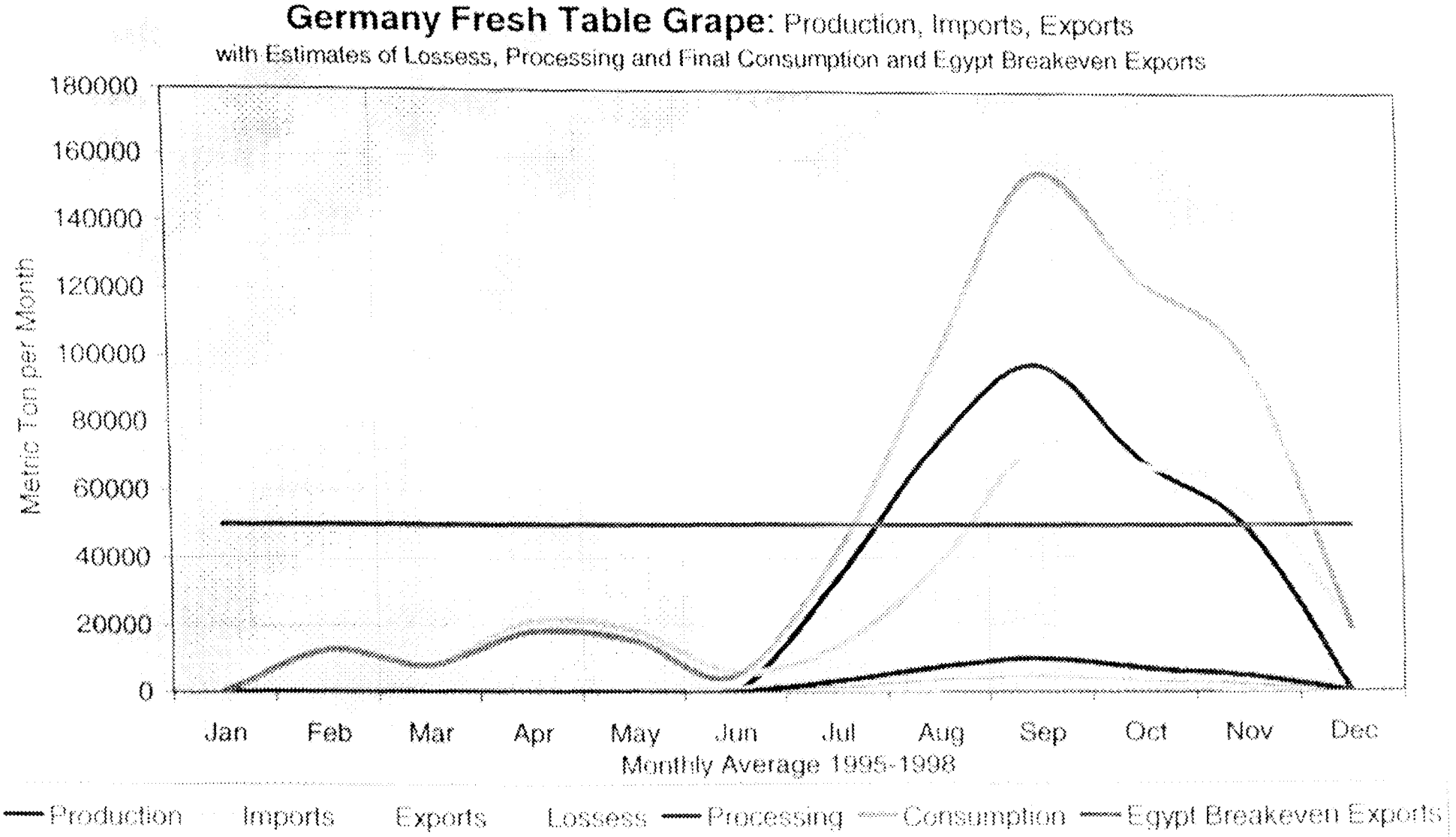

Germany Green Beans: Production, Imports, Exports
with Estimates of Lossess, Processing and Final Consumption and Egypt Breakeven Exports
8000
7000
6000
5000
4000
3000
2000
1000
0
Metric Ton per Month
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Monthly Average 1995-1998
Production
Imports
Exports
Lossess
Processing
Consumption
Egypt Breakeven Exports

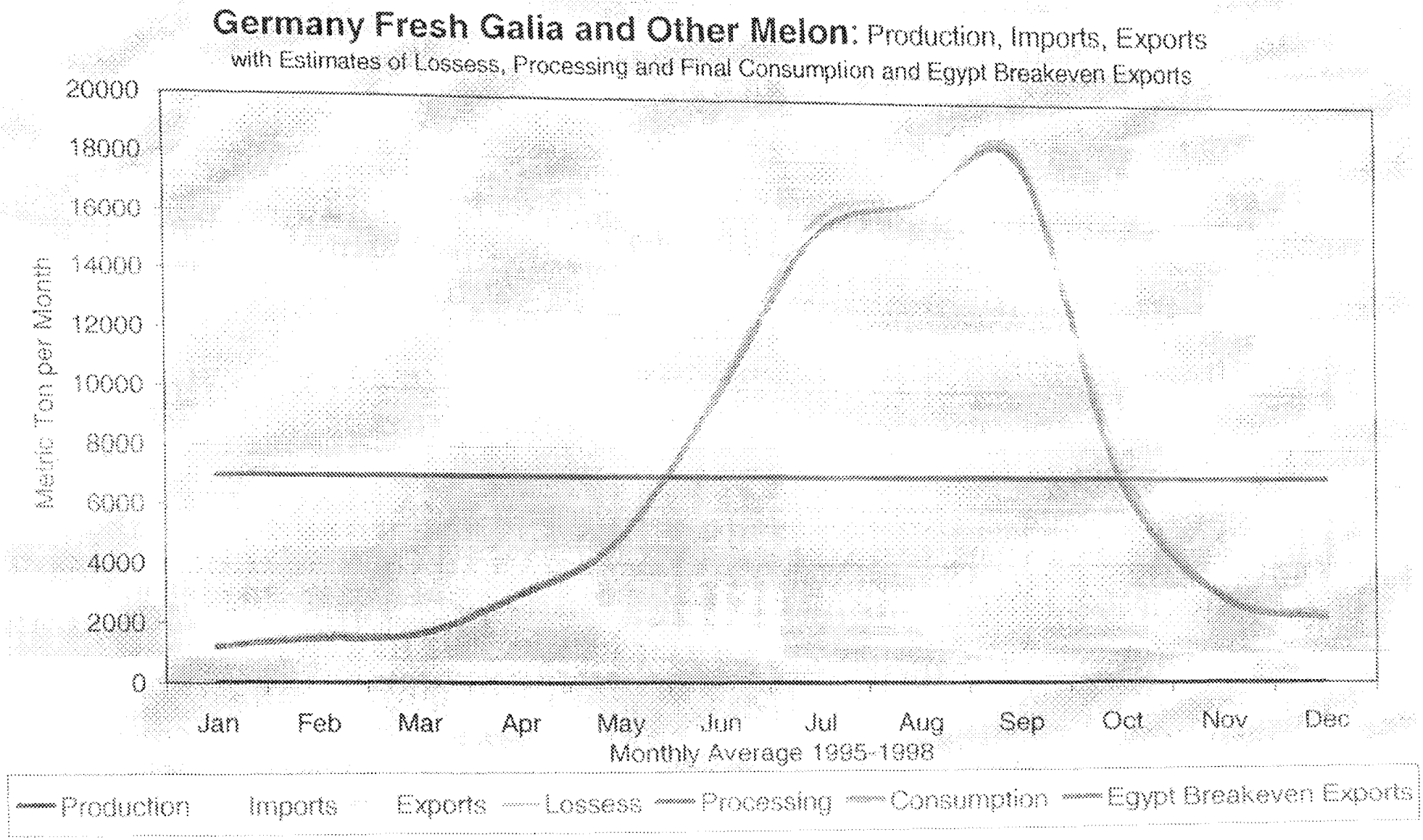

Germany Dried Onions: Production, Imports, Exports
with Estimates of Lossess, Processing and Final Consumption and Egypt Breakeven Exports
Metric Ton per Month
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Monthly Average 1995-1998
Production
Imports
Exports
Lossess
Processing
Consumption
Egypt Breakeven Exports

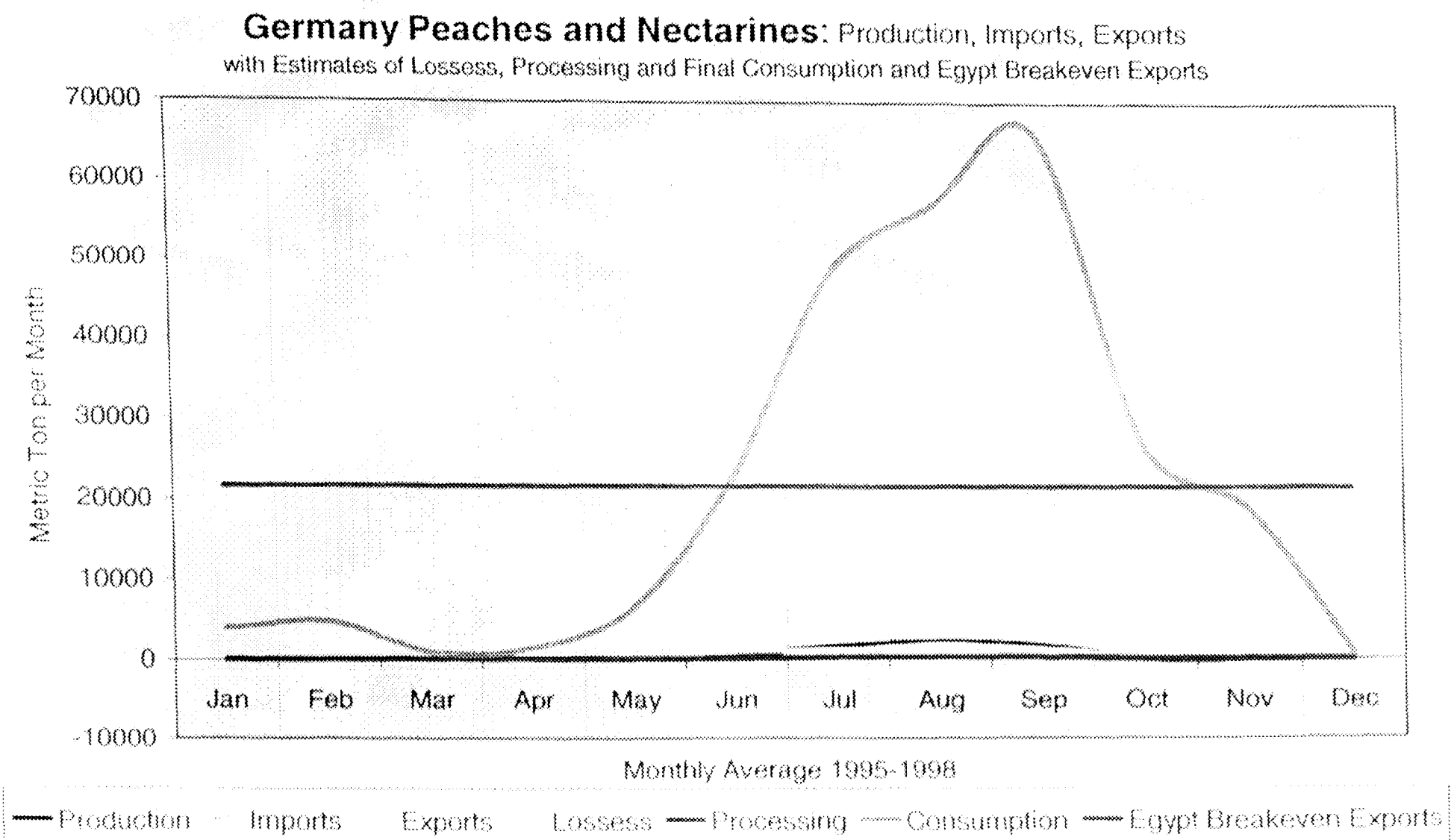

Germany Dates Fresh or Dried: Production, Imports, Exports
with Estimates of Lossess, Processing and Final Consumption and Egypt Breakeven Exports
1200
1000
800
600
400
200
0
Metric Ton per Month
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Monthly Average 1995-1998
Production
Imports
Exports
Lossess
Processing
Consumption
Egypt Breakeven Exports

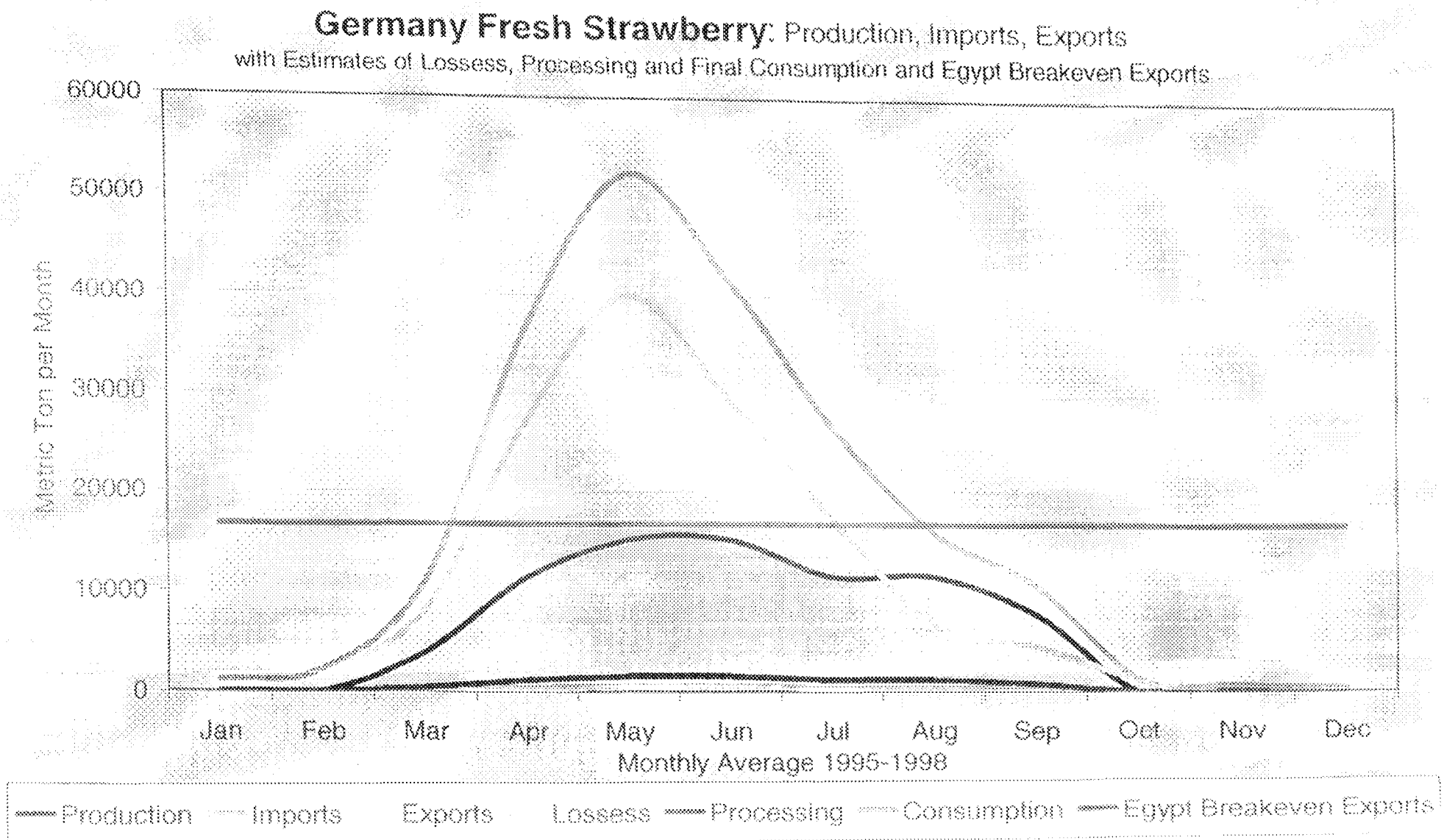

Germany Oranges: Production, Imports, Exports
with Estimates of Lossess, Processing and Final Consumption and Egypt Breakeven Exports
100000
90000
80000
70000
60000
50000
40000
30000
20000
10000
0
Metric Ton per Month
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Monthly Average 1995-1998
Production
Imports
Exports
Lossess
Processing
Consumption
Egypt Breakeven Exports


Germany Mandarins Tang. Clemin. etc: Production, Imports, Exports
with Estimates of Lossess, Processing and Final Consumption and Egypt Breakeven Exports
Metric Ton per Month
90000
80000
70000
60000
50000
40000
30000
20000
10000
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Monthly Average 1995-1998
Production
Imports
Exports
Lossess
Processing
Consumption
Egypt Breakeven Exports


Germany Fresh Table Grape: Production, Imports, Exports
with Estimates of Lossess, Processing and Final Consumption and Egypt Breakeven Exports
Metric Ton per Month
180000
160000
140000
120000
100000
80000
60000
40000
20000
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Monthly Average 1995-1998
Production
Imports
Exports
Lossess
Processing
Consumption
Egypt Breakeven Exports

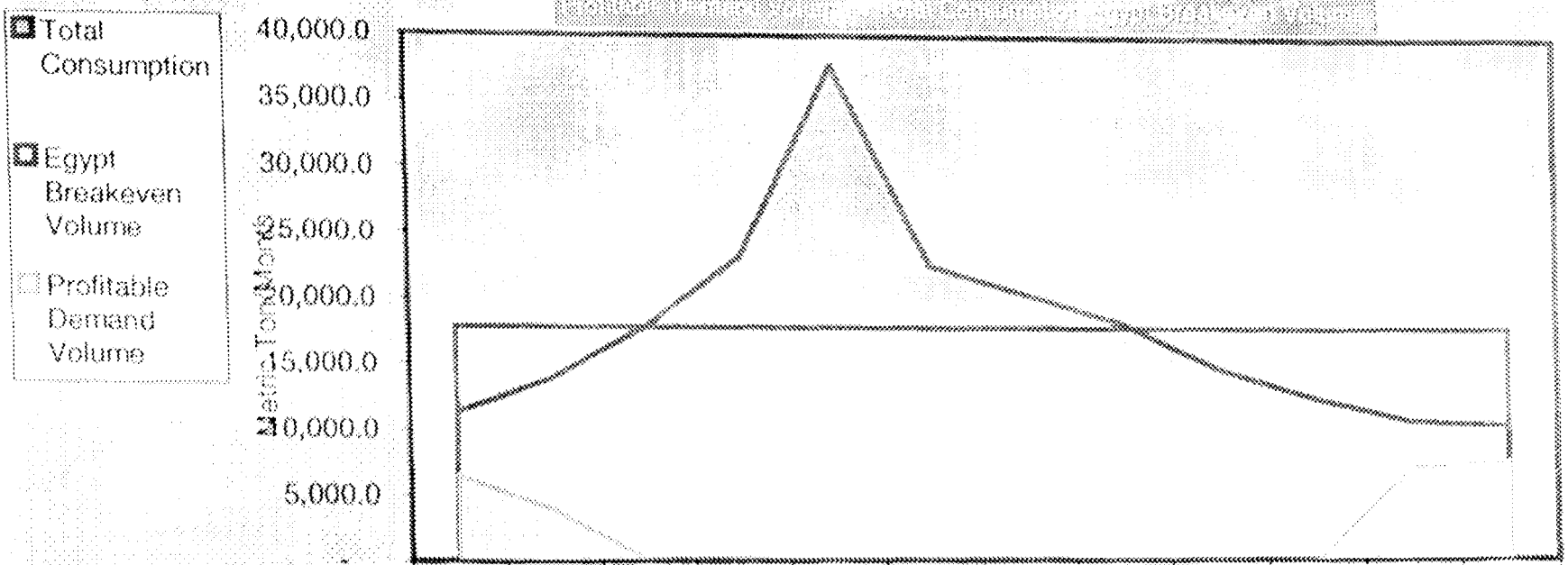

Germany Fresh Galia and Other Melon: Production, Imports, Exports
with Estimates of Lossess, Processing and Final Consumption and Egypt Breakeven Exports
Metric Ton per Month
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Monthly Average 1995-1998
Production
Imports
Exports
Lossess
Processing
Consumption
Egypt Breakeven Exports


Germany Peaches and Nectarines: Production, Imports, Exports
with Estimates of Lossess, Processing and Final Consumption and Egypt Breakeven Exports
70000
60000
50000
40000
30000
20000
10000
0
-10000
Metric Ton per Month
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Monthly Average 1995-1998
Production
Imports
Exports
Lossess
Processing
Consumption
Egypt Breakeven Exports


Germany Fresh Strawberry: Production, Imports, Exports
with Estimates of Lossess, Processing and Final Consumption and Egypt Breakeven Exports
60000
50000
40000
30000
20000
10000
0
Metric Ton per Month
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Monthly Average 1995-1998
Production
Imports
Exports
Lossess
Processing
Consumption
Egypt Breakeven Exports

# Germany Fresh Onions and Shallots

## Profitable Demand Volumes for Egypt

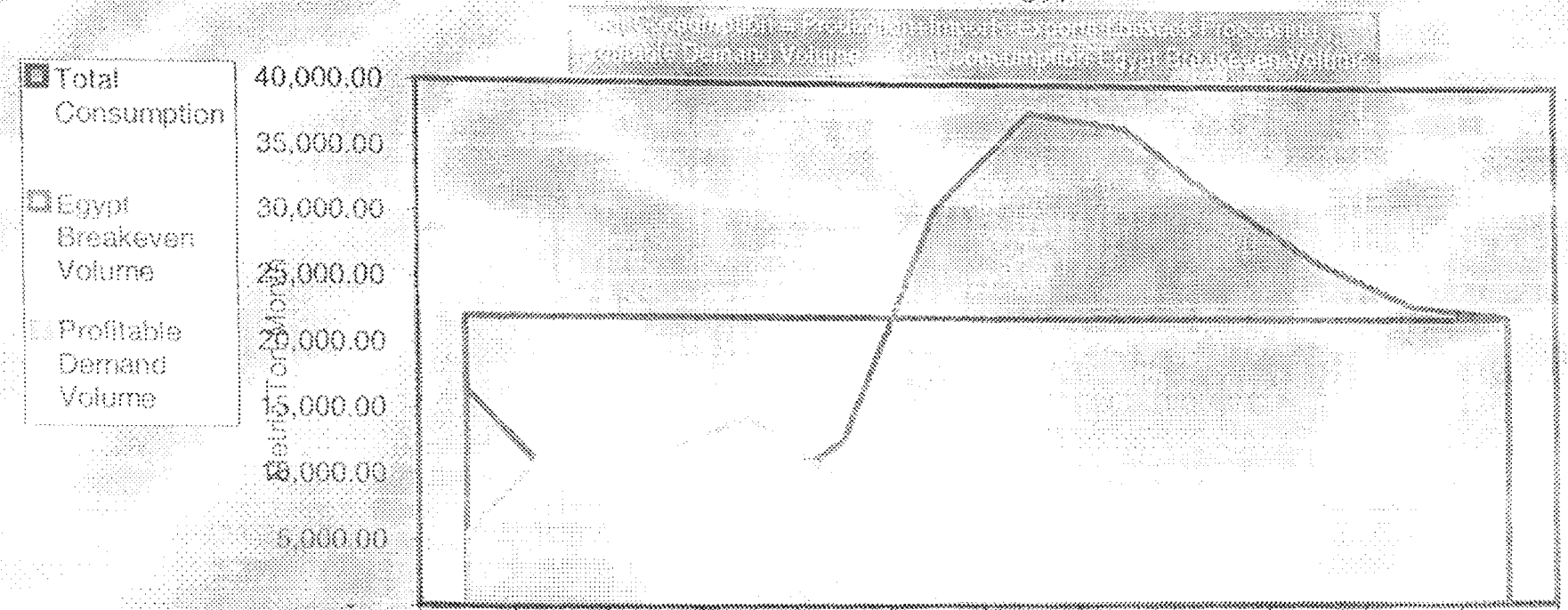



| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Consumption | 11,347. | 13,920. | 17,898. | 23,236. | 37,788. | 22,518. | 20,471. | 18,189. | 14,753. | 12,490. | 10,711. | 10,340. |
| Egypt Breakeven Volume | 17805.0 | 17805.0 | 17805.0 | 17805.0 | 17805.0 | 17805.0 | 17805.0 | 17805.0 | 17805.0 | 17805.0 | 17805.0 | 17805.0 |
| Profitable Demand Volume | 6457.69 | 3884.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7093.98 | 7464.98 |
| Monthly CIF US$/Kg | 0.69 | 0.49 | 0.24 | 0.29 | 0.36 | 0.38 | 0.41 | 0.35 | 0.28 | 0.22 | 0.52 | 0.61 |
| Egypt CIF US$/Kg | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 |

Month of 1995-1998 (4Yr Average)

# Germany Lettuce

## Profitable Demand Volumes for Egypt

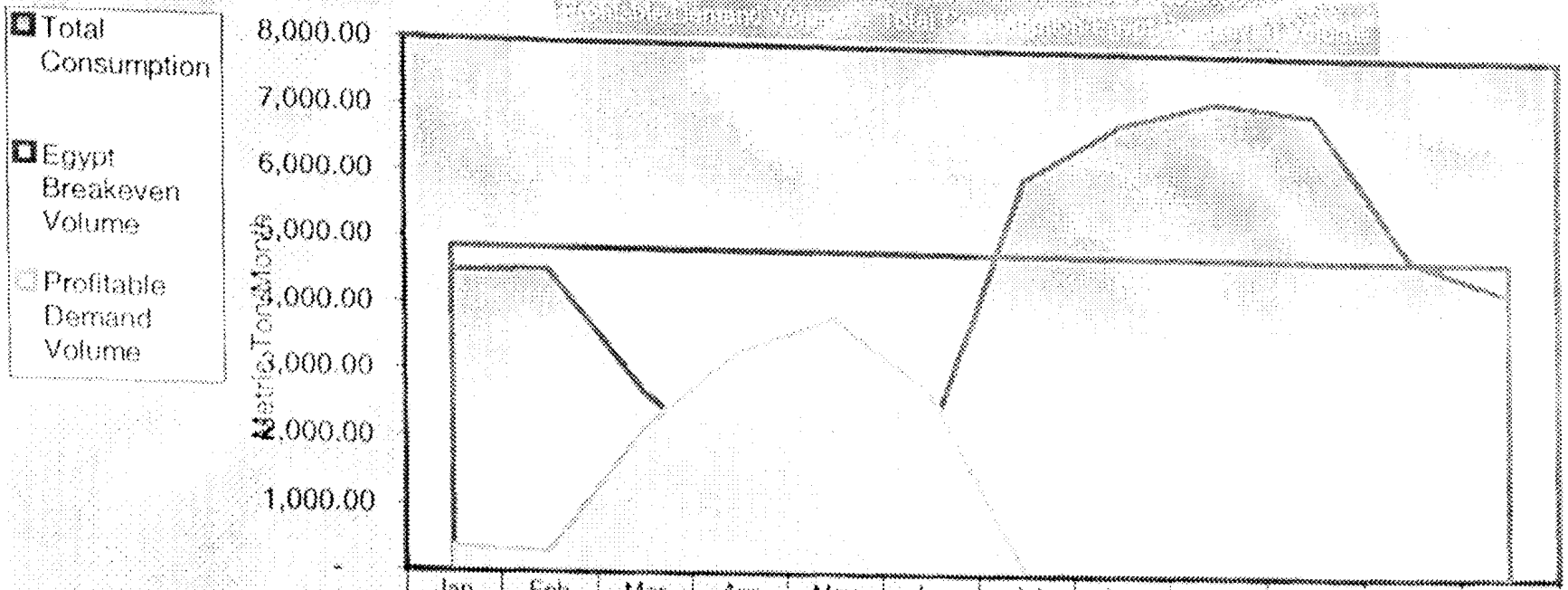



| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Consumption | 16,392. | 9,032.0 | 10,412. | 7,637.0 | 12,616. | 30,357. | 37,878. | 36,849. | 31,199. | 26,492. | 23,052. | 22,104. |
| Egypt Breakeven Volume | 22002.1 | 22002.1 | 22002.1 | 22002.1 | 22002.1 | 22002.1 | 22002.1 | 22002.1 | 22002.1 | 22002.1 | 22002.1 | 22002.1 |
| Profitable Demand Volume | 5609.46 | 12970.1 | 11590.1 | 14365.1 | 9385.63 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Monthly CIF US$/Kg | 0.95 | 1.28 | 1.08 | 0.99 | 0.84 | 0.88 | 0.81 | 0.81 | 0.91 | 0.91 | 1.07 | 1.14 |
| Egypt CIF US$/Kg | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 |

Month of 1995-1998 (4Yr Average)

# Germany Green Beans

## Profitable Demand Volumes for Egypt

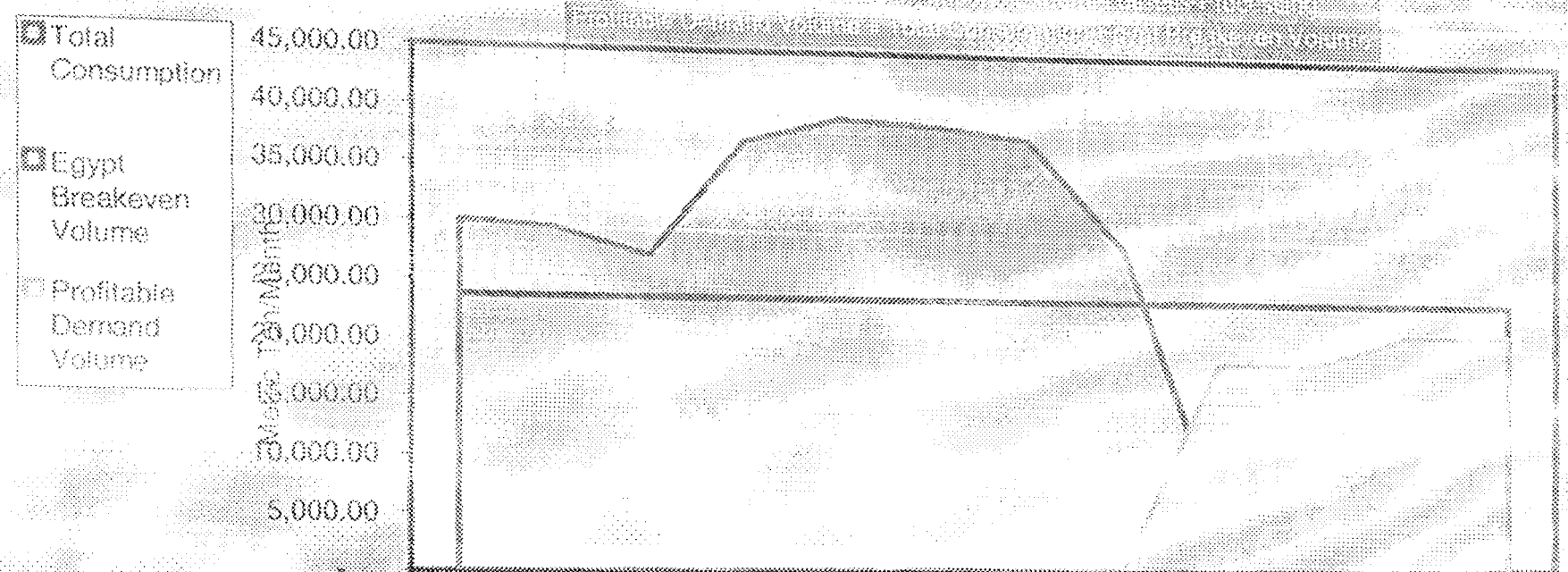



| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Consumption | 4,485.7 | 4,542.7 | 2,700.3 | 1,533.0 | 1,000.0 | 2,089.0 | 6,029.7 | 6,906.1 | 7,289.1 | 7,116.1 | 4,888.7 | 4,388.7 |
| Egypt Breakeven Volume | 4855.6 | 4855.6 | 4855.6 | 4855.6 | 4855.6 | 4855.6 | 4855.6 | 4855.6 | 4855.6 | 4855.6 | 4855.6 | 4855.6 |
| Profitable Demand Volume | 369.786 | 312.786 | 2155.17 | 3322.55 | 3855.55 | 2766.55 | 0 | 0 | 0 | 0 | 0 | 0 |
| Monthly CIF US$/Kg | 2.27 | 2.11 | 1.94 | 1.49 | 2.42 | 1.77 | 2.06 | 0.89 | 0.88 | 0.85 | 1.22 | 1.08 |
| Egypt CIF US$/Kg | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 |

Month of 1995-1998 (4Yr Average)

# Germany Dried Onions

## Profitable Demand Volumes for Egypt

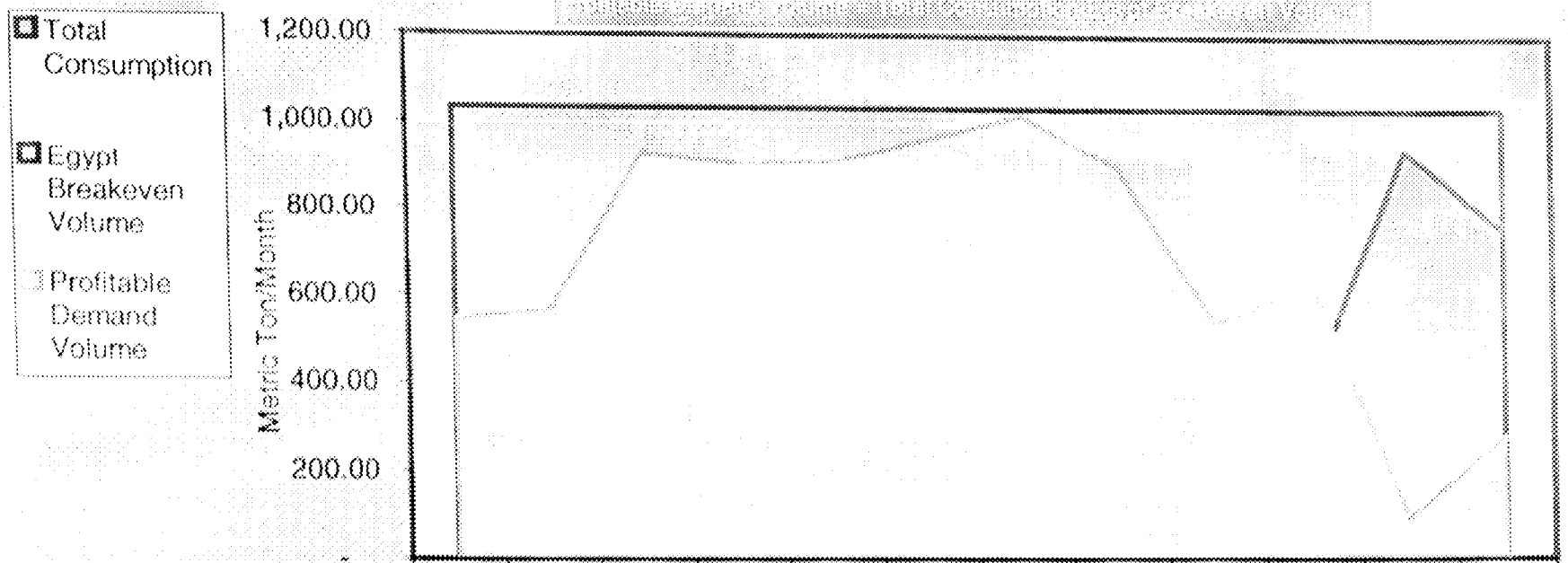



| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Consumption | 30,057. | 29,533. | 37,263. | 37,158. | 39,256. | 38,776. | 37,755. | 28,359. | 5,279.0 | 5,257.0 | 2,620.0 | 2,653.0 |
| Egypt Breakeven Volume | 23664.4 | 23664.4 | 23664.4 | 23664.4 | 23664.4 | 23664.4 | 23664.4 | 23664.4 | 23664.4 | 23664.4 | 23664.4 | 23664.4 |
| Profitable Demand Volume | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18385.4 | 18407.4 | 21044.4 | 21011.4 |
| Monthly CIF US$/Kg | 0.32 | 0.34 | 0.52 | 0.59 | 0.43 | 0.49 | 0.52 | 0.50 | 0.62 | 0.52 | 1.64 | 1.64 |
| Egypt CIF US$/Kg | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 |

Month of 1995-1998 (4Yr Average)

# Germany Dates, Fresh or Dried

## Profitable Demand Volumes for Egypt

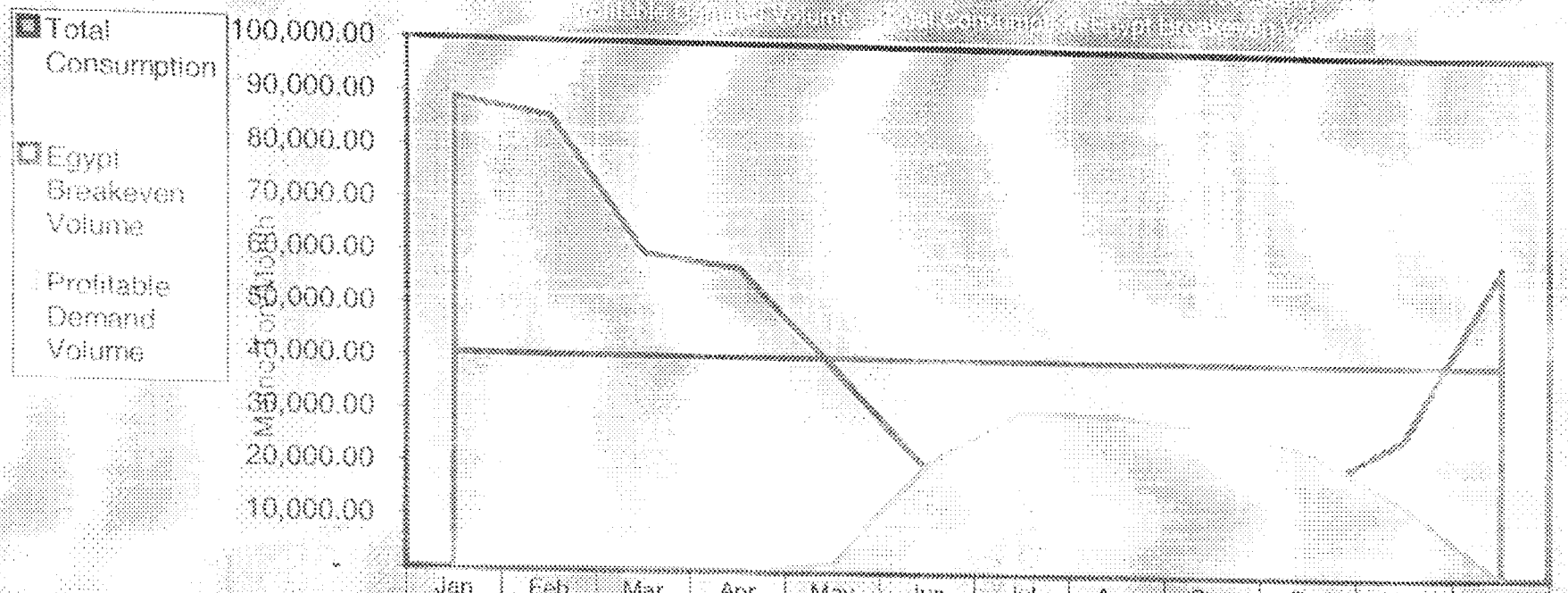



| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Consumption | 490.00 | 466.00 | 106.00 | 130.00 | 126.00 | 72.00 | 15.00 | 136.00 | 496.00 | 404.00 | 939.00 | 754.00 |
| Egypt Breakeven Volume | 1033.5 | 1033.5 | 1033.5 | 1033.5 | 1033.5 | 1033.5 | 1033.5 | 1033.5 | 1033.5 | 1033.5 | 1033.5 | 1033.5 |
| Profitable Demand Volume | 543.5 | 567.5 | 927.5 | 903.5 | 907.5 | 961.5 | 1018.5 | 897.5 | 537.5 | 629.5 | 94.5 | 279.5 |
| Monthly CIF US$/Kg | 1.32 | 1.25 | 1.75 | 1.73 | 1.16 | 1.85 | 1.04 | 1.52 | 1.84 | 2.29 | 2.27 | 2.03 |
| Egypt CIF US$/Kg | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 |

Month of 1995-1998 (4Yr Average)

# Germany Fresh Oranges

## Profitable Demand Volumes for Egypt

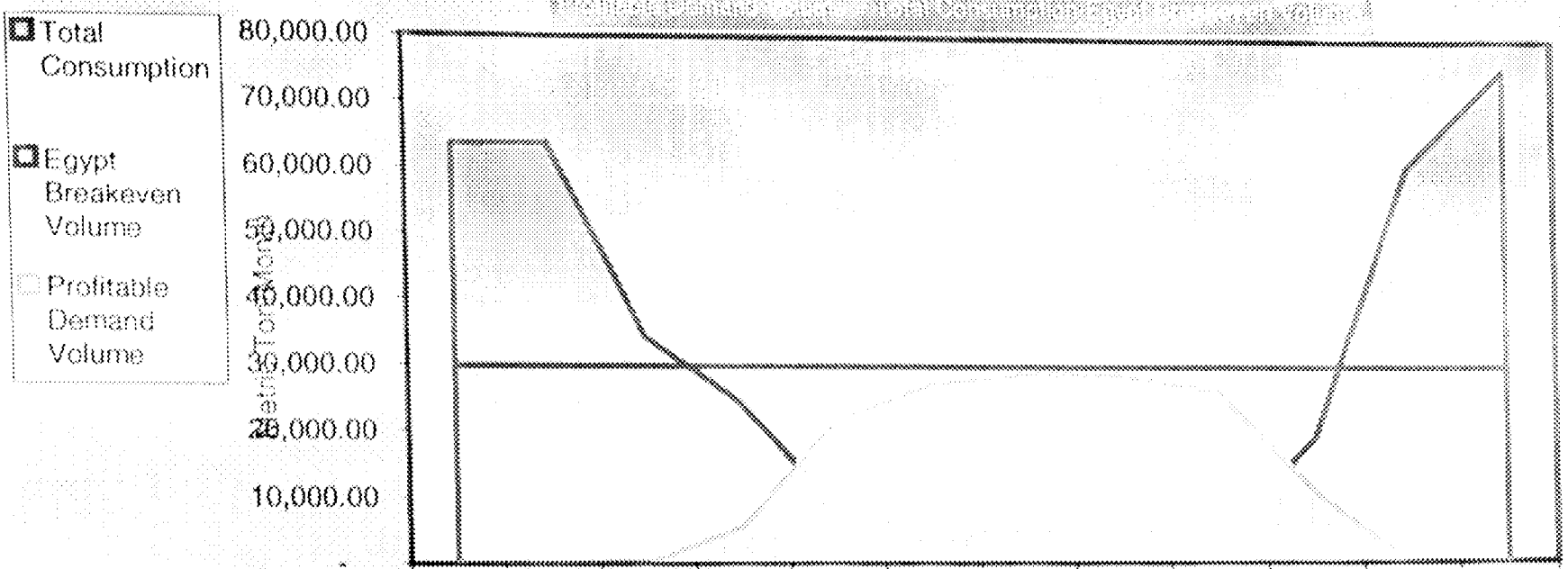



| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Consumption | 89,089 | 86,060 | 60,388 | 57,694 | 38,895 | 19,768 | 9,346.0 | 10,122 | 12,313 | 16,402 | 26,824 | 60,094 |
| Egypt Breakeven Volume | 40582.9 | 40582.9 | 40582.9 | 40582.9 | 40582.9 | 40582.9 | 40582.9 | 40582.9 | 40582.9 | 40582.9 | 40582.9 | 40582.9 |
| Profitable Demand Volume | 0 | 0 | 0 | 0 | 1687.92 | 20814.9 | 31236.9 | 30460.9 | 28269.9 | 24180.9 | 13758.9 | 0 |
| Monthly CIF US$/Kg | 0.45 | 0.46 | 0.48 | 0.47 | 0.49 | 0.48 | 0.47 | 0.51 | 0.58 | 0.50 | 0.47 | 0.43 |
| Egypt CIF US$/Kg | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 |

Month of 1995-1998 (4Yr Average)

# Germany Mandarins, Tangarins, Climin. etc

## Profitable Demand Volumes for Egypt

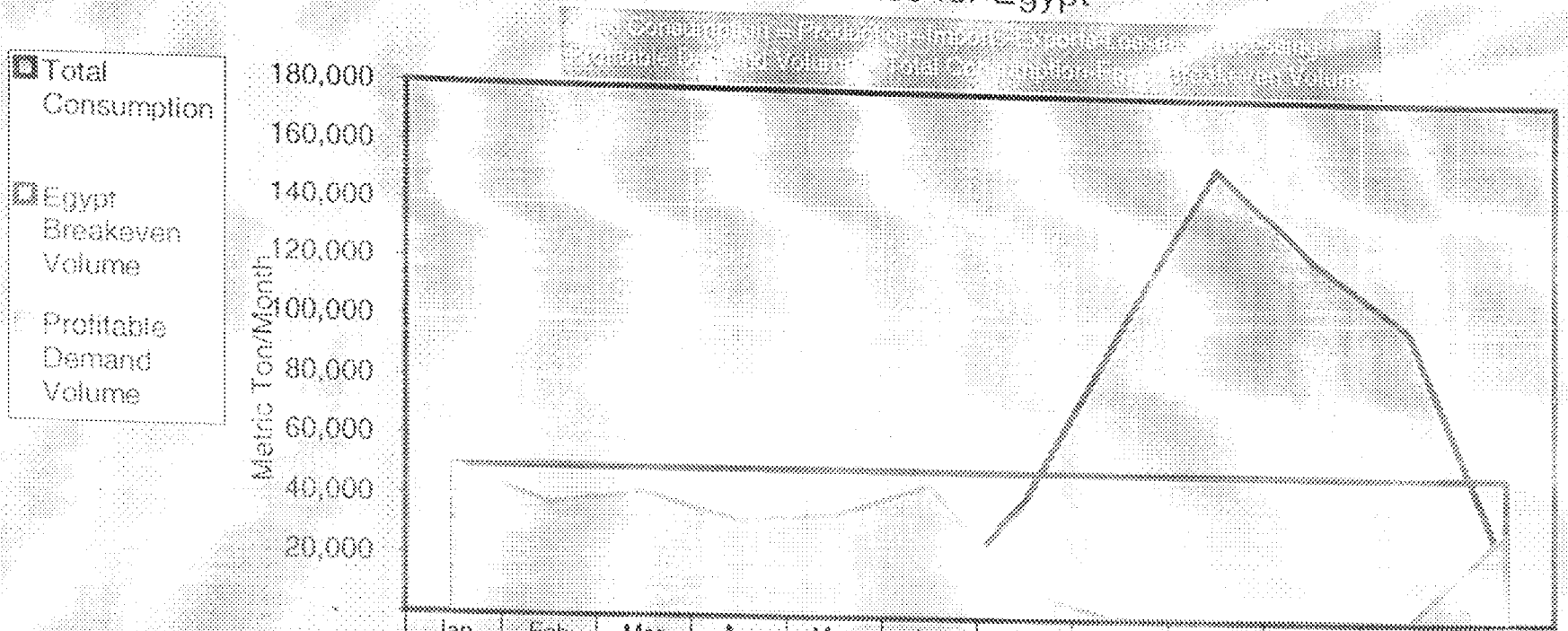



| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Consumption | 63,521. | 63,770. | 34,421. | 24,157. | 8,157.0 | 2,696.0 | 1,139.0 | 1,275.0 | 3,648.0 | 19,101. | 60,646. | 75,371. |
| Egypt Breakeven Volume | 29825.2 | 29825.2 | 29825.2 | 29825.2 | 29825.2 | 29825.2 | 29825.2 | 29825.2 | 29825.2 | 29825.2 | 29825.2 | 29825.2 |
| Profitable Demand Volume | 0 | 0 | 0 | 5668.17 | 21668.2 | 27129.2 | 28686.2 | 28550.2 | 26177.2 | 10724.2 | 0 | 0 |
| Monthly CIF US$/Kg | 0.71 | 0.72 | 0.76 | 0.68 | 0.73 | 0.68 | 0.68 | 0.90 | 0.74 | 0.57 | 0.57 | 0.55 |
| Egypt CIF US$/Kg | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 |

Month of 1995-1998 (4Yr Average)

# Germany Fresh Table Grape

## Profitable Demand Volumes for Egypt

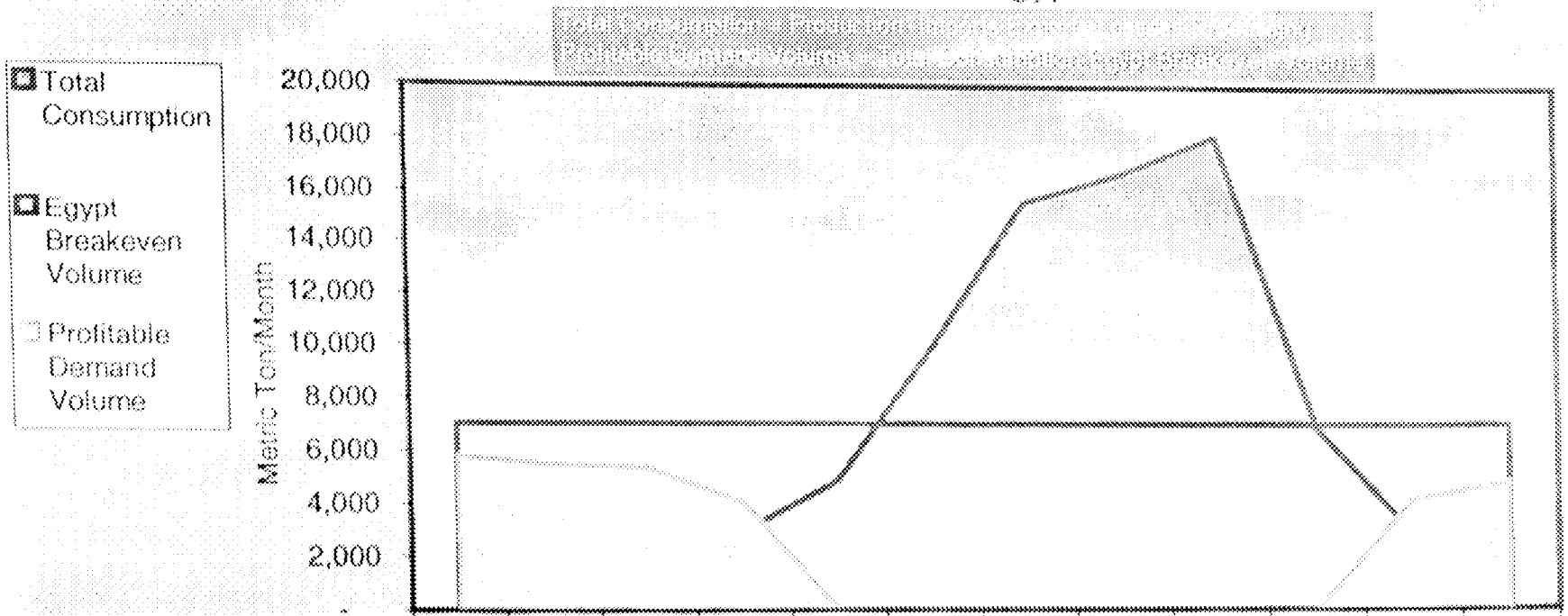



| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Consumption | 250 | 12,602 | 8,149 | 17,896 | 15,480 | 4,878 | 40,328 | 99,691 | 156,16 | 124.72 | 100,84 | 18,525. |
| Egypt Breakeven Volume | 49961.7 | 49961.7 | 49961.7 | 49961.7 | 49961.7 | 49961.7 | 49961.7 | 49961.7 | 49961.7 | 49961.7 | 49961.7 | 49961.7 |
| Profitable Demand Volume | 49711.7 | 37359.7 | 41812.7 | 32065.7 | 34481.7 | 45083.7 | 9634.12 | 0 | 0 | 0 | 0 | 31436.7 |
| Monthly CIF US$/Kg | 1.26 | 0.98 | 1.49 | 1.52 | 1.38 | 1.45 | 1.30 | 0.83 | 0.80 | 0.74 | 0.81 | 0.96 |
| Egypt CIF US$/Kg | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 |

Month of 1995-1996 (4Yr Average)

# Germany Galia and Other Melons

## Profitable Demand Volumes for Egypt

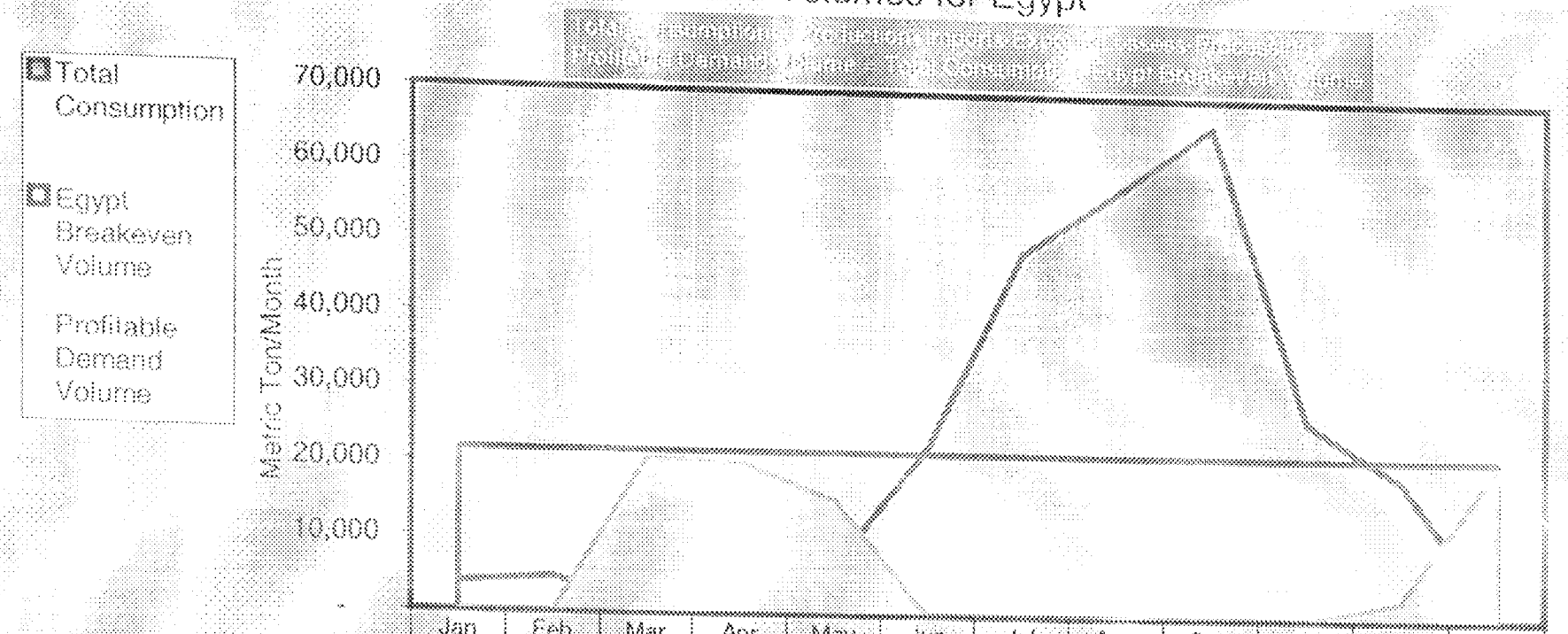



| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Consumption | 1,220 | 1,514 | 1,659 | 2,966 | 4,878 | 9,890 | 15,496 | 16,629 | 18,086 | 6,938 | 2,868 | 2184 |
| Egypt Breakeven Volume | 7027.3 | 7027.3 | 7027.3 | 7027.3 | 7027.3 | 7027.3 | 7027.3 | 7027.3 | 7027.3 | 7027.3 | 7027.3 | 7027.3 |
| Profitable Demand Volume | 5807.33 | 5513.33 | 5368.33 | 4061.33 | 0 | 0 | 0 | 0 | 0 | 0 | 4159.33 | 4843.33 |
| Monthly CIF US$/Kg | 1.06 | 0.86 | 0.88 | 0.87 | 0.78 | 0.68 | 0.54 | 0.52 | 0.54 | 0.56 | 1.02 | 1.49 |
| Egypt CIF US$/Kg | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 |

Month of 1995-1998 (4Yr Average)

# Germany Peaches and Nectarins

## Profitable Demand Volumes for Egypt

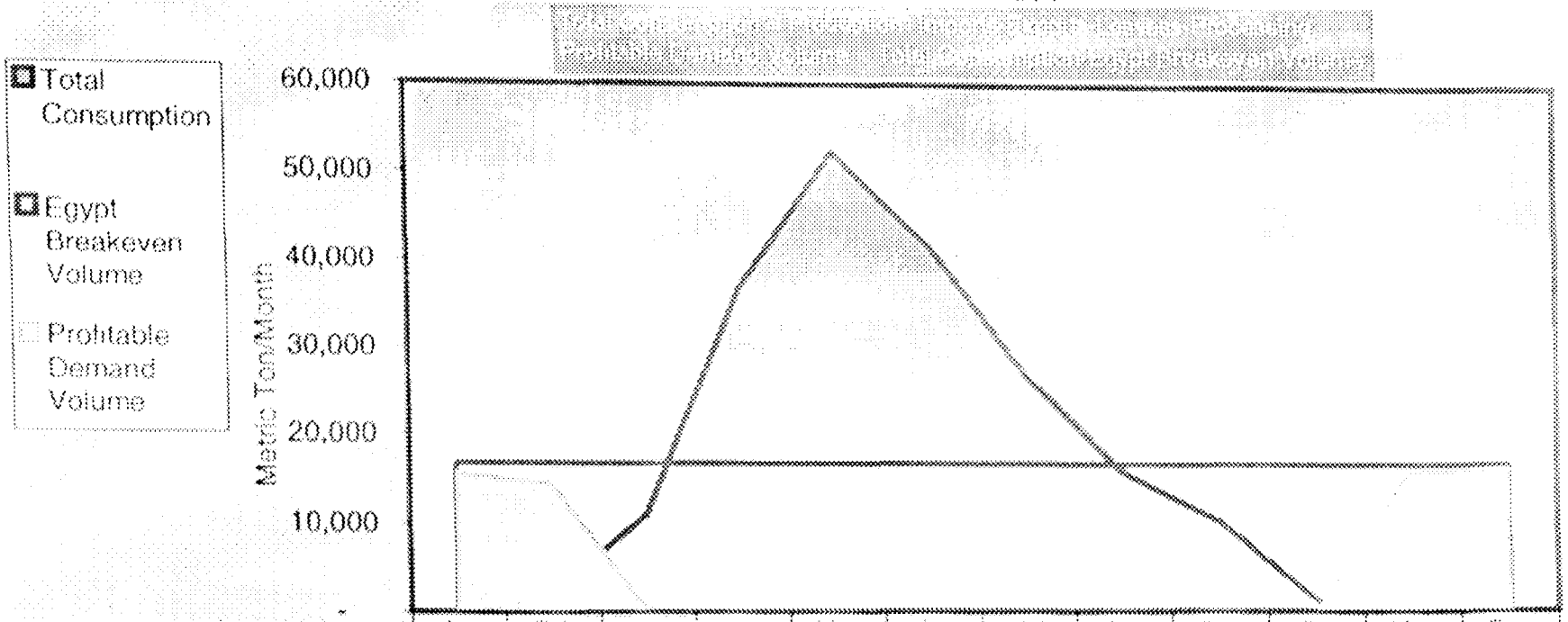



| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Consumption | 3,850 | 4,731 | 919 | 1,349 | 6,328 | 22,682 | 48,929 | 57,372 | 66,473 | 26,721 | 18,913 | 654.00 |
| Egypt Breakeven Volume | 21576.7 | 21576.7 | 21576.7 | 21576.7 | 21576.7 | 21576.7 | 21576.7 | 21576.7 | 21576.7 | 21576.7 | 21576.7 | 21576.7 |
| Profitable Demand Volume | 0 | 0 | 20657.7 | 20227.7 | 15248.7 | 0 | 0 | 0 | 0 | 0 | 2663.74 | 20922.7 |
| Monthly CIF US$/Kg | 0.63 | 0.48 | 1.04 | 3.02 | 1.86 | 0.92 | 0.49 | 0.51 | 0.18 | 0.31 | 1.22 | 1.83 |
| Egypt CIF US$/Kg | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.64 | 0.84 | 0.84 | 0.84 | 0.84 |

Month of 1995-1998 (4Yr Average)

# Germany Fresh Strawberry

## Profitable Demand Volumes for Egypt




| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Consumption | 1,170 | 2,213 | 11,001 | 36,846 | 52,309 | 41,693 | 26,924 | 15,054 | 10,469 | 1,302 | 658 | 410.00 |
| Egypt Breakeven Volume | 16745.6 | 16745.6 | 16745.6 | 16745.6 | 16745.6 | 16745.6 | 16745.6 | 16745.6 | 16745.6 | 16745.6 | 16745.6 | 16745.6 |
| Profitable Demand Volume | 15575.6 | 14532.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16087.6 | 16335.6 |
| Monthly CIF US$/Kg | 3.14 | 2.89 | 1.87 | 1.73 | 1.42 | 1.24 | 1.07 | 1.37 | 1.56 | 1.93 | 4.31 | 4.15 |
| Egypt CIF US$/Kg | 2.54 | 2.54 | 2.54 | 2.54 | 2.54 | 2.54 | 2.54 | 2.54 | 2.54 | 2.54 | 2.54 | 2.54 |

Month of 1995-1998 (4Yr Average)

PrimeCo

# Export Market Potential for Egyptian Food Products: Investment Rationale


Douglas Anderson, MS4
ALEB BDS MIS Director

Ali A. El-Saied, Ph.D
ALEB MIS Co-Director


Prospectus | August 2004

Prepared in cooperation with

Agriculture-Led Export Businesses Supporting Egypt's Processed Foods Export Industry

Project funded by USAID

Implemented by Abt associates, Inc

# Fresh Produce Markets & Potential 1



Prepared in cooperation with Agriculture-Led Export Businesses; USAID funded project; implemented by Abt Associates, Inc.

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**Prepared in cooperation with Agriculture-Led Export Businesses; USAID funded project; implemented by Abt Associates, Inc.**

## Market Opportunity

Egyptian market opportunity for exporting fresh produce to the European and GCC markets might be thought of as consisting of two separate types of possibilities. The first would be to capture some existing market from a competitive supplier during a part of the year when the market is saturated. The second possibility is that Egypt could supply additional fresh produce to the market in excess of current supply, during periods of the year when there is insufficient supply, i.e., when demand exceeds supply.

The concept of "profitable demand" is a very useful one in analysing the size and depth of the market window. To implement this type of demand analysis one must start with an estimate of the average Egyptian producer/ exporter "break-even" price in each market to be analysed. The Egyptian "break-even" wholesale price is the sum of the following costs:

**Important questions:**

**Q1.** Since there are significant export opportunities for Egyptian fresh produce, what prevents existing Egyptian growers from capturing such opportunities?

**Answer:** As shown clearly throughout the following analysis, huge export opportunities for Egyptian fresh produce are proven. However, certain impediments are hindering Egypt from benefiting from such opportunities. Among those are:

**Lack of proper infrastructure:** dealing with such highly perishable commodities, a broken cold chain is among those barriers. The recently operated fresh produce terminal in Cairo airport will contribute significantly in removing this barrier.

**Unfavorable trade policy environment:** GOE tends to improve export policy regime by means of: FOREX policy, new export law, export support fund, and through bilateral and multilateral trade agreements such as EU/Egypt Partnership Agreement, which will improve the competitive position for Egyptian products and enable Egyptian exporters to compete more effectively.

**Lack of finance and proper production and handling technologies:** still a major problem as production of fresh produce for export, although it is highly profitable, is highly capital intensive. Adapting proper technologies needs a lot of capital investment in the capacity building process.

- Farm production costs (labor, materials, annualized land, machinery, etc.)
- Packing costs (labor, packaging, annualized plant, equipment, etc.)
- Transport costs (farm to pack-house, pack-house to wholesale market in Europe)
- Tariffs, handling and marketing fees.

These costs are added together to form a total cost for supplying one unit of produce to the different European and GCC markets. The break-even price will differ slightly in the various markets because of the difference in tariff and transportation cost.

The Egyptian break-even price for selected fresh produce items was estimated based on field reviews. Detailed discussion of every stage of production, including fixed and variable inputs and average yield of one feddan (acre) are studied carefully. Different scales of production were also taken into account. The Egyptian break-even prices, compared to potential shadow market window competitors, were found to be a very competitive.

While quality is demanded of all competitors in European and GCC fresh produce markets, competition among quality suppliers is based on three main factors:

- Seasonal position
- Transport cost
- Wage rate and costs of other inputs

Egypt is well situated from the transport point of view. Its transport costs are lower than most of its major competitors. Egypt can reach the major cities of Europe by refrigerated ocean carrier (Intramodal system) within less than 4 – 7 days and close to 4 – 5 days tracking to the GCC markets. Since transport costs represent a significant percentage (up to 65%) of the delivered cost of fresh produce, Egypt has a significant comparative advantage over more distant producers such as the South Africa, Chile, Mexico, Brazil, Argentina, India, and Pakistan.

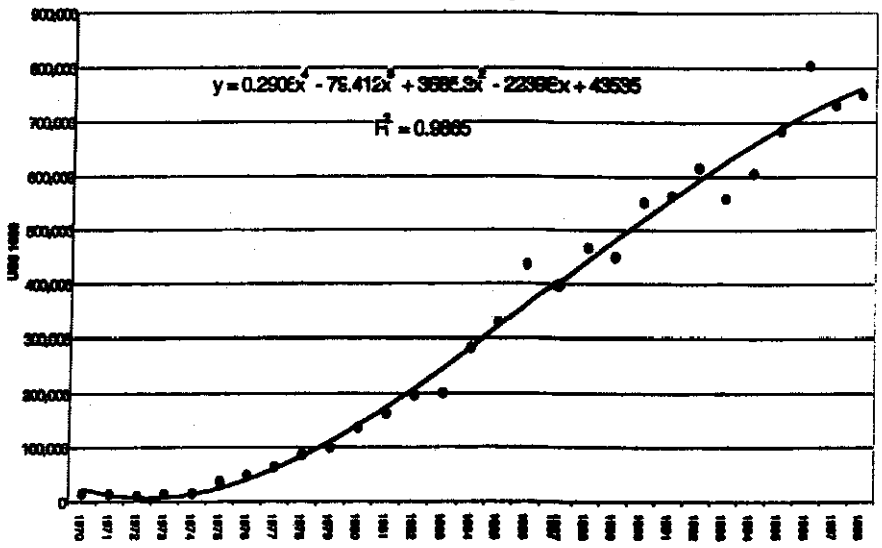
Wage rates in Egypt place it in a very competitive position in comparison to all of the top fresh produce exporters. The Egyptian competitive position may best be illustrated by examining that position against two different groups of seasonal competitors. The competitors in the first group are the "shadow" market window competitors. The second group of competitors is the "off-season" competitors. Spain, France, and Italy are by far the most important competitors during the on-season "shadow" periods just before the Egypt window opens in October – December, and just before it closes in March – April. The very high wage costs in these countries do have an impact on high delivered cost.

**Important questions:**

**Q2.** If Egypt successfully captures the fresh produce export opportunities proven in this analysis, what does the overall picture look like in terms of profitability?

**Answer:** The fresh produce business is a highly profitable business and gaining demand. The forces driving the industry from the demand side are: healthy life (anti-cholesterol) trend, year-round demand, and high Income from the demand side. From the supply side the driving forces are: off-season capabilities, improved post-harvest and transportation technologies and techniques, and limited local supply in the target export markets. Countries positioning themselves well in this regime showed huge benefits, such as Chile and South Africa.

**Figure 1 Chile total horticultural exports, 1970 - 2000**




Egypt enjoys market windows of the same depth and width as those open for Chile and South Africa with different timing. At the same time, Egypt enjoys advantages over other potential suppliers during Egyptian market windows as shown clearly in the analysis.

Egypt is fairly competitive, but this is only true if low cost refrigerated ocean containers are utilized, which requires very careful post-harvest cooling and field packing. Central and

South American countries represent a potential competitor, however freight costs and seasonal potentials make Egypt's position unique.

Morocco and Israel are roughly representative of Egypt's head-on-head seasonal competitors in the open field category and illustrates Egypt's local cost advantages. The Egyptian lower labor cost and production potentiality (land and water resources) gives it an excellent market opportunity. However, productivity needs to improve.

Egypt did not yet take the advantage of the off-season high and large, as well as increasing fresh produce markets in most West European and GCC markets. However, Mediterranean competitors extend their efforts in this direction, though Egypt has many advantages over them. Mediterranean strawberry exports to Europe increased rapidly during the last few years. Egypt lies in the most flexible possible climatic position able, with new technologies and varieties, to combine all of its competitors' seasonal strategies.

**Methodology**

Methodology of this market report follows a pattern of a "global" overview of the EU fresh fruit and vegetable market. The first section provides a market potential summary that provides an overview of EU production versus consumptive demand, including a brief statistical narrative on current suppliers and subsequent export opportunities. This is followed by a detailed commodity and market (country) specific analysis of selected commodities in selected markets with significant export potential.

This report is rich with graphs that validate market potential. The Annex explains the econometric modelling based on the "Profitable Demand" analysis methodology utilized to derive our findings.

The following section summarizes in an easy to read table the current and potential Egyptian export opportunities that we have determined based on the analyses that follow. We hope the Egyptian reader and/or potential investors take time to digest this market critique and implement our findings and recommendations to profitably realize the potential the EU fresh produce market represents for the Egyptian agricultural industry.



| Crops | Exports (MT) | | | | | Export Market Windows (MT) [1] | | | Major Competitors | Capability[2] | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Volume 1998 | Volume 1999 | Volume 2000 | Volume 2001 | Volume 2002 | Export Window 2002 | EU15 | GCC | | Q | F | S |
| Green Bean | 22,000 | 25,500 | 24,000 | 26,500 | 28,000 | 80,000 | Oct.-Apr. | | Kenya, Senegal, Burkina-Faso | | * | |
| Herbs | 21,000 | 20,000 | 21,000 | 21,000 | 22,000 | 130,000 | Year Round | | India, Argentina | * | * | * |
| Galia Melon | 100 | 150 | 200 | 350 | 550 | 200,000 | Oct.-Apr. | Oct.-May | Israel, Spain, Central America | * | * | |
| Artichoke | 1,800 | 2,000 | 2,100 | 2,000 | 2,300 | 30,000 | Nov.-Apr. | Lebanon (Nov.-Apr.) | France | | | * |
| Green Onions* | 10 | 15 | 70 | 85 | 80 | 20,000 | Year Round | | Israel, Morocco, EU | * | * | * |
| Fresh Onions | 150 | 200 | 250 | 300 | 320 | 30,000 | Nov.-Apr. | Nov.-Apr. | India, Pakistan, Morocco | * | * | * |
| Dry Onions | 18,000 | 20,000 | 21,000 | 20,000 | 22,000 | 40,000 | Year Round | Year Round | India, Pakistan, Morocco | * | * | * |
| Fresh Garlic | 8,000 | 7,500 | 6,000 | 6,500 | 8,000 | 45,000 | Year Round | Year Round | China, India, Argentina | * | * | * |
| Sweet potato | 40 | 30 | 25 | 30 | 32 | 22,000 | Year Round | Year Round | South Africa, Israel | * | * | * |
| Dates | 7,000 | 7,000 | 6,500 | 5,000 | 7,500 | 80,000 | Year Round | | Tunisia, Algeria, Morocco, Iran | * | * | * |
| Cut Flowers | 200 | 230 | 500 | 550 | 700 | 65,000 | Oct.-Jan | | Israel, Kenya, Thailand | | * | |
| Potato | 250,000 | 249,000 | 21,000 | 200,000 | 210,000 | 200,000 | Winter | | Cyprus, Morocco, Israel | * | * | * |
| Okra | 5 | 5 | 8 | 5 | 9 | 5,000 | Winter | Year Round | Israel, EU | * | * | * |
| Mango | 1,800 | 1,850 | 1,800 | 1,900 | 1,900 | 90,000 | Sep.-Dec. | Sep.-Dec. | Mexico, Brazil, Guatemala | | * | * |
| Grapes | 3,200 | 5,100 | 6,000 | 6,500 | 8,000 | 200,000 | Apr.-Jul. | Apr.-Jul. | Israel, Morocco, Italy, Spain, Chile, South Africa, India | * | * | * |

| Crops | Exports (MT) | | | | | Export Market Windows (MT) [1] | | | Major Competitors | Capability[2] | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Volume 1998 | Volume 1999 | Volume 2000 | Volume 2001 | Volume 2002 | Export Window 2002 | EU15 | GCC | | Q | F | S |
| Baby corn | 0 | 0 | 2 | 4 | 4 | 10,000 | Year Round | | Israel, EU | • | • | • |
| Lettuce | 0 | 0 | 3 | 2 | 6 | 5,000 | Year Round | | Israel, EU | • | • | • |
| Asparagus | 0 | 0 | 0 | 0.5 | 0 | 7,000 | Year Round | | Poland | • | • | • |
| Sugar Snaps | 0 | 0 | 0.5 | 0 | 0.5 | 3,000 | Year Round | | Poland | • | • | • |
| Snow Peas | 0 | 0 | 0 | 0.3 | 0.3 | 3,000 | Year Round | | Poland | • | • | • |
| Ground Nuts | 20,000 | 19,000 | 22,000 | 20,000 | 22,000 | 120,000 | Year Round | | USA, Argentina, India, EU | • | | • |
| Strawberry | 3,000 | 4,800 | 5,000 | 5,500 | 6,000 | 55,000 | Nov.-Apr. | Nov.-May | Israel, Morocco | • | | • |
| Molokhyia | 0 | 0 | 0 | 0.5 | 0.5 | | | | | | | |

* Export data collected from major producers and exporters such as El-Hoda Farms, Al-Franaa, Homain - Exports mainly to the UK market

** Seeds exports mainly to Japan

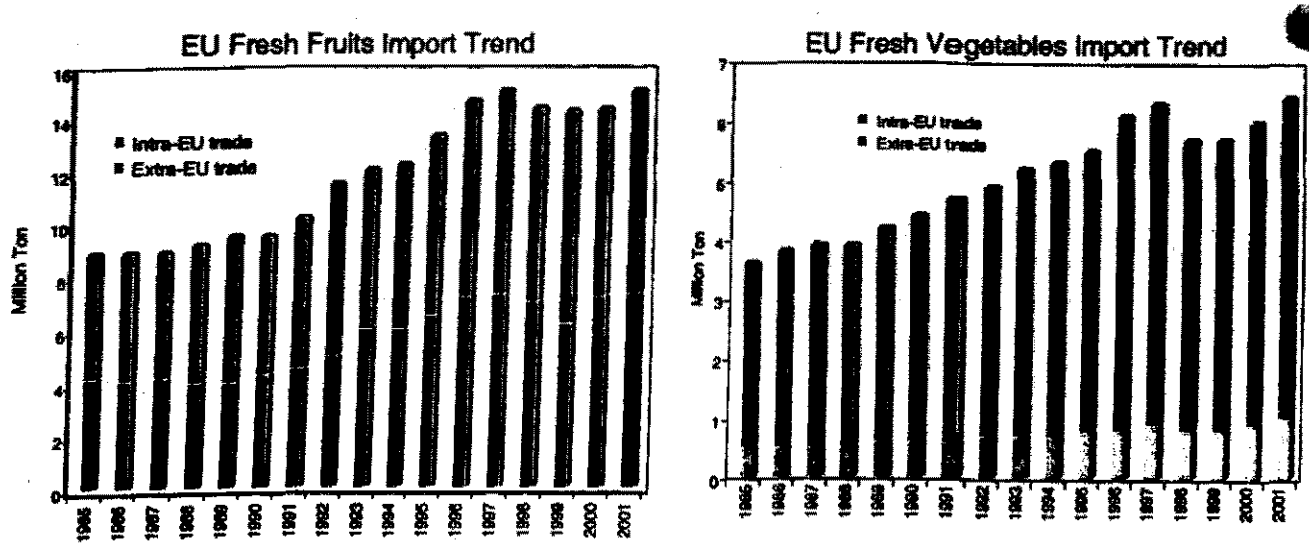
[1] Egypt Export Data collected and compiled from Agricultural Quarantine, Import data and PD estimated using EUROSTAT and Weekly EU market prices as presented by ITC.

## European Fresh Produce Market

## MARKET POTENTIAL SUMMARY

The fruit and vegetable assortment for the European consumer includes an enormous variety of products from all over the world, delivered on the basis of the supply calendars of the supplying countries and the seasonal supply of the European homegrown production. According *to available* data, total EU consumption of fresh fruit amounted to 25 million tonnes in 2002, while vegetable consumption (including potatoes) amounted to around 30 million tonnes. Italy, Germany and France, together accounting for around half of total consumption, largely dominate the EU market for fresh fruit and vegetables. The market for fresh fruit and vegetables showed rapid increase in the past few years.

**Figure 2 EU fresh fruits and vegetables import trends**




### Characteristics of the present-day European consumer

#### *Health food*

European consumers have a strongly increased interest in a healthy life and, consequently, in the consumption of health food. Healthy food refers to food products that are low in fat and have limited sugar and salt content.

#### *Organic food*

Since European consumers have recently experienced several food scares, many people are concerned about the safety of food, as well as the effects of intensive farming on the countryside and on the environment in general. These factors, combined with the increasing awareness of the importance of diet and nutrition, have intensified interest in organic foods.

***Food safety, quality and environment-consciousness***

Food production, especially primary growing, should be environmentally friendly (organic). Waste, including packaging waste, should be avoided or at least reduced.

As a result of several food scares (BSE / mad cow disease, dioxins) consumers increasingly pose questions on the production process and demand open, honest, and informative labelling. This has resulted in a discussion in the fruit and vegetable industry about "tracking and tracing". The industry is paying increased attention to chain management and labelling systems with which products can be traced back to the producer. The European Commission also recognises the importance of food safety and set up the European Food Safety Authority (EFSA) in January 2002.

***Convenience and exotics***

West European consumers have a growing need for convenience meals. This has resulted in an expanding demand for pre-packed products and consumer packs containing semi-prepared vegetables. The consumption of exotic fruits and off-season products is now well established in the EU. Some new and special varieties still enter the European market. Initial increases in sales of new tropical fruits and vegetables generally take place through ethnic minorities.

## PRODUCTION IN THE EU

Most countries in the EU have extensive domestic production of fruit and vegetables. However, the temperate climate of northern Europe limits the production of various fruit and vegetables. Production in greenhouses partly compensates for the restrictive climatic conditions, but, for bananas and a wide range of exotics, there exists a large and developing market that cannot, or only insufficiently, be supplied by domestic (European) production. EU production is substantial for some products like citrus fruit and apples. However, at the same time the production is season-bound, offering opportunities for suppliers from outside the EU to supply the European market in off-season periods, although improved storage and distribution has enabled producers to reduce the negative influence of the seasons.

Production is season-bound, offering opportunities for suppliers from outside the EU to supply the European market in off-season periods

The total EU production of fresh fruit amounted to almost 31.5 million tonnes in 2002. The leading producers of fruit are by far, Italy (10.6 million tonnes) and Spain (10.4 million tonnes). Total EU production of fresh vegetables amounted to around 52.5 million tonnes in 2002, representing an increase of 4 percent compared to 2001. Also in the case of fresh vegetables, Italy (15.5 million tonnes) and Spain (11.7 million tonnes) are the leading supplying countries.

### Imports

***Fruit***

In 2002, EU member countries, representing a value of US$ 12 billion of which extra-EU countries supplied 40 percent, imported almost 18.3 million tonnes of fresh fruit. Germany is

the major market for fresh fruit accounting for 24 percent of total imports (in value) by EU member countries in 2000, followed by the United Kingdom (17%) and France (14%).

The leading imported fresh fruit product is bananas, accounting for almost a quarter of total fruit imports by EU member countries. Other leading products are citrus fruit (21%), apples (10%) and grapes (10%). In 2002, the leading supplier of fresh fruit to the EU was Spain, supplying 21 percent of imports (in value) by EU member countries, followed by Italy (10%), The Netherlands (10%), and France (8%).

More than seventy countries from all continents are responsible for the immense product flow directed at the European countries. The share of developing countries in imports by EU member countries of fresh fruit amounted to 34 percent in 2002. Developing countries play a major role in the supply of tamarinds & lychees, papayas, dates, bananas, and pineapples to the EU, accounting for more than 60 percent of total imports by EU member countries in 2000. The leading developing countries exporting fresh fruit to the EU are South Africa and Latin-American countries like Costa Rica, Ecuador, Colombia, Chile, Argentina and Panama. Other important developing country suppliers are Côte d'Ivoire, Morocco and Turkey.

## Vegetables

Although smaller than fruit, the imports of fresh vegetables by EU member countries still amounted to almost US$ 6.6 billion or 8.1 million tonnes in 2002.

Germany was the leading fresh vegetable importing EU country, accounting for 33 percent of total imports by EU member countries (in terms of value) in 2000, followed by the United Kingdom (22%) and France (14%). Spain was the leading supplier of fresh vegetables to the EU by far, supplying 34 percent of imports (in value) by EU member countries in 2002.

The leading imported fresh vegetable product is tomato, accounting for more than a quarter of total vegetable imports by EU member countries. Other leading products are capsicum/pimienta (13%), lettuce/chicory (10%) and cucumbers (8%).

Whereas Latin-American countries dominate the extra-EU import of fruit, African countries are important extra-EU suppliers of vegetables in particular to France, United Kingdom and The Netherlands. Nevertheless, intra-EU trade dominates vegetable imports to a larger extent than fruit imports. Developing countries play a significant role in the supply of peas & beans and sweet corn, supplying respectively 59% and 50% of total imports (in value) by EU member countries.

## Exports

In 2002, total EU exports of fresh fruit amounted to US$ 8.8 billion, a strong decrease in terms of value since 1998. In terms of volume, exports increased by 2 percent, reaching more than 14 million tonnes in 2000. The major EU exporting countries, Spain, Italy, Belgium and France exported large quantities of fruit. The leading fresh fruit products exported by EU member countries are bananas, apples, mandarins, grapes and oranges.

Between 1998 and 2002, exports of fresh vegetables by EU member countries decreased by 13 percent in value and 5 percent in volume, amounting to US$ 6.6 billion (8.5 million tonnes) in 2002. Spain and The Netherlands are the leading exporters, together accounting for 70

percent of total EU exports in 2002. Contrary to the Spanish exports, which consist mainly of domestic produce, a large part of the Netherlands' exports consists of re-exports. Major exported fresh vegetable products by EU member countries are tomatoes and capsicum.

## Re-exports

Increasing internationalisation, which is also the case in the European Union, marks the fruit and vegetable trade. A total of US$ 18.6 billion of fruit and vegetables entered the EU in 2002, but not more than 20 percent of this value remained in the same country to which it was originally exported. The major share of it was transported to other destinations, partly as re-exports, partly as transit trade.

## Trade structure

A strong tendency towards concentration and consolidation can be noticed in the horticultural trade, both on the buyers' and suppliers' level. As a result, demand for consistent volumes and qualities of fresh produce increases, causing firms to introduce procurement methods that manage the supply chain more efficiently.

Importers, trade fairs and increasingly the Internet are valuable sources for finding trading partners in the EU.

## Opportunities for exporters

Leading fresh fruit products from developing countries are tamarinds, table grapes, strawberries, dates, guavas, mangoes and figs. However, in the trade of fresh vegetables, developing countries play an important role in supplying peas & beans, sweet maize and baby corn, and winter vegetables. Opportunities for developing country exporters in the EU fresh fruit and vegetable market could lie in the trade of exotics and off-season fresh fruit and vegetables. If trade in lesser-known exotic products is considered, marketing strategies should specifically take into account ethnic minorities familiar with these products. The organic food market is also particularly interesting for growers in developing countries, since much of their production is already organic or can easily be changed to organic. Moreover, although exporters to the EU are not obliged to have an HACCP (Hazard Analysis Critical Control Point) system and their system will not be subject to control by the food inspection service in the importing country, the adopting of an approved HACCP system, or working according to a similar principle of quality control, will be a very positive argument in the export business.

In the scope of the increasing environment-consciousness in the EU, a group of leading European food retailers launched the EurepGap Protocol in 1999. The objective of EurepGap (Euro-Retailer Produce Working Group for Good Agricultural Practice) is to raise standards for the production of fresh fruit and vegetables by promoting food safety, sustainable use of natural resources and more environmentally friendly production. Producers in developing countries experience difficulties in complying with the Eurep standards and some interested parties are calling for relaxation of the standards. For more information on the Eurep Group and EurepGap Protocol, please refer to www.eurep.org

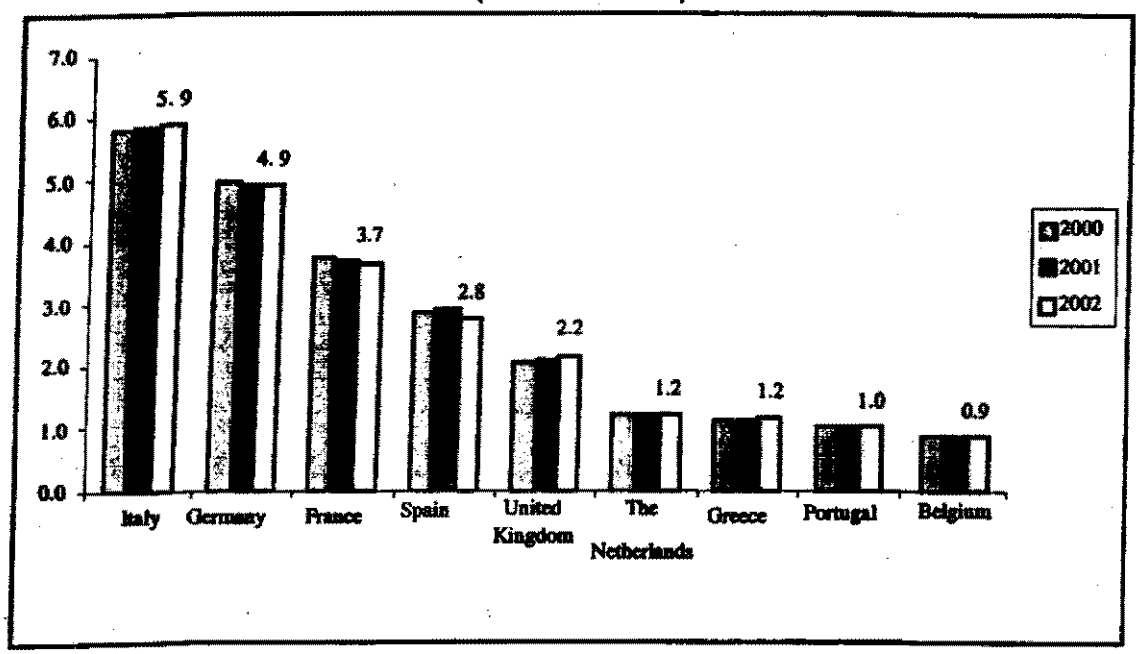
## Consumption

### Market size

#### *Fruit*

According to *Euromonitor*, total fruit sales in the EU amounted to around 25 million tonnes in 2002. More than 30 percent of the fruit sales consisted of citrus fruit, which was consumed relatively more in Mediterranean countries like France, Spain, Italy and Greece. The major EU fruit market is Italy with a consumption of 5.9 million tonnes in 2000, followed by Germany with 4.9 million tonnes, and, at a considerable distance, France, Spain, and the United Kingdom. Consumption of fruit over recent years has been quite stable.

**Figure 3 Volume sales of fruit in major EU markets, 2000-2002 (million tonnes)**



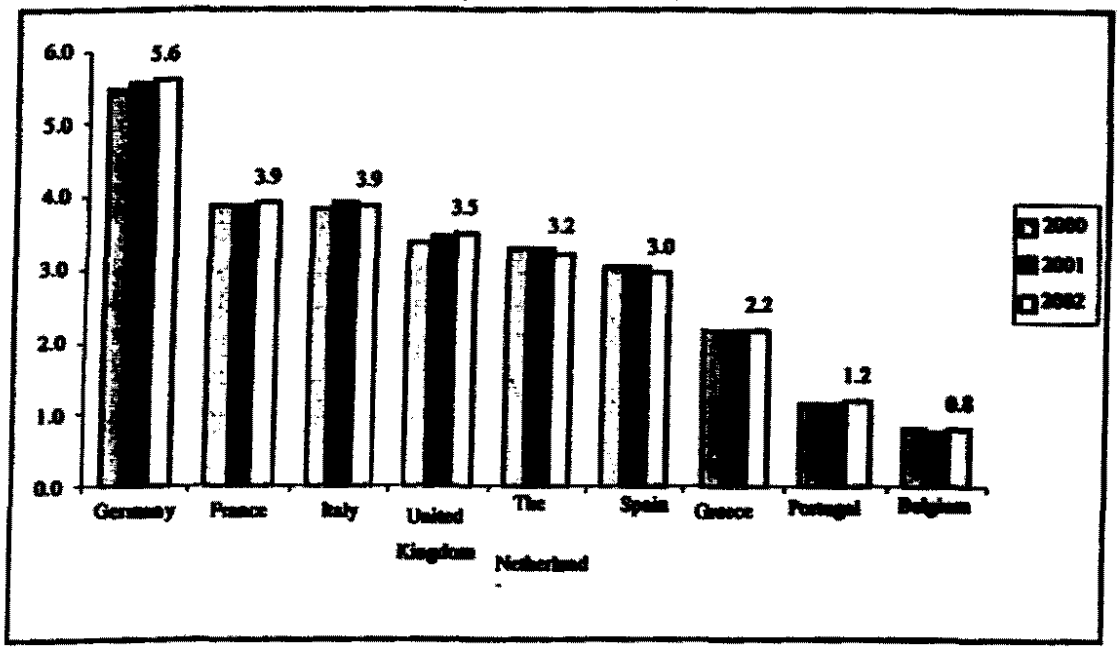

#### *Vegetables*

In 2002, total vegetable sales (including potatoes) in the EU amounted to 30 million tonnes, which was about the same volume as in the previous years. More than half of total vegetable consumption consisted of potatoes, while tomatoes accounted for around 10 percent of vegetable consumption. The major EU vegetable market is Germany with a consumption of 5.6 million tonnes in 2002, followed by France, Italy and the United Kingdom, with the UK being the biggest growth market (+3.4%).



Prepared in cooperation with Agriculture-Led Export Businesses; USAID funded project; Implemented by Abt Associates, Inc.

**Figure 4** **Volume sales of vegetables in major EU markets, 2000-2002 (millions tonnes)**




## GERMANY

According to the German organisation ZMP, per capita consumption of fresh fruit in Germany was estimated at 143.8 kg in 2001, representing an increase of 7 percent compared to the preceding year, and per capita consumption of fresh vegetables was estimated at 90.2 kg in 2000, which represents an increase of 2 percent since 1999.

### *Fruit*

Total fruit consumption in Germany was estimated at 11.9 million tonnes in 2001, representing an increase of 14 percent since 1998. This boost in fruit consumption is largely caused by a 25 percent increase in apple consumption, although pear, banana, orange and cherry consumption also made a significant contribution. Until 1999, bananas witnessed huge cuts in consumption, making them relatively less important, though bananas still remained the second most popular fruit product in Germany.

The leading fruit species consumed in Germany was apples, which accounted for 27 percent of total fruit consumption in 2001. Between 1999 and 2001, orange consumption increased by 11 percent, amounting to 523 thousand tonnes. The demand for other citrus fruit (grapefruit, lemons, clementines, etc.) fluctuated, with consumption increasing in 2000, but dropping in 2001. In 2001, total citrus fruit consumption amounted to over 1 million tonnes.

### *Vegetables*

In 2000, total vegetable consumption in Germany was estimated at 7.4 million tonnes, representing a modest increase of 3 percent since 1998. The major vegetable product consumed in Germany was tomatoes (1.44 million tonnes in 2000), and the various cabbage varieties (nearly 1 million tonnes in 2000). Other popular vegetables are carrots, onions and cucumbers. The demand for mushrooms and asparagus increased by 9% and 10%

respectively since 1998, amounting to 173 thousand tonnes and 115 thousand tonnes in 2000. The demand for peas and beans was estimated at 265 thousand tonnes in 2000.

**Table 2. Consumption of fresh fruits & vegetables in Germany, 1998-2001, tonnes (000)**

| | 1999 | 2000[1] | 2001[1] | | 1998 | 1999 | 2000[1] |
|---|---|---|---|---|---|---|---|
| | Fruits | | | | Vegetables | | |
| apples | 2,605 | 2,760 | 3,255 | tomatoes | 1,423 | 1,399 | 1,441 |
| bananas | 844 | 889 | 976 | cabbages | 980 | 928 | 991 |
| pears | 548 | 549 | 664 | carrots | 444 | 513 | 498 |
| oranges | 473 | 480 | 524 | cucumbers/gherkins | 513 | 512 | 492 |
| berries | 485 | 538 | 507 | onions | 447 | 521 | 490 |
| prunes | 410 | 460 | 480 | lettuce | 249 | 254 | 269 |
| clementines | 313 | 325 | 315 | mushrooms | 158 | 164 | 173 |
| grapes | 314 | 348 | 293 | beans | 174 | 165 | 168 |
| peaches | 261 | 328 | 290 | asparagus | 105 | 106 | 115 |
| cherries | 209 | 273 | 276 | peas | 93 | 88 | 97 |
| lemons | 126 | 132 | 127 | leek | 98 | 94 | 94 |
| grapefruit | 77 | 90 | 65 | spinach | 89 | 62 | 60 |
| apricots | 35 | 54 | 43 | celery | 53 | 60 | 56 |
| *other fruit* | *428* | *498* | *417* | *other vegetables* | *1,590* | *1,627* | *1,615* |
| *consumption of imports* | *3,287* | *3,330* | *3,629* | *cultivation for own consumption* | *787* | *796* | *854* |
| **total fruit** | **10,414** | **11,053** | **11,859** | **total vegetables** | **7,200** | **7,267** | **7,411** |

[1] provisional
Source: ZMP, 2001

## FRANCE

Total fresh fruit and vegetable household consumption in France amounted to 158.1 kg in 2000, which represented an increase of 2 percent compared to the preceding year. According to Interfel, the total number of French households amounted to around 23 million.

### *Fruit*

Between 1999 and 2000, average household consumption of fresh fruit increased by 4 percent, amounting to 88.8 kg in 2000. The most popular fresh fruit species were apples, oranges and bananas, together accounting for 42 percent of total fruit sales in 2000. Of these fruit species, only banana consumption remained stable, whereas the consumption of the other two increased. During the past few years, exotic fruit species like lychees and mangoes gained more popularity, although their sales still account for a small share of total fruit sales.



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***Vegetables***

In 2000, average household consumption of fresh vegetables in France amounted to almost 70 kg, which represented only a small increase since 1999. The most popular fresh vegetables were tomatoes accounting for a share of nearly 20 percent of total vegetable sales, followed by carrots (12%) and lettuce (10%).

**Table 3. Household consumption of fresh fruit and vegetables in France, 1999 – 2000**
(kg per year)

| | 1999 | 2000 | | 1999 | 2000 |
|---|---|---|---|---|---|
| total fruit | 85.6 | 88.8 | total vegetables | 69.0 | 69.3 |
| apples | 16.1 | 16.5 | tomatoes | 14.1 | 13.4 |
| oranges | 10.3 | 11.3 | carrots | 8.6 | 8.4 |
| bananas | 9.9 | 9.9 | lettuce | 6.9 | 6.7 |
| clementines | 6.6 | 6.9 | endive | 5.1 | 5.7 |
| melons | 6.3 | 6.7 | cabbages | 4.6 | 4.6 |
| peaches | 6.2 | 6.4 | courgettes | 3.7 | 4.1 |
| grapefruit | 4.3 | 5.6 | onions | 3.4 | 3.6 |
| grapes | 4.2 | 4.9 | leek | 3.2 | 3.5 |
| pears | 4.7 | 4.7 | cucumbers | 3.2 | 3.0 |
| strawberries | 2.3 | 2.3 | beans | 1.7 | 1.9 |
| avocados | 1.6 | 2.2 | radish | 1.4 | 1.4 |
| lemons, limes | 2.0 | 2.0 | peppers | 1.4 | 1.3 |
| kiwi fruits | 1.7 | 2.0 | artichokes | 1.2 | 1.1 |
| apricots | 2.4 | 2.0 | mushrooms | 1.1 | 1.1 |
| pineapples | 1.5 | 1.0 | eggplant | 0.9 | 1.0 |
| lychees | 0.2 | 0.2 | asparagus | 0.9 | 0.9 |
| mangoes | 0.2 | 0.2 | garlic | 0.6 | 0.6 |
| other fruit | 4.0 | 4.0 | others | 6.9 | 7.0 |

Source: Interfel, 'Bilan Fruits & Légumes 2000'

## THE NETHERLANDS

According to a survey published by the Commodity Board for Horticulture in 1999, one of the major trends in The Netherlands is the growing demand for convenient and timesaving ways of preparing meals. This trend applies in particular to vegetables and is expressed by the growing demand for pre-packed and semi-prepared vegetables. In 1999, an average Netherlands household purchased 101 kilograms of fresh fruit and 76 kilograms of fresh vegetables (Commodity Board). The total fresh fruit consumption amounted to about € 650 million, while the consumption of fresh vegetables was slightly more, amounting to € 875 million.

***Fruit***

Total purchases of fresh fruit in The Netherlands amounted to 685 thousand tonnes in 1999, which meant a decrease of 3 percent compared to 1996. As was also the case in 1996, most popular fruit species in The Netherlands were apples, oranges and bananas in 1999. They accounted for nearly two thirds of total fruit consumption. Other important fruit species

were mandarins and pears. The consumption of citrus fruit (oranges, mandarins, grapefruit and melons) decreased by 4 percent, while the consumption of exotics (mangoes, avocados and lychees) showed only a slight increase. In recent years, kiwi fruits have gained more popularity, climbing up to number 9 of the fruit top 10 in 1999. In this year, pre-packed fruit accounted for 37 percent of total fruit consumption, which means an increase of 5 percent compared to 1996. Pre-packed fruit is mostly purchased in supermarkets, whereas greengrocers and markets sell only small amounts of pre-packed fruit.

### *Vegetables*

In 1999, total consumption of fresh vegetables (excluding potatoes) in The Netherlands amounted to 513 thousand tonnes, which was about the same amount as in 1996. Domestically grown products like cauliflower, onions/shallots and tomatoes dominate the consumption of vegetables. In 1999, cucumbers gained popularity over carrots and climbed up to the fourth place. Together, the top 5 vegetables accounted for 42 percent of total vegetable purchases in 1999. In this year, pre-packed vegetables accounted for 45 percent of total vegetable sales, while in 1996 it took up only 37 percent.

**Table 4. Consumption of fresh fruit and vegetables in The Netherlands, 1999**

(1,000 tonnes)

| | 1996 | 1999 | | 1996 | 1999 |
|---|---|---|---|---|---|
| total fruit | 700.0[1] | 685.4 | total vegetables | 515[1] | 513.4 |
| *fruit top 10:* | | | *vegetables top 10:* | | |
| apples | 187.1 | 185.4 | cauliflower | 56.1 | 51.9 |
| oranges | 170.3 | 161.4 | onions/shallots | 43.1 | 44.7 |
| bananas | 102.0[1] | 104.0 | tomatoes | 36.7 | 40.5 |
| mandarins | 55.9 | 55.1 | cucumbers | 38.9 | 40.4 |
| pears | 43.2 | 38.4 | carrots | 41.7 | 37.2 |
| melons | 25.3 | 25.2 | lettuce | 25.2 | 25.1 |
| grapefruit | 21.2 | 21.2 | chicory | 32.4 | 24.0 |
| grapes | n.a. | 20.3 | green beans | 20.4 | 20.6 |
| kiwi fruits | 14.0[1] | 15.4 | leek | 21.1 | 20.3 |
| strawberries | 16.0 | 14.4 | endive | 21.7 | 19.6 |
| *selected others:* | | | *selected others:* | | |
| lemons | 4.9 | 5.2 | peppers | 12.6 | 13.2 |
| mangoes | 2.0 | 1.9 | asparagus | 3.0[1] | 2.9 |
| avocados | 0.7 | 0.7 | garlic | 1.1 | 1.2 |
| lychees | 0.3 | 0.5 | | | |

[1] estimation
n.a.: not available
Source: Commodity Board for Horticulture, 2001



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## UNITED KINGDOM

According to the annually published National Food Survey, the per capita consumption of fresh fruit and vegetables in the United Kingdom amounted to 76.8 kg in 2000, which meant a slight increase of 1 percent compared to the preceding year.

### *Fruit*

In 2000, the British consumed almost 38.7 kg of fresh fruit per person, which was 1.7 kilogram more than in 1999. The most popular fruit species was bananas, followed by apples. Together, fresh banana and apple consumption represented more than half of the total fruit consumption. Apples and citrus fruit other than oranges showed the largest increase in consumption in 2000.

### *Vegetables*

In 1999, per capita consumption of fresh vegetables in the United Kingdom amounted to 38.1 kg, representing a decrease of 0.6 kg since 1999. The most popular vegetables were carrots representing 15 percent of total vegetable consumption, followed by tomatoes and onions. The composition of the fresh vegetable consumption in 2000 remained more or less the same as in 1999.

**Table 5. Per capita consumption of fresh fruit in the United Kingdom, 1999-2000**
(kg per year)

| | 1999 | 2000 | | 1999 | 2000 |
|---|---|---|---|---|---|
| fresh vegetables | 38.7 | 38.1 | fresh fruit | 37.0 | 38.7 |
| *of which* | | | *of which* | | |
| carrots | 5.7 | 5.7 | bananas | 10.5 | 10.7 |
| tomatoes | 5.2 | 5.0 | apples | 8.8 | 9.4 |
| onions | 5.0 | 5.0 | other citrus fruit | 3.7 | 4.2 |
| cauliflower | 4.2 | 4.1 | stoned fruit | 3.1 | 3.0 |
| leafy salads | 3.0 | 3.1 | oranges | 2.6 | 2.8 |
| cabbages | 2.7 | 2.5 | pears | 2.2 | 2.4 |
| mushrooms | 1.8 | 1.9 | grapes | 2.3 | 2.2 |
| cucumbers | 1.9 | 1.9 | soft fruit other than grapes | 1.0 | 1.1 |
| turnips | 1.3 | 1.4 | rhubarb | 0.1 | 0.1 |
| beans | 1.2 | 1.1 | other fresh fruit | 2.7 | 2.8 |
| brussels sprouts | 0.9 | 0.8 | | | |
| peas | 0.3 | 0.3 | | | |
| other fresh vegetables | 5.5 | 5.3 | | | |

Source: National Food Survey 1999 and 2000



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## ITALY

Total fresh fruit and vegetable (excluding potatoes) consumption in Italy amounted to nearly 9 million tonnes in 2000, which represented a per capita consumption of 156 kg.

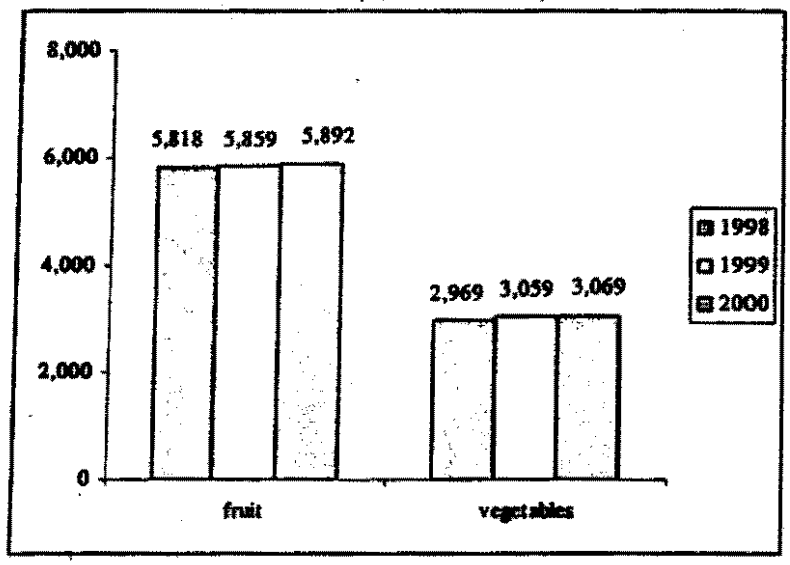
### *Fruit*

Per capita consumption of fresh fruit in Italy amounted to 102.2 kg in 2000, making it one of the highest fruit consumption levels in Europe. Citrus fruit sales accounted for about one quarter of total fruit sales.

### *Vegetables*

In 1999, total Italian consumption of fresh vegetables amounted to over 3 million tonnes. Fresh tomatoes make up around 15 percent of total vegetable sales, which represents a per capita consumption of tomatoes of 8 kg.

**Figure 5 Volume sales of fresh fruit and vegetables in Italy, 1998-2000 (1,000 tonnes)**




Source: Euromonitor 'Consumer Europe', 2001/2002

### Market segmentation

The market can be divided into segments following the quality classifications (Class Extra, I, II and III).

Another segmentation is possible with the help of the product classification. This classification reveals the following market segments:

- Domestically produced fruit and vegetables (temperate fruit and vegetable products)
- Well known products not, or only sporadically, produced in northern Europe
- Exotics (tropical/subtropical products)
- Off-season products

The market for fruit and vegetables can also be segmented according to whether the products are grown by organic farming or by conventional farming. This is particularly important since the demand for organic food is increasing in the EU member countries and these can offer interesting market opportunities for developing countries exporters. Organic products still account for a small share of the total food consumption, although most markets for organic fruit and vegetables experienced strong growth rates during the last years of the 1990s. Particularly high growth rates have recently been observed in the United Kingdom and Italy. In the period 1998-2000, organic fruit and vegetable retail sales in Italy showed annual growth rates up to 85 percent.

Because of its nature, organic production is highly suitable for small and medium-sized farmers working in areas that may not be suitable for large-scale food production. For more information on organic production and its certification, please contact SKAL, Ecocert, Soil Association or other EU inspection organisations. Please refer to Appendix 9 for contact details of these organisations.

**Consumption patterns and trends**

The population in Western Europe is still growing and will continue to grow until about 20 years from now. It is estimated that thereafter, Western Europe will start to show a declining population size. However, the composition of the population is changing now. It shows a rapidly growing number of elderly people combined with a decreasing number of young people. We also see a family 'dilution'; family households are getting smaller because people are having fewer children. Moreover, the number of single households in Western Europe is substantial and still increasing, making these people a highly significant consumer group for food suppliers.

Prosperity in the EU has increased over years, and eating behavior is related to income and life style. Despite this increase in prosperity, the food market in the EU is highly competitive, since consumers are not going to eat more, but will only, at the very most, switch to other products.

A number of trends affecting European consumer demand for fresh fruit and vegetables can be distinguished in the past few years. These include:

***Health food***

European consumers have a strongly increased interest in a healthy life and, consequently, in the consumption of health food. Health food refers to food products which are low in fat and have limited sugar and salt content; this includes functional foods, which have specific health-promoting properties and food products with added vitamins and minerals or bacteria which support the intestinal function (see CBI Market Survey 'Health Foods'). Fresh fruits and vegetables are generally associated with health foods. This is because fruit and vegetables contain vitamins and natural antioxidants, which are supposed to have properties preventive to heart diseases and cancer.

***Organic food***

Since European consumers have recently experienced several food scares, many people are concerned about the safety of food, as well as the effects of intensive farming on the countryside and on the environment in general. These factors, combined with the increasing awareness of the importance of diet and nutrition, have intensified interest in organic foods,

which are grown according to principles laid down in Directive EC 2092/91 (see Section 1.3 of the EU Strategic Marketing Guide 'Fresh Fruit and Vegetables'). The demand for organic food is booming in several EU member countries and this can offer interesting market opportunities for developing countries' exporters. Organic products still account for a small share of the EU's total food consumption, although the market for organic products is experiencing strong growth rates. France, Denmark and the United Kingdom are the major growth markets, with annual growth rates of over 20 percent.

***Food safety, quality and environmental consciousness***

Food production, especially primary growing, should be environmentally friendly (organic, *see above*, good land stewardship, etc.). Waste, including packaging waste, should be avoided or at least reduced. In the scope of the increasing environmental consciousness in the EU, a group of leading European food retailers launched the EurepGap Protocol in 1999. The objective of EurepGap (Euro-Retailer Produce Working Group for Good Agricultural Practice) is to raise standards for the production of fresh fruit and vegetables by promoting food safety, sustainable use of natural resources and more environmentally friendly production. Producers in developing countries experience difficulties in complying with the EurepGap standards and some interest groups are calling for relaxation of the standards. For more information on the Eurep Group and EurepGap Protocol, please refer to www.eurep.org.

As a result of several food scares (e.g., BSE/mad cow disease and dioxins) consumers increasingly pose questions on the production process and demand open, honest, and informative labelling. This has resulted in a discussion in the fruit and vegetable industry about "tracking and tracing". With good chain management and control within the chain, distributors are able to supervise all kinds of aspects of fresh fruit and vegetables such as plant material, growth, harvest, storage, distribution and processing. As mentioned in the box below, the consumer demands open, honest, and informative labelling. The fruit and vegetable industry is increasingly paying attention to chain management and labeling systems with which products can be traced back to the producer.

Safe Quality Food (SQF), which was originally developed in Australia, has recently been introduced in the EU. SQF aims at chain certification and combines quality concerns, HACCP and Tracking & Tracing in its certification requirements.

The European Commission also recognises the importance of food safety and set up the European Food Safety Authority (EFSA) in January 2002.

***Convenience***

European people (including women) are working more and more and have busy social lives. Moreover, the number of single households is increasing. Less time is left for the preparation of a full meal and, as a result, demand for products requiring extensive preparation has declined, while the opportunities for easy to prepare, semi-prepared, catered and processed products are increasing. The high cost of labor in Europe constantly encourages the shift towards adding value in the country of production. In the fresh fruit and vegetables sector, this has led to pre-packed products and consumer packs containing semi-prepared vegetables such as sliced runner beans, topped and tailed 'mangetout' peas and mixed packs of fruit and vegetables for stir-fry meals.

***Exotics***

A remarkable increase can be seen in the consumption of exotic fruits and off-season products. Until the 1970s, there was hardly any consumption of exotics, though small quantities were imported to meet the demand of ethnic minority groups. The increase in ethnic minorities living in the EU is considered to be responsible for the initial increases in sales of all kinds of tropical fruits. Once the products were on the shelves, other groups were inclined to buy them. Consumption of a wide scale of varieties of exotics like mangoes, papayas, passion fruit and avocados has increased slowly but steadily over the last decades. In their search for products with more added value, major importers in The Netherlands are now promoting lesser-known exotics like kumquats, rambutan and mangosteen. Complying with the demand for convenience, they provide the exotics in easy recognisable packages, containing small amounts and with practical product information. This makes it easier for consumers to become familiar with these relatively new and unknown products. Supermarkets are increasingly interested in selling exotics in such standardized packages.

**Table 6. Key Consumption Trends to 2010**

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

Source: Food Marketing, October 1999

**Production**

Most countries in the EU have extensive domestic production of fruit and vegetables. However, the temperate climate of northern Europe limits the production of various fruits and vegetables. Production in greenhouses partly compensates for the restrictive climatic conditions, but, for bananas and a wide range of exotics, there exists a large and developing market that cannot, or only insufficiently, be supplied by domestic (European) production. There is a large production of citrus fruit and apples in the EU but at the same time the production is season-bound, offering opportunities for suppliers from outside the EU to supply the European market in off-season periods. However, improved storage and distribution has enabled producers to reduce the negative influence of the seasons. A decreasing number of fruit and vegetables growers can be noticed in Northern European countries. This development is partly caused by the trend towards consolidation at buyers' level, and partly by the fact that more and more suppliers find it hard to conform to the European regulations for agricultural production. As a consequence, growers have to change their production to large-scale production or consolidate in order to stay in the market.

Larger buyers are the power behind consolidation at the supplier level, forcing shippers to attempt to match the scale of their customers in order to serve them efficiently. These large-scale suppliers have sufficient financial resources and backing, and can bear the costs and risks associated with producing crops in several regions or countries over extended periods.

## Fruit

In 2001, the total production of fresh fruit in the EU was estimated at 31.5 million tonnes, a decrease of 6 percent since 1999. Remarkable is the (and in the cases of The Netherlands and Belgium, even very substantial) decrease in production in the EU member countries between 1999 and 2001, except for Finland and Luxembourg. In 2000, Italy and Spain were the leading EU producers, together accounting for two thirds of total EU fruit production. Other large producers of fresh fruit in the European Union are France, Greece and Germany.

In 2001, the harvest of apples decreased to 7.5 million tonnes, although it was still the main fruit product grown in the EU. With 2.1 million tonnes in 2001, the production of pears is also considerable. The production of peaches in the EU amounted to 2.9 million tonnes in 2001, representing a decrease of 7 percent compared to 1999.

It is estimated that in 2001 the production of citrus fruit within the EU amounted to 10.3 million tonnes. The two leading citrus fruit producing countries in the European Union are Spain and Italy, together accounting for almost two thirds of total citrus fruit production. Except for lemons, which increased by 17 percent between 1999 and 2001, the EU production of the various citrus fruits decreased moderately (mandarins and grapefruit) to strongly (oranges) between 1999 and 2001. In 2001, the estimated harvest of oranges within the EU amounted to 6.1 million tonnes, which makes it one of the major fruit species grown in the EU. In that same year, EU growers produced 2.5 million tonnes of small citrus fruits (mandarins, celmentines and satsumas), and 1.7 million tonnes of lemons. The importance of grapefruit is relatively insignificant, with estimated production amounting to only 46 thousand tonnes in 2001.

Between 1995 and 2000, the kiwi fruit production in the EU was characterised by fluctuations varying from 315 to over 480 thousand tonnes. Kiwi fruit production in 2001 was estimated at 400 thousand tonnes, representing a considerable decrease compared to the record production level in the previous year.

**Table 7. Fruit production in the EU, 1999-2001 (1,000 tonnes)**

| Country | 1999 | 2000 | 2001[1] | | 1999 | 2000 | 2001[1] |
|---|---|---|---|---|---|---|---|
| Italy | 11,068 | 10,888 | 10,608 | EU 15 | 33,490 | 32,700 | 31,500 |
| Spain | 10,686 | 10,193 | 10,428 | | | | |
| France | 3,790 | 3,791 | 3,427 | *of which* | | | |
| Greece | 3,399 | 3,265 | 3,229 | apples | 8,475 | 8,295 | 7,543 |
| Germany | 1,330 | 1,443 | 1,173 | oranges | 6,145 | 5,841 | 6,055 |
| Portugal | 976 | 936 | 921 | peaches | 3,175 | 3,097 | 2,944 |
| The Netherlands | 772 | 757 | 605 | small citrus fruits[2] | 2,854 | 2,563 | 2,449 |
| Belgium | 760 | 741 | 434 | pears | 2,331 | 2,381 | 2,146 |
| United Kingdom | 359 | 298 | 338 | lemons | 1,457 | 1,596 | 1,699 |
| Austria | 226 | 233 | 203 | nectarines | 1,186 | 1,197 | 1,170 |
| Denmark | 49 | 50 | 46 | strawberries | 988 | 933 | 853 |
| Sweden | 34 | 40 | 33 | prunes | 630 | 650 | 700 |
| Finland | 19 | 22 | 21 | apricots | 631 | 560 | 586 |
| Ireland | 18 | 18 | 17 | kiwi fruits | 437 | 483 | 400 |
| Luxembourg | 5 | 6 | 5 | cherries | 450 | 497 | 388 |

[1] estimated
[2] these include mandarins, clementines and satsumas
Source: ZMP, 2001



Prepared in cooperation with Agriculture-Led Export Businesses; USAID funded project; implemented by Abt Associates, Inc.

According to FAO data, there is a small banana production in the EU, amounting to about 440 thousand tonnes in 2001, of which Spain accounted for almost 90 percent.

**Vegetables**

Total EU production of fresh vegetables was estimated at 52.5 million tonnes in 2000, representing an increase of 4 percent compared to 1998. Besides the EU production of fresh fruit, Italy and Spain also dominate the EU production of fresh vegetables, together accounting for over half of total EU production. In 2000, the total Italian production of vegetables amounted to 15.5 million tonnes, which meant an increase of 6 percent compared to 1997. Spain is the second largest producing country, accounting for a production of 11.7 million tonnes in 2000.

Production figures for selected fresh vegetables species grown in the EU are listed in Table 4.2. There is a remarkable increase in the production of the main products between 1998 and 2000, except for cauliflower, combined with a more or less stable production of the less important products like artichokes, garlic and asparagus. Tomatoes are by far the leading product group produced in the EU, which makes this product not very interesting for exporters from developing countries. Leading tomato producers in the EU are Italy and Spain, together accounting for over two thirds of total EU production. Spain and The Netherlands are the leading EU producers of onions, while France and the United Kingdom produce most of the carrot supplies.

**Table 8. Vegetable production in the EU, 1998-2000 (1,000 tonnes)**

| Country | 1998 | 1999 | 2000[1] | | 1998 | 1999 | 2000[1] |
|---|---|---|---|---|---|---|---|
| Italy | 14,692 | 15,183 | 15,520 | EU 15 | 50,708 | 53,048 | 52,536 |
| Spain | 11,907 | 12,144 | 11,685 | | | | |
| France | 6,253 | 6,378 | 6,297 | *of which* | | | |
| Greece | 4,111 | 3,979 | 4,030 | tomatoes | 14,620 | 16,317 | 16,171 |
| The Netherlands | 3,236 | 3,836 | 3,726 | onions | 3,437 | 3,829 | 3,872 |
| Germany | 2,706 | 2,910 | 2,994 | carrots | 3,331 | 3,727 | 3,675 |
| United Kingdom | 2,855 | 2,914 | 2,749 | cabbage | 2,546 | 2,633 | 2,599 |
| | | | | lettuce | | | |
| Portugal | 2,199 | 2,634 | 2,491 | cauliflower | 2,266 | 2,204 | 2,127 |
| Belgium | 1,393 | 1,569 | 1,578 | capsicum | 1,706 | 1,731 | 1,817 |
| Austria | 419 | 529 | 500 | green beans | 1,096 | 1,118 | 1,110 |
| Ireland | 257 | 249 | 249 | artichokes | 882 | 817 | 861 |
| Sweden | 246 | 249 | 247 | mushrooms | 793 | 828 | 823 |
| Finland | 209 | 245 | 243 | eggplants | 651 | 601 | 688 |
| Denmark | 223 | 227 | 225 | garlic | 271 | 271 | 273 |
| Luxembourg | 2 | 2 | 2 | asparagus | 216 | 214 | 219 |

[1] estimated
Source: ZMP, 2001

The most important fruit and vegetable growing regions in the EU, where the value of fruit and vegetable production represents more than 2.5 percent of the EU total production and more than 25 percent of the value of total agricultural production in the region, are the following:

**Table 9. The most important fruit and vegetable growing regions in the EU**

| Region | Country | Share of EU (in %) | Share of region (in %) |
|---|---|---|---|
| Emilia Romagna | Italy | 4.3 | 27 |
| Lazio | Italy | 2.5 | 37 |
| Campania | Italy | 3.9 | 43 |
| Apulia | Italy | 4.3 | 42 |
| Sicily | Italy | 5.9 | 53 |
| Communidad Valenciana | Spain | 4.6 | 67 |
| Andalusia | Spain | 4.6 | 30 |
| Murcia | Spain | 2.5 | 64 |
| Provence Alpes Côte D'Azur | France | 2.9 | 46 |
| Kentriki Ellada | Greece | 2.6 | 29 |

Source: CIMO, 2000

## Commodity/Market Specific Analysis

The following analysis focuses on specific products in specific target market(s). The intent of this analysis is to investigate the export potential for selected fresh produce items. However, this analysis is not inclusive as several fresh produce items have certain marketing opportunities under certain conditions as indicated in the summary.

### Strawberry

Strawberry is one of the most potential for profitable horticultural Egyptian exports to the EU and GCC markets. Off-season prices are quite high, and with appropriate technology Egyptian growers could supply these markets during the highest price periods. Strawberry markets are large and growing in most West European countries and GCC markets as well. The largest two markets are Germany and France.

Study countries imports (including intra-EU trade) of strawberry have increased quickly during the last years. From 1990 to 2001, imports of strawberries increased at an average annual rate of more than 20 percent.

Germany is by far the largest importing country with about 123 thousand tonnes imported each year. The UK is a smaller but profitable market. While the Netherlands looks like a large importer, that is partly due to the importance of Rotterdam as major port for incoming produce destined for the rest of Western Europe. Quality is the key in penetrating the very demanding West European markets.

Germany and France are the two largest potential Egyptian export markets. The share of Germany imports amounted to 50% of total EU imports of strawberry 1994; France imports amounted to 25%. The two countries absorb more than 75% of total EU imports. It appears that the two countries can absorb roughly 4,000 metric tonnes per week at prices profitable to an Egyptian producer.

The major Non-EU suppliers are Poland, United States, Israel, and Morocco. Spain is the major player in the late summer market. Non-EU Imports fluctuate partly in response to the size of local European harvests, but this effect is limited to small part of season when local production is possible.

## GERMANY

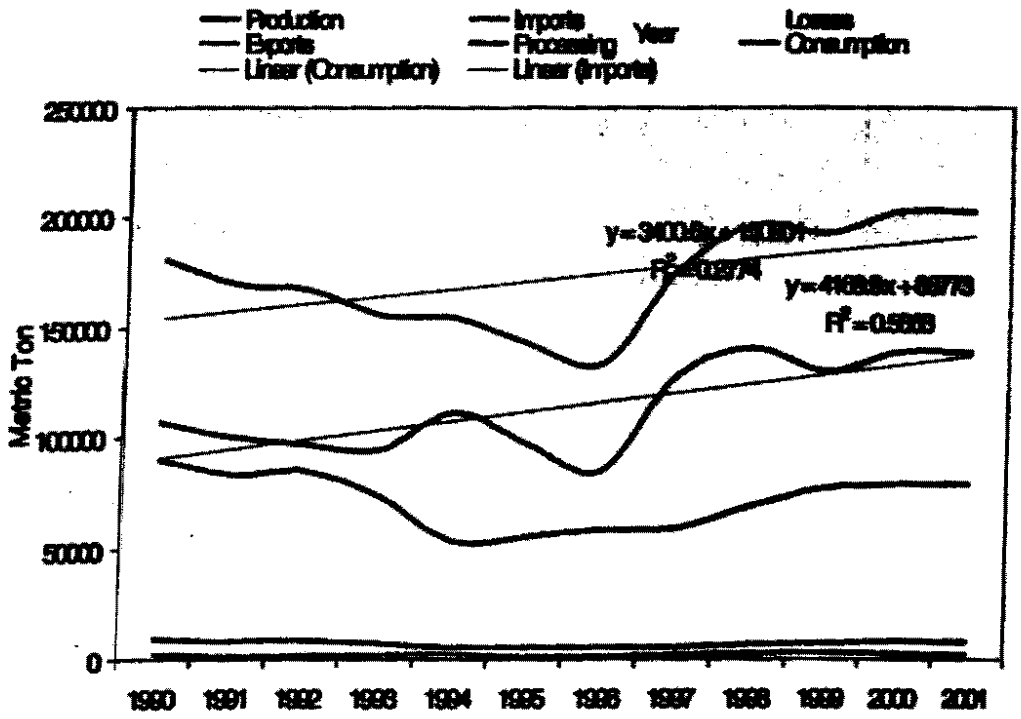
German imports of strawberries are strengthening over time. German imports increased at an average annual rate of more than 26 percent. The major non-EU strawberry suppliers to the German market are Poland and Morocco while Spain is the main EU supplier.

The German market presents the largest amount of potential Un-Met demand of the four markets. The German Profitable Demand line is drawn at roughly 26,000 metric tonnes per month. During the five months when the market window is open to Egypt, this would imply a total profitable demand of roughly 130,000 metric tonnes.

During the three months before the window closes in March, competitors are already meeting some of the profitable demand. This leaves the overall depth of the window at over 44,000 tonnes per year.

The overall shape of the weekly supply line during 1996-2001 years suggests a fairly stable supply situation. May is always the high supply period. This is when Germany and its major suppliers are at peak production. Spain and Italy supply most of the strawberry to the German market. Spanish supplies enter the market in February and reach their peak in April and May. They can supply up to 4000 MT/Week during the peak months. German domestic production enters into the market much later and usually peaks in May.

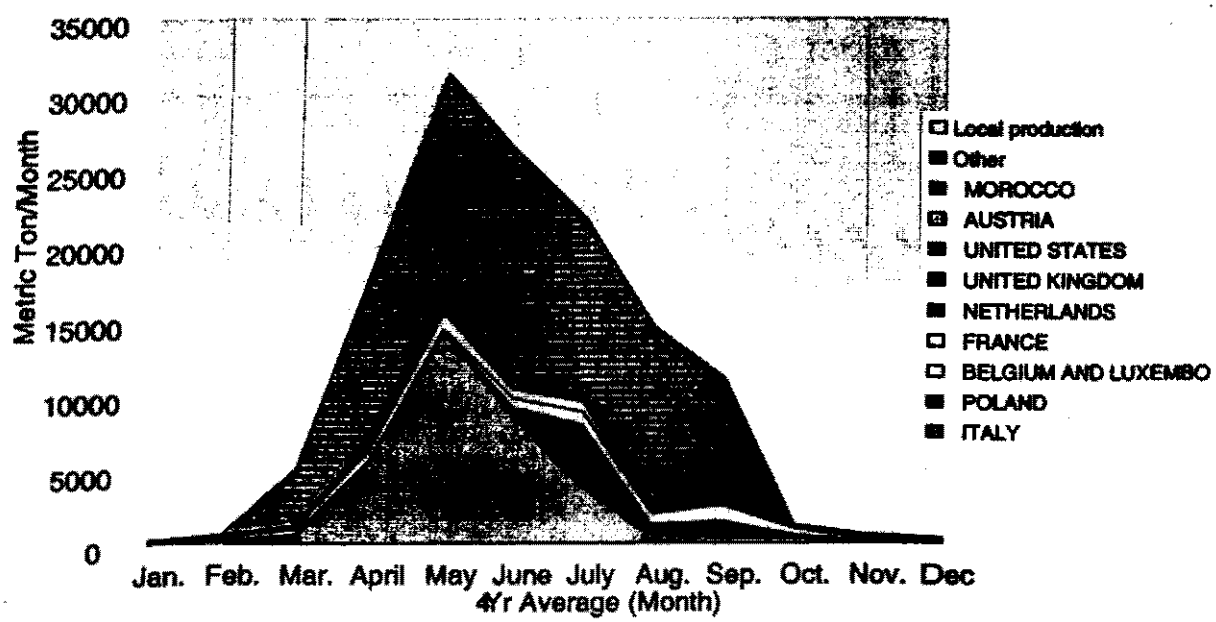
**Figure 6** **Germany fresh strawberries: Production, Imports, exports. Estimates of consumption and ten year trend**




Italy, Belgium and Netherlands also supply fairly large portions of the German market. They compete directly with Spain during the on-season February-June. Italy and Belgium have

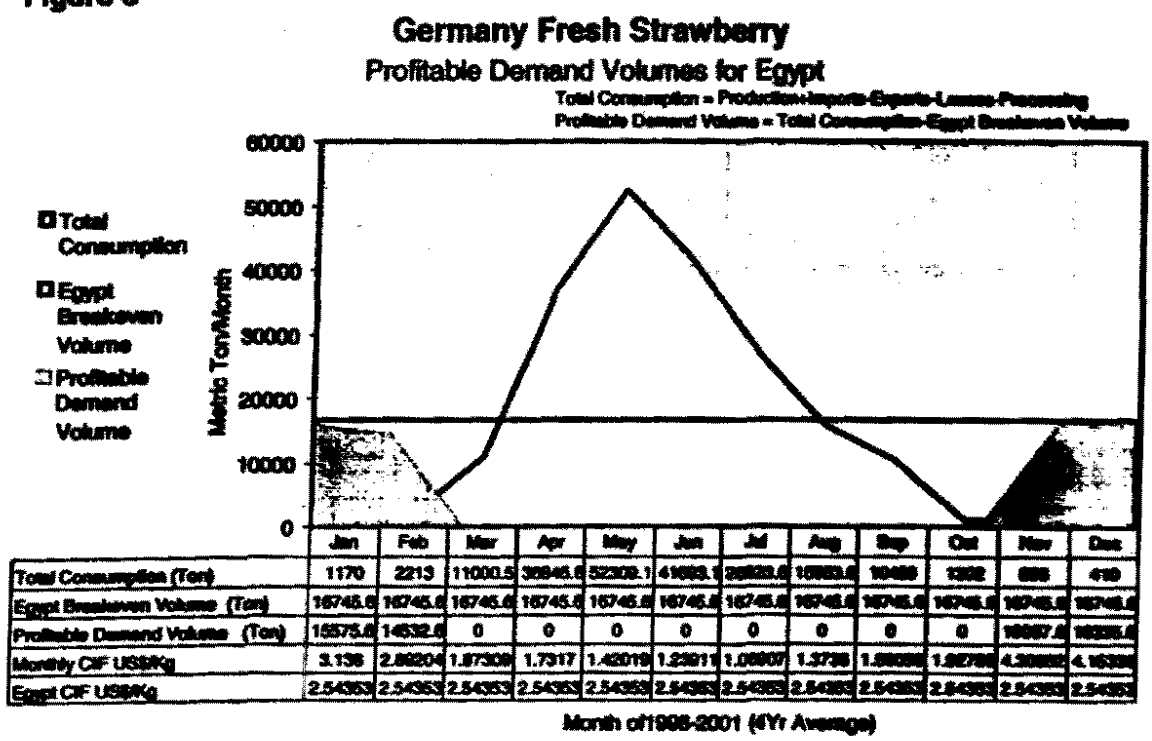
supplied over 500 MT/Week during May. Most of the competition in the German market is concentrated around on-season, leaving a large market window open for new competitors. Although profits can still be made during the on-season, Egypt should concentrate off-season supply in the German market.

**Figure 7** **Germany fresh strawberry: major suppliers and Egypt comparative position**




German domestic supplies do not affect the German market like the domestic supplies do in the French market. The small size of the domestic supply allows the wholesale price to remain above the break-even price for the whole year. The lack of domestic supplies also opens the market to competitor countries, but there is still a good off-season market potential in Germany.

**Figure 8**




Poland, USA and Morocco round out the top suppliers in the German market. These countries do not have a significant portion of the market. There are several countries that provide a significant amount of strawberry to the U.K. market during the off-season. This creates a more competitive atmosphere for the Egyptian producer. The UK has a relatively large domestic production of strawberry, but only plays a strong part in the market during May and June. The United States is the second largest supplier and has the longest supply period of any country. US supplies begin in March, peak in August and September, and continue until October. Thus, the United States is able to supply the market nine of the twelve months during the year. Spain affects the market in May and June.

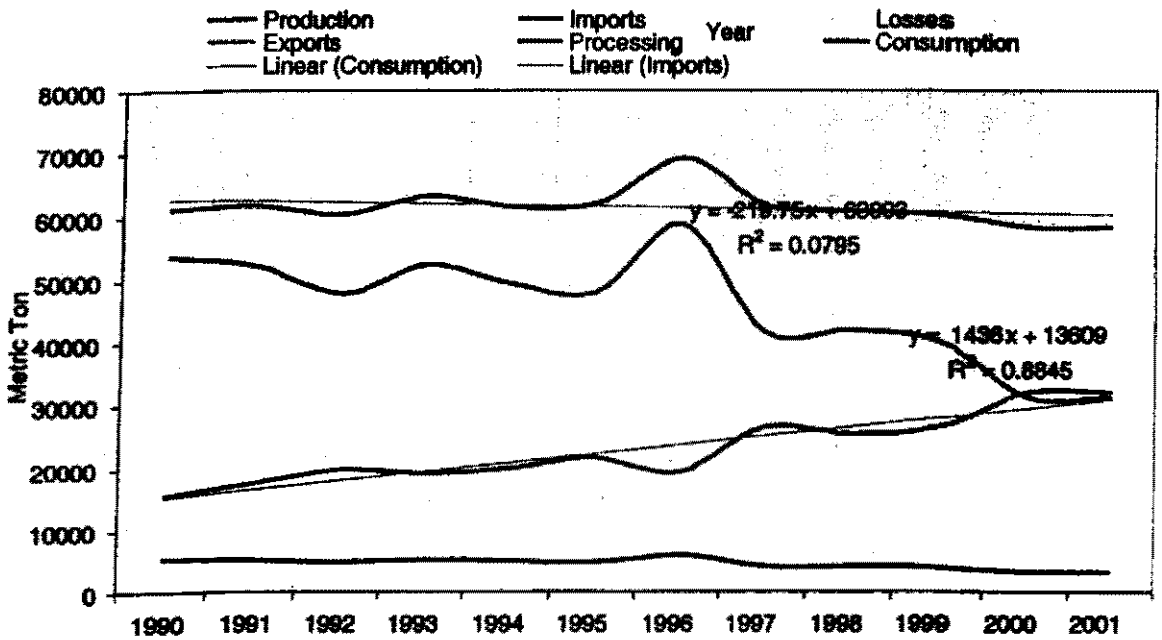
## THE UNITED KINGDOM

UK imports of strawberries are increasing steadily over time. From 1990 to 2001, UK imports increased at an average annual rate of more than 19 percent. The major non-EU supplier is the United States. Spain, Belgium and Netherlands are the main EU supplier.

**Figure 9**

**UK Fresh Strawberries:**

Production, Imports, Exports with Estimates of Consumption and Ten Year Trends




In the U.K. market, the profitable demand level is estimated at 5,500 tonnes per month. The Egyptian window is open for five months with a total depth of approximately 27,500 tonnes. The UK market is fairly stable market. The beginning of the on-season supply usually starts in the 12th week of each year and rises to a high point in May. The Egyptian producer should try to fill the market window during the period of November – March. Concentrating more on the time frame starting at the end of the year, Morocco and Israel are the significant off-season suppliers with supplies beginning in July and continuing until November. Colombia has captured a small market window by supplying the market in July and August while few other countries are filling this period.

**Figure 10**

**UK Fresh Strawberry:**
**Major Suppliers and Egypt Comparative Position**

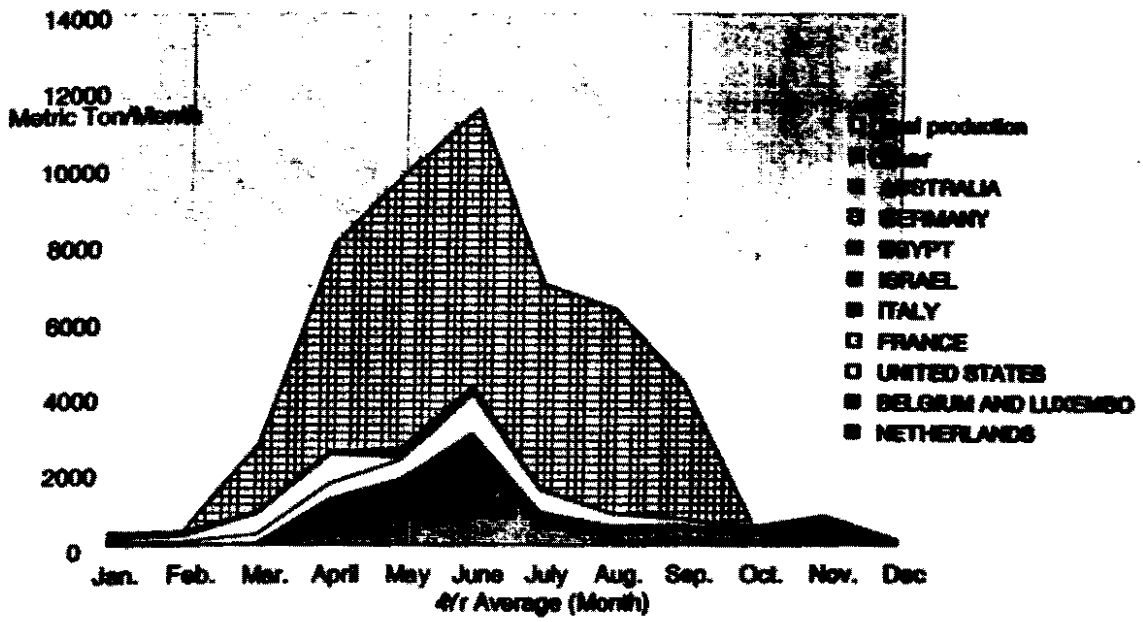
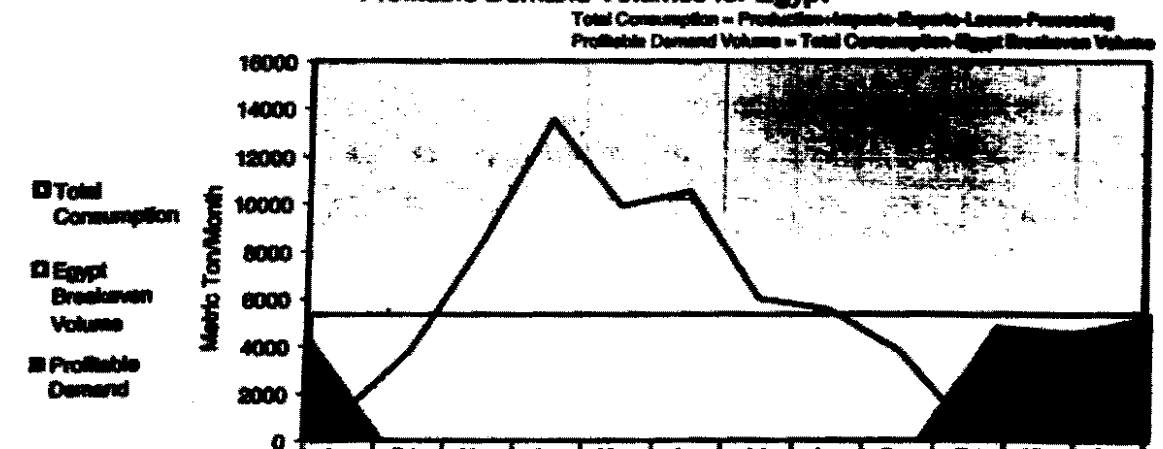



**Figure 11**

**UK Fresh Strawberry**
**Profitable Demand Volumes for Egypt**



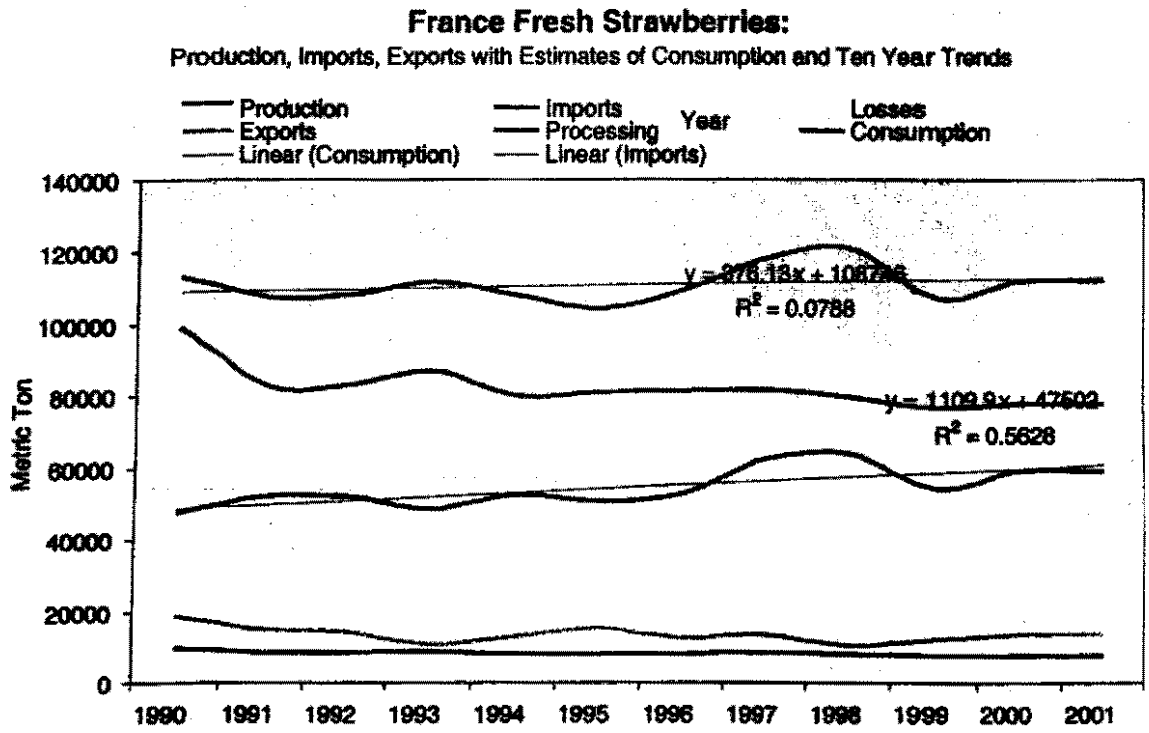

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Consumption (Ton) | 886 | 3608 | 8375.44 | 13542.3 | 9816.75 | 10487.6 | 6875.31 | 6549.31 | 5749.69 | 669 | 771 | 185 |
| Egypt Breakeven Volume (Ton) | 5382.4 | 5382.4 | 5382.4 | 5382.4 | 5382.4 | 5382.4 | 5382.4 | 5382.4 | 5382.4 | 5382.4 | 5382.4 | 5382.4 |
| Profitable Demand Volume (Ton) | 4356.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4819.4 | 4881.4 | 5197.4 |
| Monthly CIF US$/Kg | 2.48691 | 1.99553 | 2.07757 | 1.46318 | 1.87946 | 1.80288 | 1.37288 | 1.2188 | 2.29383 | 2.01888 | 2.89884 | 3.39188 |
| Egypt CIF US$/Kg | 2.54363 | 2.54363 | 2.54363 | 2.54363 | 2.54363 | 2.54363 | 2.54363 | 2.54363 | 2.54363 | 2.54363 | 2.54363 | 2.54363 |

Month of1999-2001 (4Yr Average)

**France**

France imports are strengthening over time. From 1990, France imports increased at an average annual rate of more than 10 percent. The major non-EU suppliers are Morocco and Poland. Spain and Belgium are the main EU competitors.

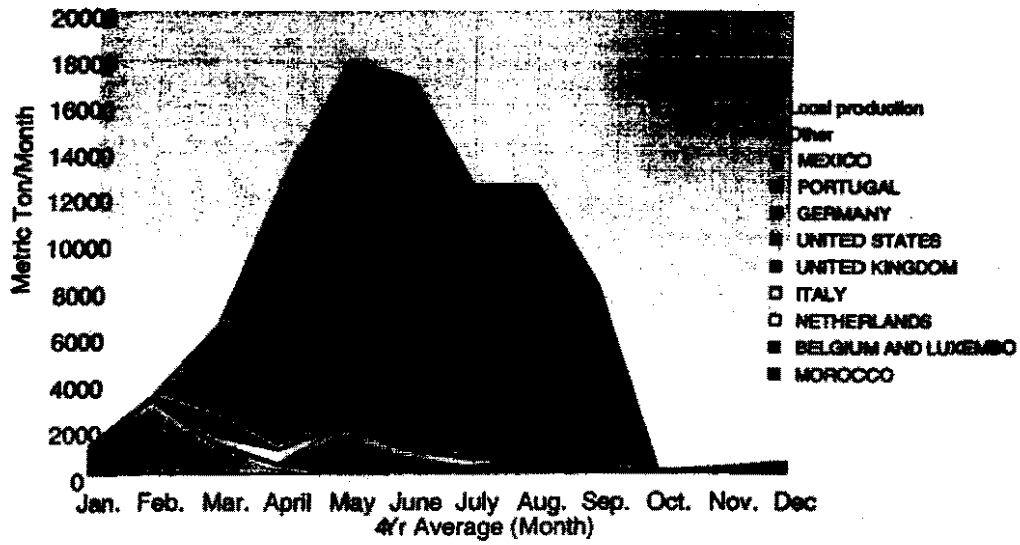
**Figure 12**




Profitable demand in the French market is estimated at approximately 16,000 metric tonnes per month, making it the second largest market behind Germany. The reason for the large size of the French market is mainly to the size of the French domestic production.

From March until June the French market window is closed to Egypt. Quantities supplied often exceed 15,000 metric tonnes per month during this period. The sizeable domestic market cases prices to fall during the summer months, especially during the months of April, May and June.

**Figure 13 France fresh strawberries: major suppliers and Egypt's comparative position**



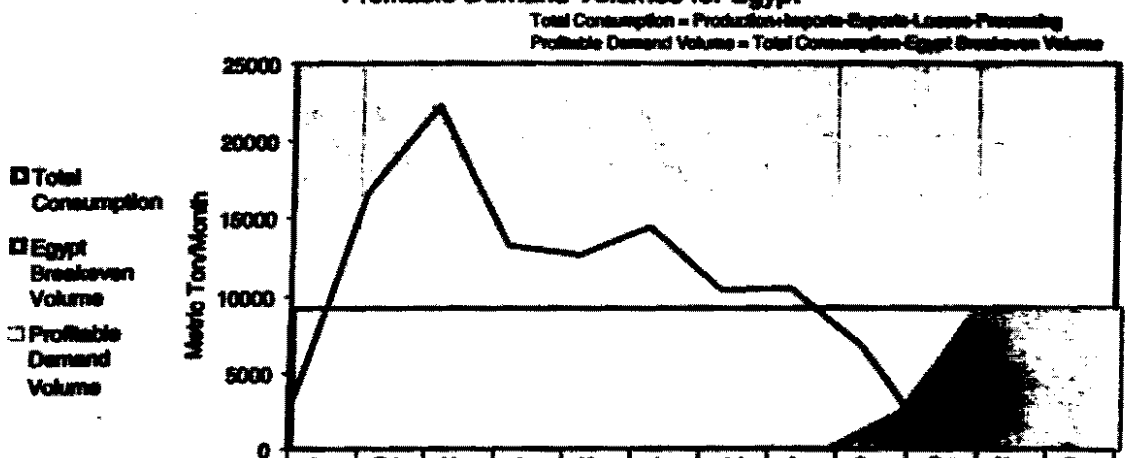



Prepared in cooperation with Agriculture-Led Export Businesses; USAID funded project; Implemented by Abt Associates, Inc.

**Figure 14**

**France Fresh Strawberry**

Profitable Demand Volumes for Egypt




| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Consumption (Ton) | 3134 | 16801 | 22273.8 | 13199.4 | 12602.2 | 14441.2 | 10488.4 | 10474.4 | 6821.8 | 22 | 74 | -15 |
| Egypt Breakeven Volume (Ton) | 9154.85 | 9154.85 | 9154.85 | 9154.85 | 9154.85 | 9154.85 | 9154.85 | 9154.85 | 9154.85 | 9154.85 | 9154.85 | 9154.85 |
| Profitable Demand Volume (Ton) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2333.35 | 9132.85 | 9080.85 | 9169.85 |
| Monthly CIF US$/Kg | 2.25626 | 1.64804 | 1.15208 | 0.4928 | 0.85329 | 1.24208 | 1.47944 | 1.44853 | 14.3288 | 9.8578 | 6.414 | 11.6783 |
| Egypt CIF US$/Kg | 2.54353 | 2.54353 | 2.54353 | 2.54353 | 2.54353 | 2.54353 | 2.54353 | 2.54353 | 2.54353 | 2.54353 | 2.54353 | 2.54353 |

Month of1998-2001 (4Yr Average)

Total unmet profitable demand in France totals approximately 80,000 metric tonnes. This represents a great potential market if strawberries can be supplied during the off-season period (November to February). Spain is dominant in the domestic market during the on-season. Only one other country (Morocco) is clearly visible. The domestic market begins in late February and continues until July. Domestic supply peaks during May and June.

Even though domestic supply dominates the market, there is a large off-season market that could be supplied by the Egyptian producer. Spain is largest supplier of strawberries to France. It competes during the first part of the French domestic production, choosing to supply in November and December.

Other countries such as Poland, Mexico, and Colombia supply portions of strawberry to the French market, but are dwarfed by the size of the domestic production. The Netherlands market is much smaller in size than other three markets.

The profitable demand level is estimated at only 3,000 tonnes per month. The Egyptian window is open for five months with a total depth of approximately 3,000 tonnes. The beginning of the on-season supply usually starts in the 12th week of each year and rises to a high point in April-June. There is more competition from off-season competitors throughout the entire year.

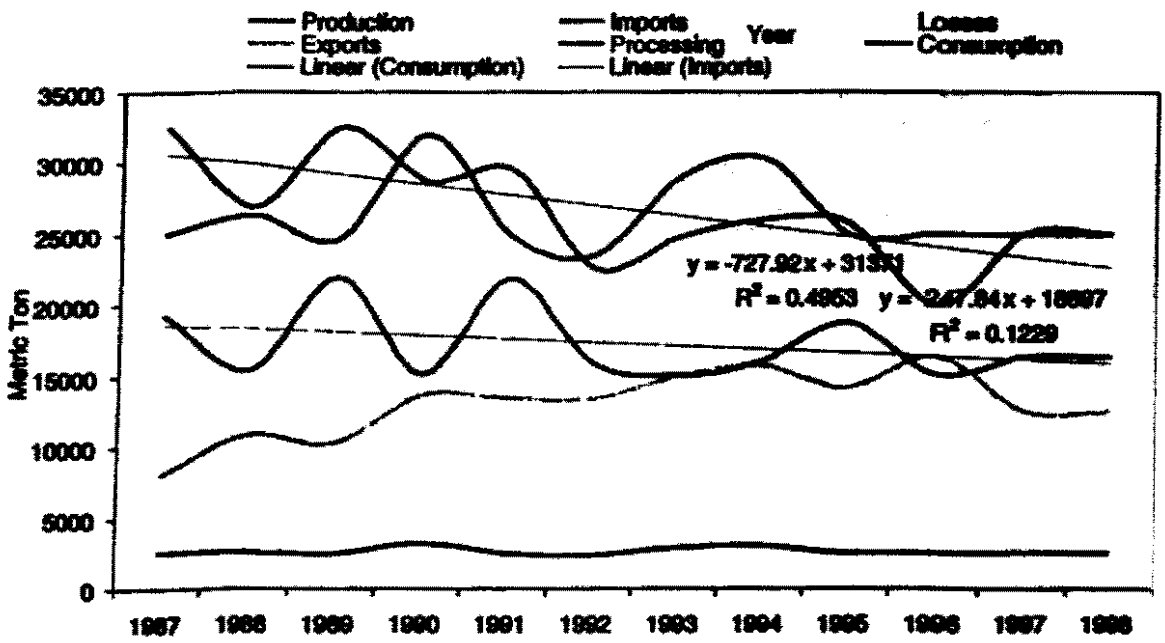
The Egyptian producer should try to fill the market window during the period of November and December, concentrating more on the time frame starting at the end of the year. This is when competition is the weakest and as we will discover later, the wholesale prices are the highest.

## THE NETHERLANDS

Netherlands is also dominant in its domestic market. The domestic market begins in late February and continues until July. Domestic supply peaks during May. Even though domestic supply dominates the market, there is a large off-season market that could be supplied by the Egyptian producer. Spain is the largest supplier of strawberries to the Netherlands. It competes during the first part of the Netherlands domestic production, choosing to supply in March and April. Spanish supplies tend to drop off during the peak domestic production periods. The Egyptian producer should concentrate on the market window (November – December).

**Figure 15**

**The Netherlands Fresh Strawberries:**
Production, Imports, Exports with Estimates of Consumption and Ten Year Trends

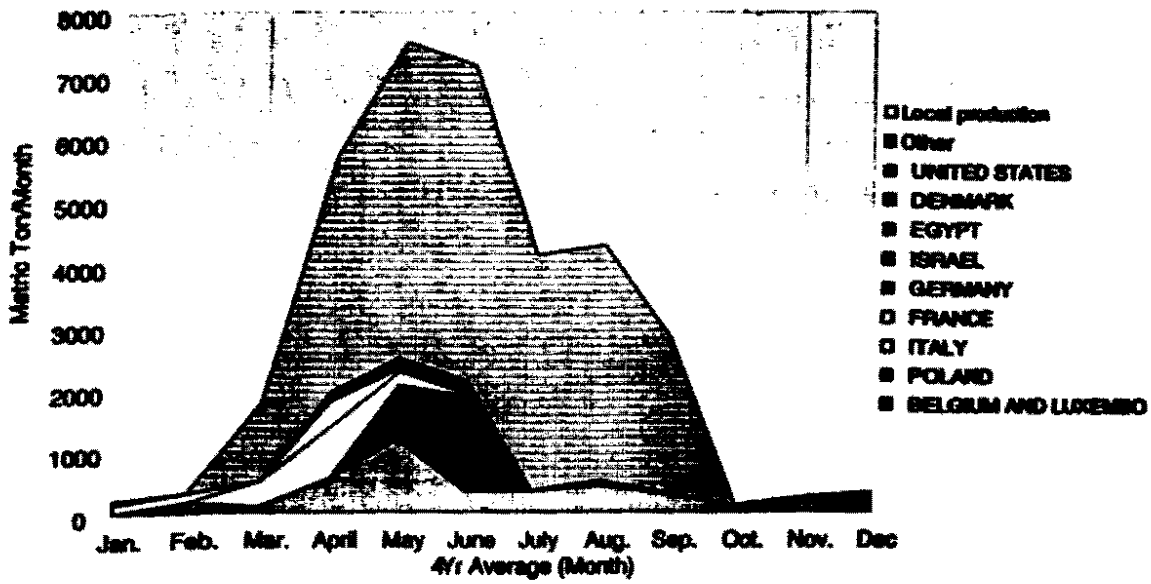





Prepared in cooperation with Agriculture-Led Export Businesses; USAID funded project; Implemented by Abt Associates, Inc.

**Figure 16**

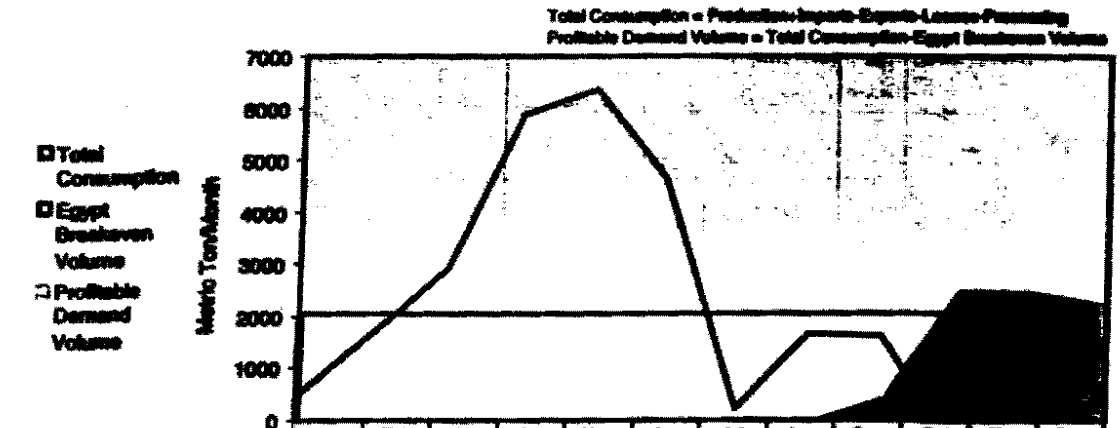
**Netherlands Fresh Strawberry:**
Major Suppliers and Egypt Comparative Position




Other countries such as Poland, Morocco, and Israel supply portions of strawberry to the Netherlands market, but are dwarfed by the size of the domestic production.

**Figure 17**

**Netherlands Strawberry**
Profitable Demand Volumes for Egypt



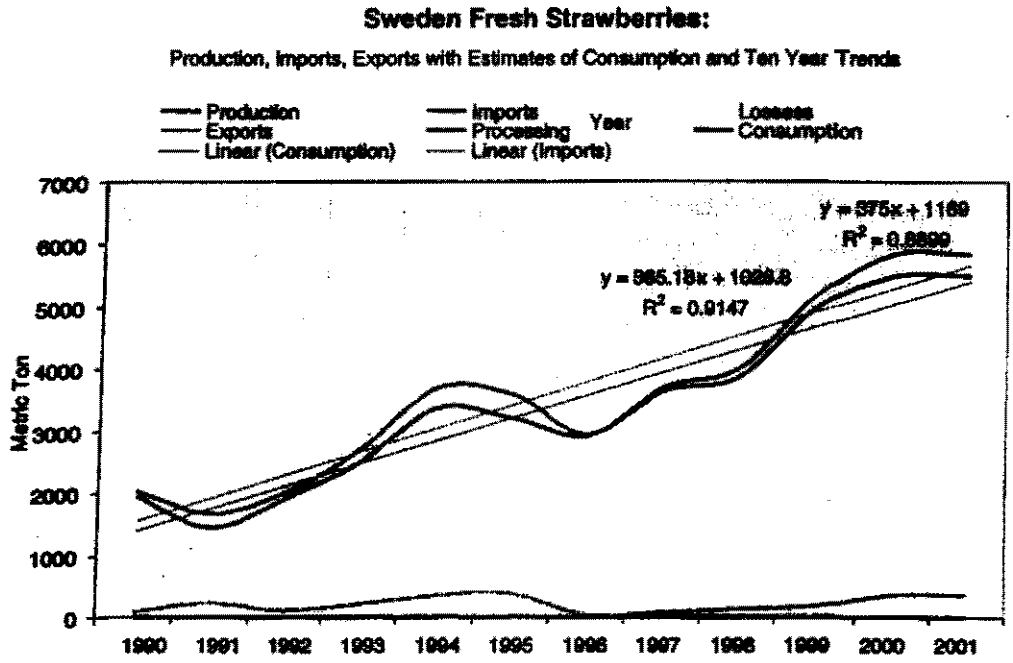

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Consumption (Ton) | 817 | 1672 | 2940.8 | 5888.8 | 6385 | 4687 | 2827.5 | 1679.5 | 1488 | | | |
| Egypt Breakeven Volume (Ton) | 2038.75 | 2038.75 | 2038.75 | 2038.75 | 2038.75 | 2038.75 | 2038.75 | 2038.75 | 2038.75 | 2038.75 | 2038.75 | 2038.75 |
| Profitable Demand Volume (Ton) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 431.75 | 3474.75 | 3449.75 | 3849.75 |
| Monthly CIF US$/Kg | 2.25082 | 1.53178 | 1.38416 | 0.7999 | 0.57244 | 0.48228 | 1.41668 | 0.78877 | 5.3167 | 4.34978 | 7.85714 | 13.8844 |
| Egypt CIF US$/Kg | 2.54353 | 2.54353 | 2.54353 | 2.54353 | 2.54353 | 2.54353 | 2.54353 | 2.54353 | 2.54353 | 2.54353 | 2.54353 | 2.54353 |

Month of1995-1998 (4Yr Average)

## OTHER MARKETS

Although the above markets represent the biggest markets in terms of import volumes, other markets also indicate very rapid growth that opens more and more market windows for strawberry.

**Figure 18**





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## Table Grapes

Total grape imports in Western Europe were subjected to rapid increase over the last five years. The major importing countries in Europe and North America have become more conscious about nutrition and physical fitness. This trend has been gaining strength and is now beginning to exhibit itself strongly in the marketplace in the form of a shift in consumption in favor of fresh fruits and vegetables. There is a similar consumption trend, which has favorably affected the market for fresh produce, which is related to the link between cholesterol and heart disease. Recent research has confirmed the link, and a significant proportion of the consuming population is now shifting diet in the direction of fresh fruits and vegetables.

Table grape markets are large and growing in West European countries. The largest four markets are Germany, France, UK, and Netherlands. Germany is the largest consuming country of these four with imports amounting to 363,000 thousand tonnes in 2001, and is by far the largest importing country because domestic supply is almost nonexistent. France is the second largest importer with 135,000 tonnes followed by UK with 135 tonnes, and finally Netherlands with 117,000 in 2001. Total imports of table grape for the four markets amounted for 783,000 Tonnes (91% of total EU grape imports in 2001).

Data indicate that grape import trends in Europe are strengthening over time. This dramatic recent expansion in grape imports into Europe is very clear.

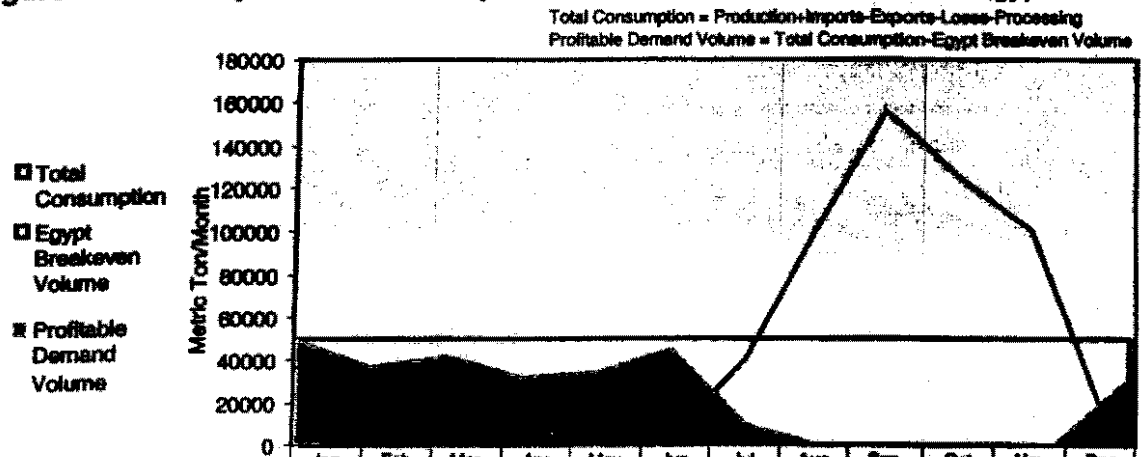
### GERMANY

The surge in grape imports by Germany is striking and has experienced significant growth during the period from 1990-2001. Germany experienced an annual increase in grape imports during that period amounting to 15,500 tonnes. This clearly indicates that the German market has limited production capacities and a strong growing demand with resultant positive import trends. The market is still unsaturated and open for serious off-season suppliers.

Total grape supply in the German market is concentrated in the period from July until November. German domestic supplies do not affect the German market. The absence of a domestic supply allows the wholesale price to remain above the break-even price for almost the whole year. The German profitable demand is drawn at roughly 50,000 tonnes per month. During the 7 – 8 months when the market window is open to Egypt, this would imply a total profitable demand of roughly 400,000 metric tonnes. During the months before the window closes in August and months after it reopens in November competitors are already meeting 25% of the profitable demand. This leaves the overall depth of the window at over 300,000 tonnes per year. Improved Egyptian quality with the same growing conditions and technologies permits Egypt to increase supplies to the German market by approximately 177,000 tonnes during May and June. Italy, Greece and Spain supply most of the grapes to the German market. Italian supplies enter first into the market in June with small supplies and then as the Italian season comes into full swing by September supply rises to over 60,000 tonnes per month. During the Italian peak in October, Italian supplies can reach 70,000 tonnes per month. Italian supplies trail off abruptly in late October, but continue into November. Greek supplies appear in the German market during the same market period as Italy. Greek supplies begin in July and peak in October. Spain is the third largest supplier in the German market. Spanish supplies avoid much of the saturated market period of September and October. Spain supplies enter in the market in July and August, decrease

rapidly and then enter the market again in November. Chile and South Africa are the largest suppliers in the off-season. Chile begins to supply the market during the month of January and continues to supply up to 1000 tonnes per month until April. Egypt should try to supply the French market during the same period. South Africa supplies the German market during the same period as Chile.

**Figure 19 Germany Fresh Table Grapes** – Profitable Demand Volumes for Egypt



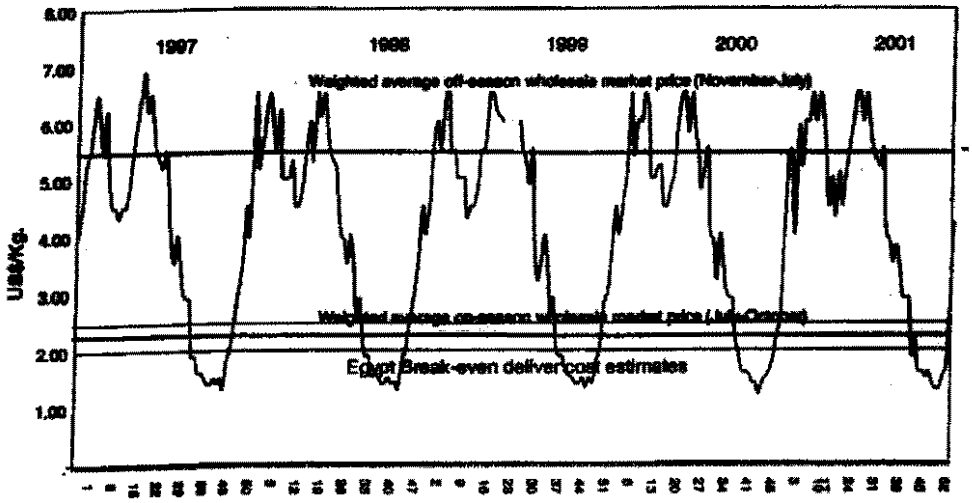

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Consumption (Ton) | 250 | 12602 | 8149 | 17696 | 15480 | 4878 | 40927.8 | 99660.9 | 186169 | 124726 | 100649 | 16525 |
| Egypt Breakeven Volume (Ton) | 49961.7 | 49961.7 | 49961.7 | 49961.7 | 49961.7 | 49961.7 | 49961.7 | 49961.7 | 49961.7 | 49961.7 | 49961.7 | 49961.7 |
| Profitable Demand Volume (Ton) | 49711.7 | 37359.7 | 41812.7 | 32065.7 | 34481.7 | 45083.7 | 9034.12 | 0 | 0 | 0 | 0 | 31436.7 |
| Monthly CIF US$/Kg | 1.2552 | 0.98183 | 1.48505 | 1.51753 | 1.3847 | 1.44936 | 1.33435 | 0.82955 | 0.80273 | 0.74016 | 0.81388 | 0.95802 |
| Egypt CIF US$/Kg | 0.72059 | 0.72059 | 0.72059 | 0.72059 | 0.72059 | 0.72059 | 0.72059 | 0.72059 | 0.72059 | 0.72059 | 0.72059 | 0.72059 |

Month of1998-2001 (4Yr Average)

The lack of domestic supplies also opens the market to competitor countries, but there is still a good off-season market potential in Germany. Prices in the German market, as in other EU markets, are very attractive to Egyptian exporters. Wholesale prices never drop below Egyptian break-even prices during Egyptian market windows as shown in the following graph.

**Figure 20**

**Weekly Wholesale Market Prices of Thompson Seedless Grapes in the German Market (1997-2001) - Class A**






Prepared in cooperation with Agriculture-Led Export Businesses; USAID funded project; Implemented by Abt Associates, Inc.

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## FRANCE

The French grape import trend has experienced significant growth during 1990 –2001 with an annual increase in grape imports during that period amounting to 7,500 tonnes. This clearly indicates that the French market has limited production capacities and a strong growing demand with resultant positive import trends. The market is still unsaturated and open for serious off-season suppliers.

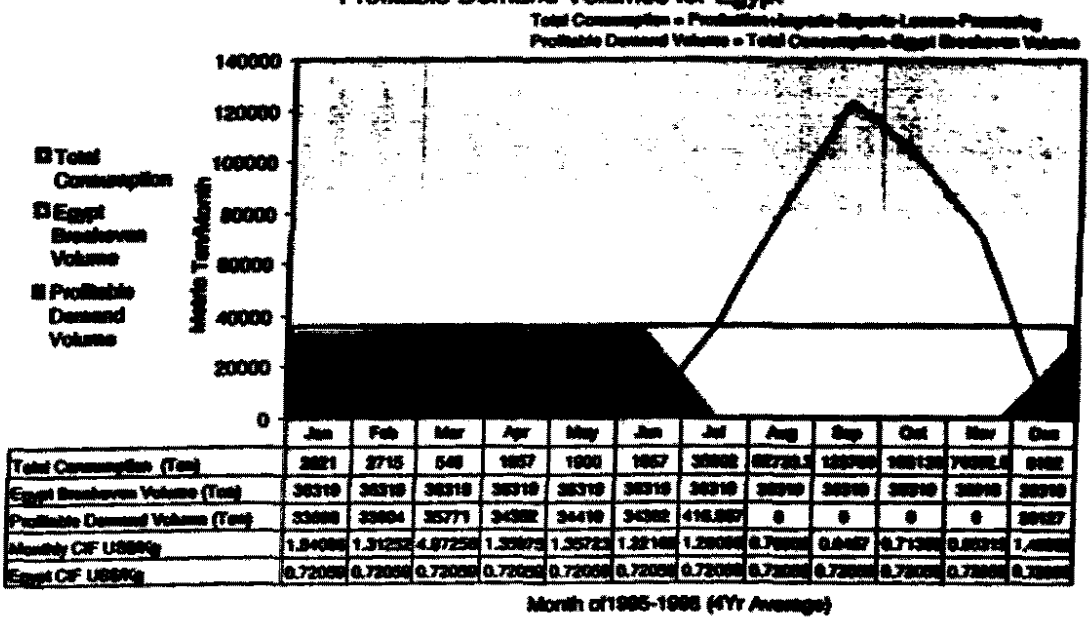
Total grape supply in France is concentrated in the period July until November. French domestic production from Southern France can begin earlier in small volumes. The French profitable demand is drawn at roughly 29,000 tonnes per month. During the 7 – 8 months when the market window is open to Egypt, this would imply a total profitable demand of roughly 232,000 metric tonnes. During the months before the window closes in August, and months after it reopens in November competitors are already meeting one-eighth of the profitable demand. This leaves the overall depth of the window at over 203,000 tonnes per year.

Improved Egyptian quality with the same growing conditions and technologies permit Egypt to increase supplies to the French market by approximately 56,000 tonnes during May and June. Italy and Spain supply most of the grapes to the French market. Italian supplies enter first into the market in June with small supplies and then as the Italian season comes into full swing by September supply rises to over 30,000 tonnes per month. During the Italian peak in October, Italian supplies can reach 40,000 tonnes per month. Italian supplies trail off abruptly in late October, but continue into November. Chile and South Africa are the largest suppliers in the off-season. Chile begins to supply the market during the month of January and continues to supply up to 1000 tonnes per month until April. Egypt should try to supply the French market during the same period. South Africa supplies the French market during the same period as Chile.

**Figure 21**

**France Fresh Table Grape**

**Profitable Demand Volumes for Egypt**



## THE NETHERLANDS

The Netherlands grape import trend has experienced significant growth from 1998 – 2001 with an annual increase in grape imports during that period amounting to 9,160 tonnes. This clearly indicates that the Netherlands market has limited production capacities and a strong growing demand with resultant positive import trends. The market is still unsaturated and open for serious off-season suppliers.

**Figure 22 Netherlands Table Grapes**

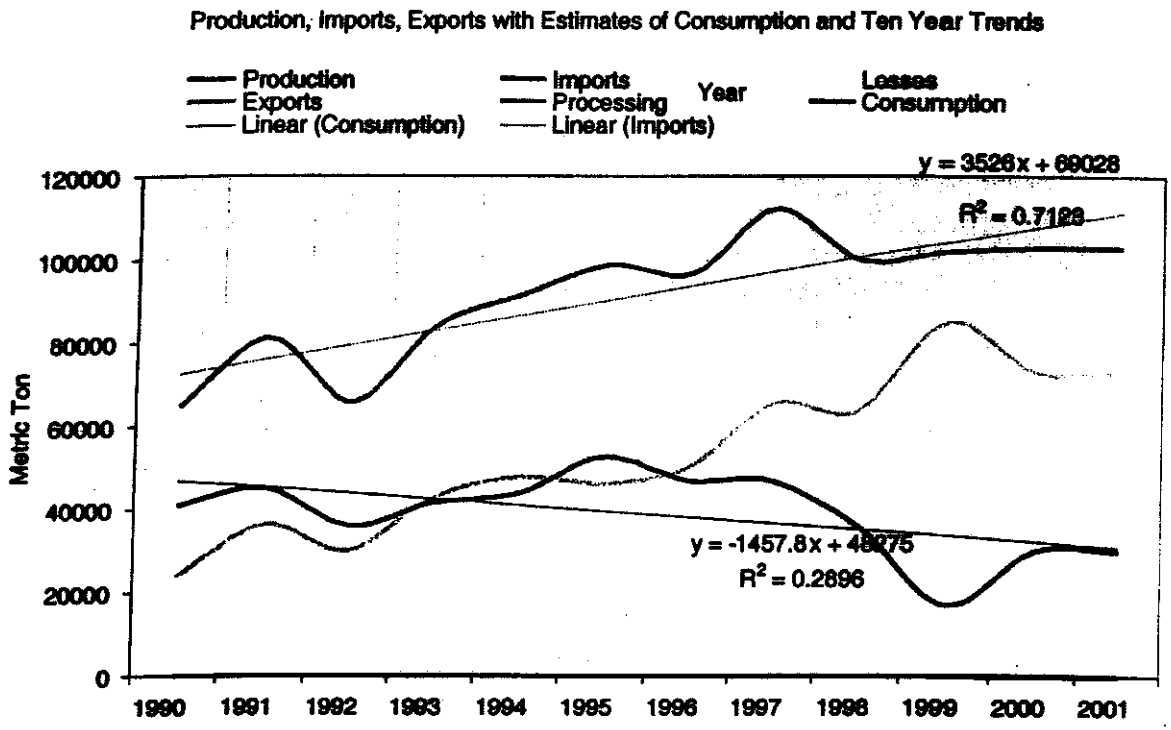
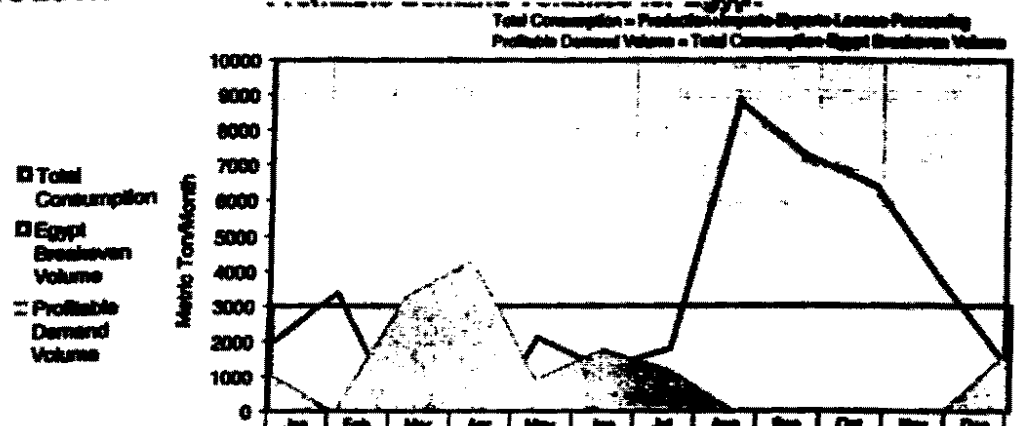


**Figure 23 Netherlands Grapes – Profitable Demand for Egypt**




The Netherlands market has consistent levels of supply. There are several countries that provide a significant amount of grapes during the off-season. This creates a more competitive atmosphere for the Egyptian exporters. Chile, Italy and Greece are the largest suppliers to the Netherlands market. It appears that Chile supplies the market heavily year round, which is technically impossible.

While the Netherlands looks like a large importer, that is partly due to the importance of Rotterdam as a major port for incoming fresh produce destined for the rest of Western Europe. Netherlands profitable demand is drawn at roughly 20,000 tonnes per month. During the May and June months when the market window is open to Egypt, this would imply a total profitable demand of roughly 8,000 metric tonnes. Chile, Italy and Greece supply most of the grapes to the Netherlands market.

## THE UNITED KINGDOM

The U.K. grape import trend has experienced significant growth from 1998-2001 with an annual increase in grape imports during that period amounting to 2,300 tonnes. This clearly indicates that the U.K. market has limited production capacities and a strong growing demand with resultant positive import trends. The market is still unsaturated and open for serious off-season suppliers.

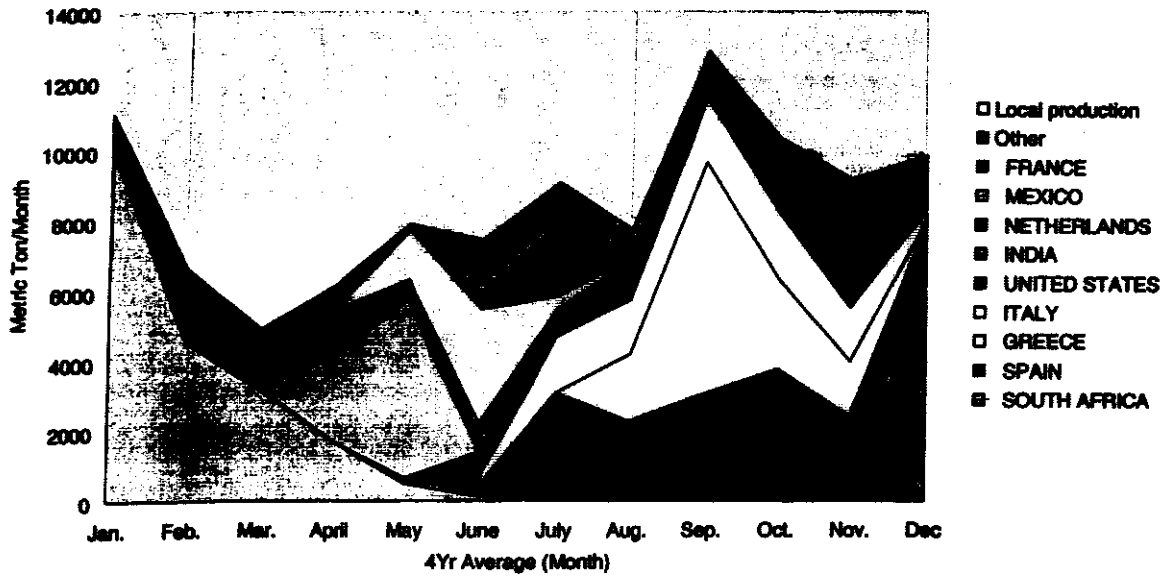
The April, May and June window for Egyptian grape in the UK market is very clear. The gap between off-season supplies and on-season period in the UK market opens an excellent situation for Egyptian grape in the UK market.

Total grape supply in the UK market is concentrated in two periods. Italian supplies dominate the period July until November. Chile and South Africa dominate the off-season period. The UK profitable demand is drawn at roughly 32,000 tonnes per month. During the four months when the market window is open to Egypt, this would imply a total profitable demand of roughly 128,000 metric tonnes. Competitors are already meeting roughly 100,000 tonnes of the profitable demand. This leaves the overall depth of the window at over 16,000 tonnes per year. Italy, Greece and Spain supply most of the grapes to the UK market. Italian supplies enter first

into the market in July with small supplies and then as the Italian season comes into full swing by October supply rises to over 4,000 tonnes per month. During the Italian peak in October, Italian supplies can reach 6,000 tonnes per month. Italian supplies trail off abruptly in late October, but continue into November. Greek supplies appear in the German market during the same market period as Italy. Greek supplies begin in July and peak in October. Spain is the third largest EU supplier in the UK market. Spanish supplies avoid much of the saturated market period of September and October. Spain supplies enter in the market in July and August, decrease rapidly and then enter the market again in November. Chile and South Africa are significant suppliers in the typical off-season period. They often supply over 10,000 MT/Month from February to May. The lack of domestic supplies also opens the market to competitor countries, but there is still a good off-season market potential in Germany.

**Figure 24**

UK Fresh Table Grapes:
Major Suppliers and Egypt Comparative Position



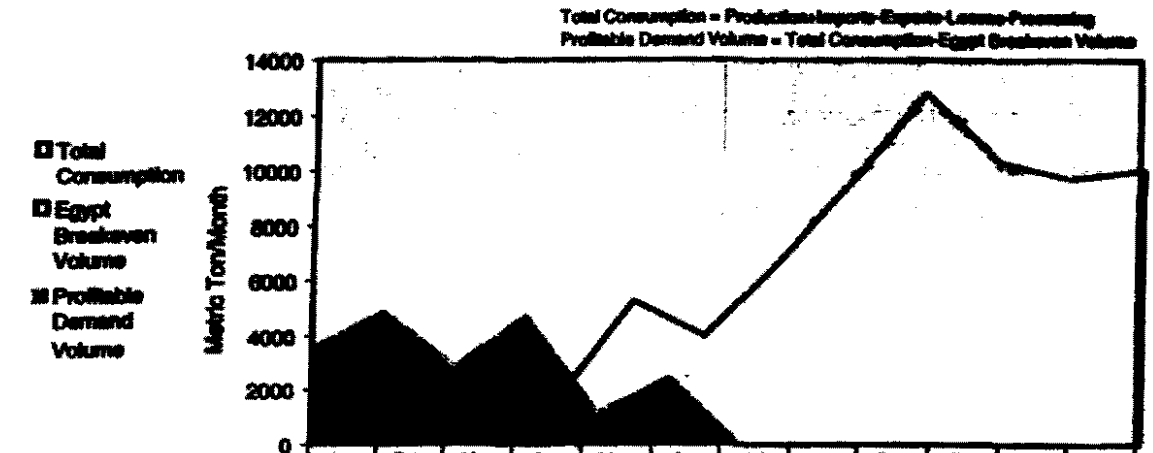



Prepared in cooperation with Agriculture-Led Export Businesses; USAID funded project; Implemented by Abt Associates, Inc.

**Figure 25**

**UK Fresh Table Grape**

**Profitable Demand Volumes for Egypt**




| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Consumption (Ton) | 2875 | 1646 | 3572 | 1798 | 5313 | 4915 | 6888.5 | 6888.56 | 12788.5 | 10888.5 | 8537.56 | 10949 |
| Egypt Breakeven Volume (Ton) | 6530.44 | 6530.44 | 6530.44 | 6530.44 | 6530.44 | 6530.44 | 6530.44 | 6530.44 | 6530.44 | 6530.44 | 6530.44 | 6530.44 |
| Profitable Demand Volume (Ton) | 3655.44 | 4884.44 | 2958.44 | 4742.44 | 1217.44 | 2516.44 | 0 | 0 | 0 | 0 | 0 | 0 |
| Monthly CIF US$/Kg | 2.0728 | 1.59082 | 1.8351 | 2.01088 | 1.29539 | 1.392 | 1.34338 | 1.6061 | 1.21614 | 1.48181 | 1.88814 | 2.01687 |
| Egypt CIF US$/Kg | 0.72058 | 0.72058 | 0.72058 | 0.72058 | 0.72058 | 0.72058 | 0.72058 | 0.72058 | 0.72058 | 0.72058 | 0.72058 | 0.72058 |

Month of1998-2001 (4Yr Average)

## BELGIUM & LUXEMBOURG

In addition to the above major markets in the EU, other members, although smaller in size, showed very rapid growth in import demand for table grapes; among those are Belgium & Luxembourg as shown below.

**Figure 26**

**Belgium & Luxembourg Table Grape:**

**Production, Imports, Exports with Estimates of Consumption and Ten Year Trends**

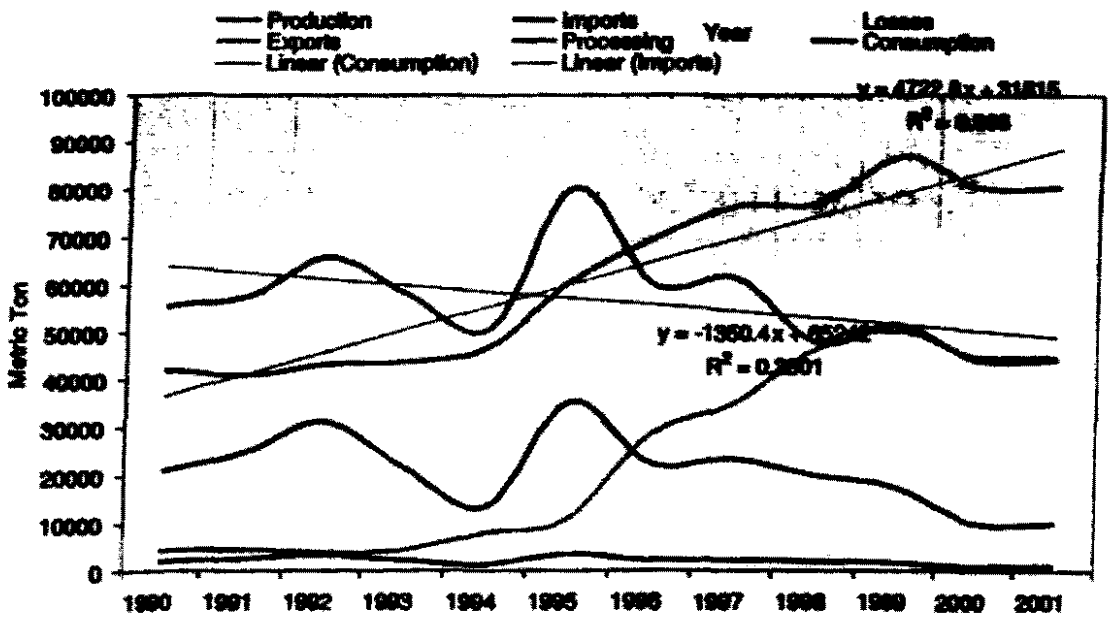
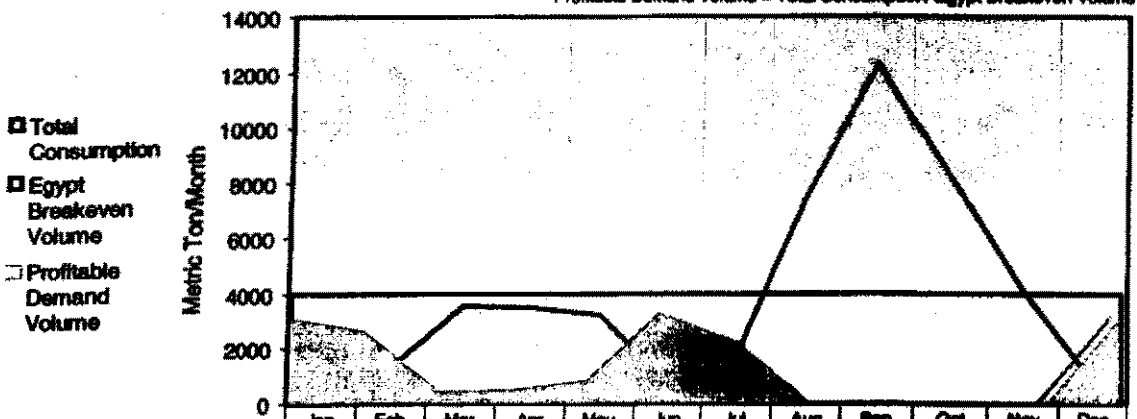


**Figure 27**

## Belgium & Luxembourg Fresh Table Grape

Profitable Demand Volumes for Egypt

Total Consumption = Production+Imports-Exports-Losses-Processing
Profitable Demand Volume = Total Consumption-Egypt Breakeven Volume




| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Consumption (Ton) | 909 | 1339 | 3577.5 | 3495 | 3201 | 740 | 1745.07 | 7537.85 | 12337.2 | 6133.64 | 4108.8 | 817 |
| Egypt Breakeven Volume (Ton) | 3994.89 | 3994.89 | 3994.89 | 3994.89 | 3994.89 | 3994.89 | 3994.89 | 3994.89 | 3994.89 | 3994.89 | 3994.89 | 3994.89 |
| Profitable Demand Volume (Ton) | 3085.89 | 2655.89 | 417.387 | 499.887 | 793.887 | 3254.89 | 2249.82 | 0 | 0 | 0 | 0 | 3177.89 |
| Monthly CIF US$/Kg | 1.62828 | 1.53061 | 4.39136 | 1.37643 | 1.27945 | 1.47827 | 1.35383 | 0.99903 | 0.80622 | 0.88948 | 1.35656 | 2.10828 |
| Egypt CIF US$/Kg | 0.72059 | 0.72059 | 0.72059 | 0.72059 | 0.72059 | 0.72059 | 0.72059 | 0.72059 | 0.72059 | 0.72059 | 0.72059 | 0.72059 |

Month of1998-2001 (4Yr Average)

### Green Beans

The two largest EU bean-importing countries are Netherlands and France, each importing 25 thousand tonnes to 35 thousand tonnes imported per year. France is a major market but prices until recently were significantly lower. While the Netherlands is a major market for beans, much of the imports are re-exported to other European countries, especially Germany. The UK is a smaller but highly profitable market.

Netherlands imports amounted to 24% of total EU green bean imports in 2001. France, Germany and UK imports amounted to 23%, 12% and 7% respectively. The three countries absorb more than two thirds of total EU imports.

The major intra-EU suppliers are Spain, Netherlands and France in that order. EU production is concentrated from June through August. Kenya, Egypt, Senegal and Burkina Faso are the major non-EU suppliers. Morocco has become a more important supplier in recent years. Kenya ships throughout the year, with major concentrations in December – February and May – June. Egyptian exports also tend to be concentrated in December – February and April – May.

Burkina Faso and Senegal also compete in the winter market. All suppliers are using airfreight at the present time because of the extremely short shelf life of beans. Controlled atmosphere transport is technically and commercially feasible and could reduce Egyptian delivered costs significantly.

Egypt can deliver beans cheaper than any of these competitors. While their production costs are competitive, Egypt has an advantage over Kenya, Senegal and Burkina Faso because its transport costs are lower. The Canary Islands has low freight costs, but their costs of

production are higher. The United States produces a lot of high quality green beans, but high production and transport costs make it uncompetitive in the EU market.

The following sections include detailed analysis and information on marketing beans in EU countries, with most analysis focusing on the four largest importing countries (Germany, UK, France and Netherlands). Imports by the four major importing countries (including intra-EU trade) have been quite stable at about 80,000 tonnes per year during the period 1996 to 2001. Dutch imports declined in 2000, and French imports have been quite stable, with a slight decrease in 2000.

Egyptian green bean export prices are generally about one half of the prices paid for "fine" beans. Those low prices are the result of the thickness of diameter of the "bobby bean" and due to low product quality caused by improper production and post-harvest handling, especially the absence of fast cooling.

The present analysis focuses exclusively on "fine" fresh beans, since consumers, and therefore processors pay a significantly lower price for bobby beans. The prices and potential profit margins for fresh "fine" beans in European countries are high, especially during the off-season. With appropriate production and post-harvest technology, Egyptian growers could supply these markets during the highest price periods.

Fresh green beans are delicate and perishable. The product must be finally packed and fast cooled immediately (within 1 – 2 hours) after harvest. Beans have the highest rate of respiration of any vegetable, meaning they quickly lose moisture if not kept at low temperature in a high humidity atmosphere.

European consumers will only accept straight and tender beans with low fiber content. Thus, immediately after harvest the product should be moved to a nearby packing and hydro cooling facility, where the heat can be removed from the product within minutes after harvesting. Hydro cooling is a method of cooling products fast (fast cooling) that are subject to rapid quality deterioration due to loss of moisture. The product is drenched in ice-cold water until the pulp temperature reaches 0 degrees centigrade. The product should be kept at just above 0 degrees centigrade with over 90 percent relative humidity throughout the transportation and marketing process.

German market prices are near or below the break-even line in the on-season from June through September. The prime market window for Egypt is December – May. Based on 2002 prices, the profit potential for Egyptian exporters would range from about $1.00 to $2.50 per kilo during that period.

Profits are low to negative during June-August. The best profit margin for Germany appears to be in February, March and May, when profits are often above $2.00/Kg.

The UK market, while a small market for beans, has good profit potential during the entire year. The shaded area never falls below the black breakeven price line, indicating that profits may be realized during the whole year. However, the Egyptian producer should concentrate on the February – April period when profits would be about $3.00 per kilo.

During March and early April the wholesale price is about $6.00/Kg. Potential Egyptian profits are about $3.00 per kilo during that period. During the rest of the year, profit potentials in the UK market range from less than $1.00 to $2.00.

The French wholesale prices are somewhat lower than in the UK market. Wholesale price drops below the break-even price in May – June and again in August. Egyptian exporters can make their best profits in March and in October. Potential profits would range from $1.00 to $2.00 per kilo.

The most attractive market window for Egypt in the French market is in the month of March, with profit potential of about $2.00 per kilo. Profit potentials are also reasonably good in October – November. Egyptian exporters should avoid the May – September period.

The Netherlands wholesale prices are even lower than in the French market and are very stable throughout the year. There is no highly attractive market window. Profit potentials are about $1.00 per kilo throughout the year.

The Netherlands market presents marginal opportunities for the Egyptian exporter. Prices remain low but stable throughout the year. Profits range from about $.75 to $1.50 per kilo.

European consumers will pay very high prices for fresh, pencil thin or smaller, succulent, straight and tender green beans, a very different product from the one traditionally exported from Egypt. To satisfy that demand, European distributors prefer what are called "fine" or "extra fine" beans. In order to deliver the quality demanded at highly profitable prices, growers must plant the appropriate varieties, use proper cultural practices, harvest carefully, fast cool the product within less than one hour of harvest and make sure the product is kept at optimum temperature and humidity until it reaches the supermarket shelf in Europe. Egypt appears to have the growing conditions needed to produce the higher priced beans. Given its proximity to Europe, and mild winter climate, fresh "fine" green beans should be a highly profitable export crop. Since transportation costs represent a significant percentage (up to 75%) of the delivered cost of fresh produce, Egypt has a significant comparative advantage over more distant producers such as Kenya, Burkina Faso and Senegal.

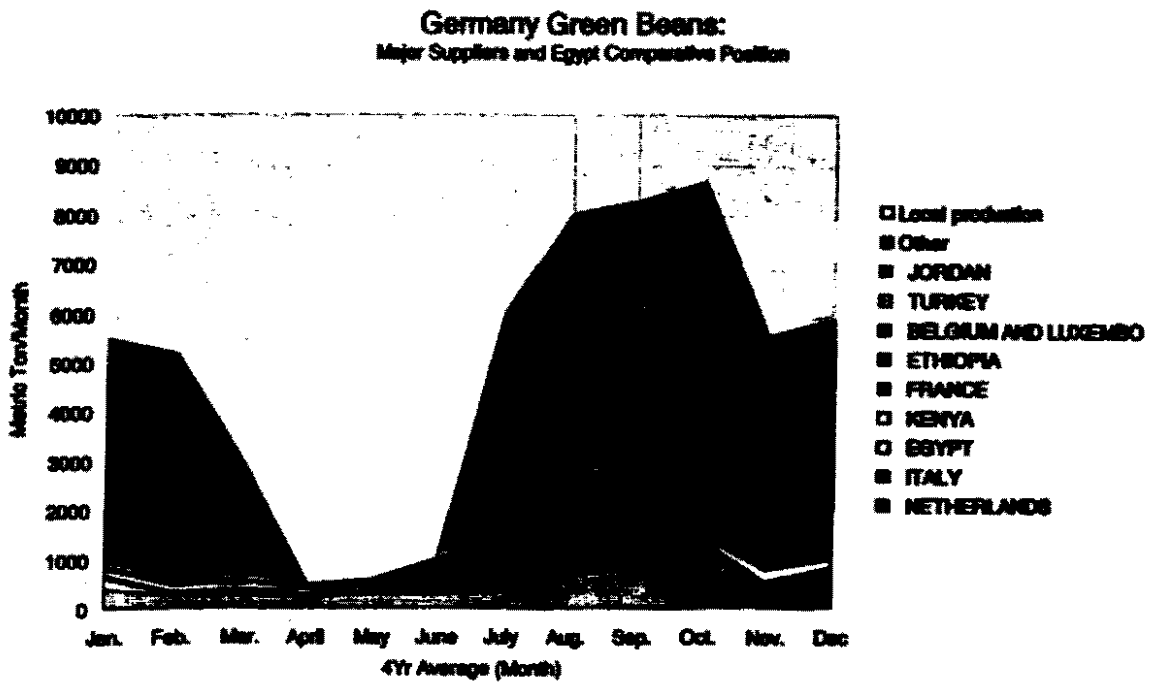
Egypt lies in the most flexible possible climatic position. With appropriate production technologies and varieties, Egypt should be able to produce for selected off-season markets and compete favorably in the front edge of the on-season as well.

## GERMANY

German bean imports increased in 1998 and then fell below pre-1995 levels in 2001. The major suppliers are Italy, Netherlands and Spain. Kenya is the major supplier from outside the EU. Imports from Italy, Netherlands and Spain have been declining due to rising labor costs. Bean production is quite labor intensive

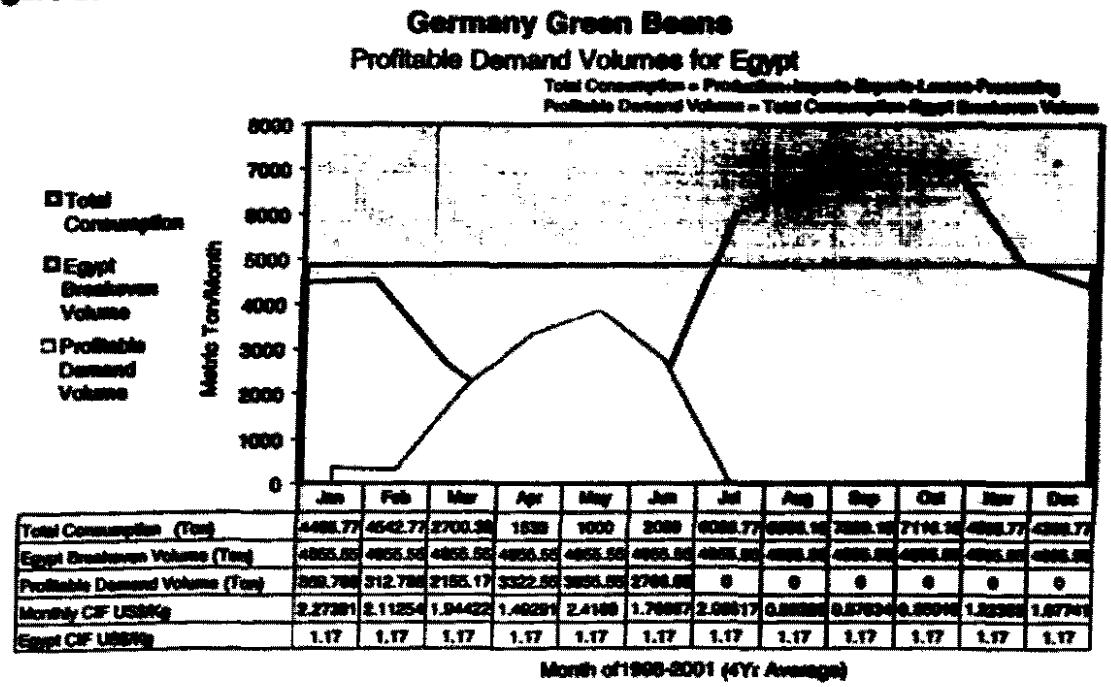
The German Profitable Demand line is roughly 6000 metric tonnes per month. The peak import level, in June, indicates that German consumers have already demonstrated a willingness to purchase that quantity of imported beans at a price that would be profitable for the Egyptian exporter. During the nine months when the market window is open to Egypt, this would imply a total profitable demand of roughly 54,000 metric tonnes.

**Figure 28**




A large portion of that profitable demand is already being met by competitors and leaves for Egypt around 4,700 tonnes. A review of similar data for 1990 – 2001 indicated the overall shape of the weekly supply line varies little from year to year. Spain and Italy supply most of the beans to the German market. Spanish and Italian supplies enter the market in late May and peak in June, with a second smaller peak in November. They supply over 2000 MT per month during the peak month. German domestic production enters into the market much later and usually peaks in August. German imports from non-EU countries are quite low.

**Figure 29**



## FRANCE

French bean imports decreased by about 8000 tonnes since 1989. Most of that decrease came at the expense of other EU suppliers, especially Germany and Netherlands. Non-EU imports have remained fairly constant, led by Morocco, Kenya and Burkina Faso. Egypt has not been a major competitor in France because the market is primarily for "fine" beans.

Profitable demand in the French market is estimated at approximately 2,500 metric tonnes per month, making it the second largest market behind Germany. The total unsatisfied annual demand during the nine months when the market is under supplied is 22,500 tonnes. As in all EU markets, the period from June through August is unprofitable for Egypt.

A large portion of the profitable demand is already being supplied and leaves around 9,500 tonnes. Nevertheless, Egypt's lower delivered cost provides the exporter with assurance that he will have a profitable market. Domestically produced beans dominate the market in September when market supplies are large and prices are at their lowest. Imports are concentrated in April – June. As noted earlier, France is not a particularly attractive market for Egypt. Supplies are large the entire period from April through August and prices are low throughout the year, relative to other EU countries.

Spain and Italy are major intra-EU suppliers with significant shipments in April – July and somewhat smaller quantities in October – December. The major non-EU suppliers during that same period are Morocco and Kenya. During the off-season, from December through February, Burkina Faso and Senegal are major suppliers. Egypt ships small quantities in November – December.

**Figure 30**

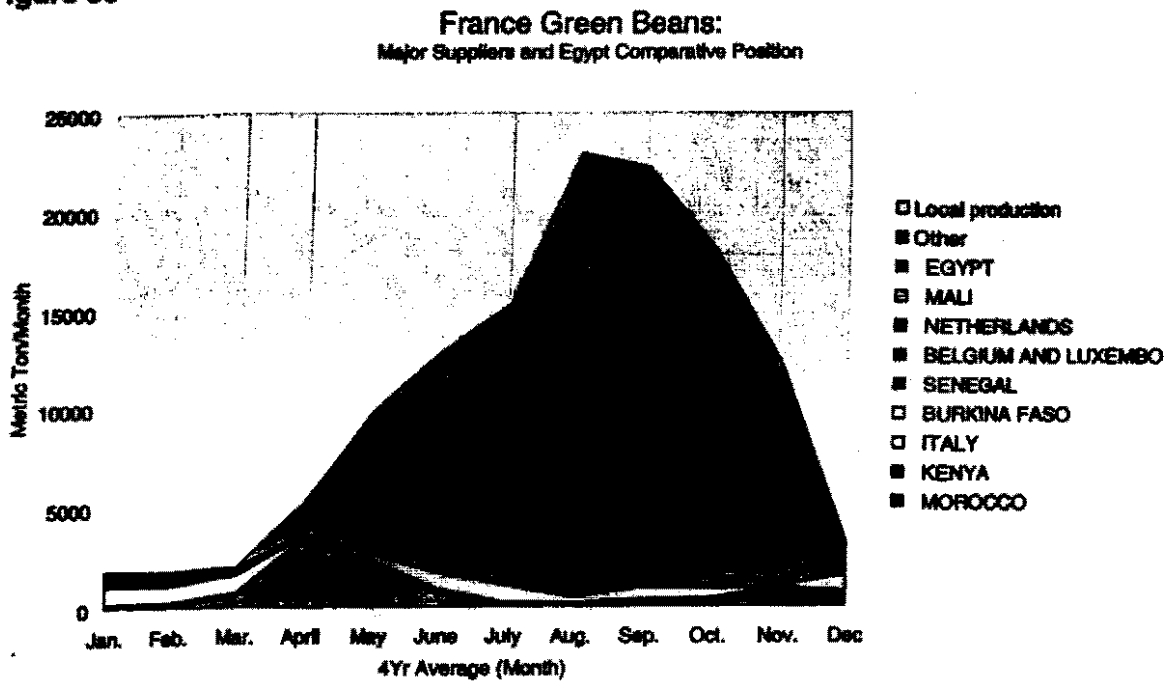





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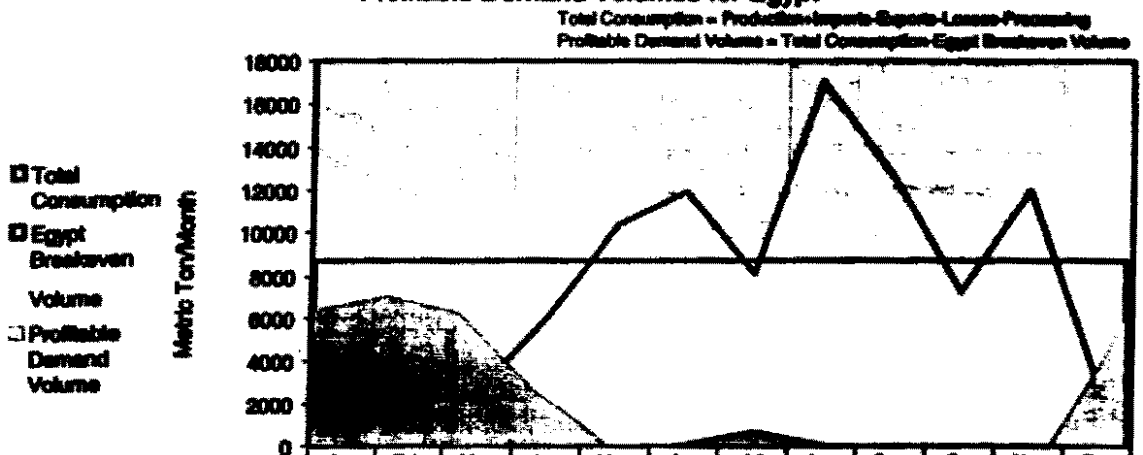
**Figure 31**

**France Green Beans**

Profitable Demand Volumes for Egypt




| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Consumption (Ton) | 2407 | 1767 | 2528 | 6076.88 | 10413.5 | 11935.3 | 8128 | 17084.8 | 12812.6 | 7884.88 | 11871.2 | 2868 |
| Egypt Breakeven Volume (Ton) | 6740.13 | 6740.13 | 6740.13 | 6740.13 | 6740.13 | 6740.13 | 6740.13 | 6740.13 | 6740.13 | 6740.13 | 6740.13 | 6740.13 |
| Profitable Demand Volume (Ton) | 6333.13 | 6973.13 | 6212.13 | 2663.25 | 0 | 0 | 614.13 | 0 | 0 | 0 | 0 | 5798.13 |
| Monthly CIF US$/Kg | 1.58477 | 1.57109 | 1.94242 | 1.63418 | 1.28863 | 0.00808 | 1.18837 | 0.82885 | 0.89484 | 1.61428 | 1.5737 | 1.53218 |
| Egypt CIF US$/Kg | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 |

Month of1998-2001 (4Yr Average)

## UNITED KINGDOM

UK bean imports were up from 1990 to 2001, slightly declining in 1993. Kenya is the dominant supplier, followed by Spain, Netherlands and Zimbabwe. Again, Egypt has not been a major supplier because UK consumers prefer "fine" beans and other varieties not currently produced in Egypt.

The UK market is the smallest of the four countries analyzed. Profitable demand is estimated at 800 tonnes per month. During the nine-month market window total profitable demand would be 7,200 tonnes.

**Figure 32**

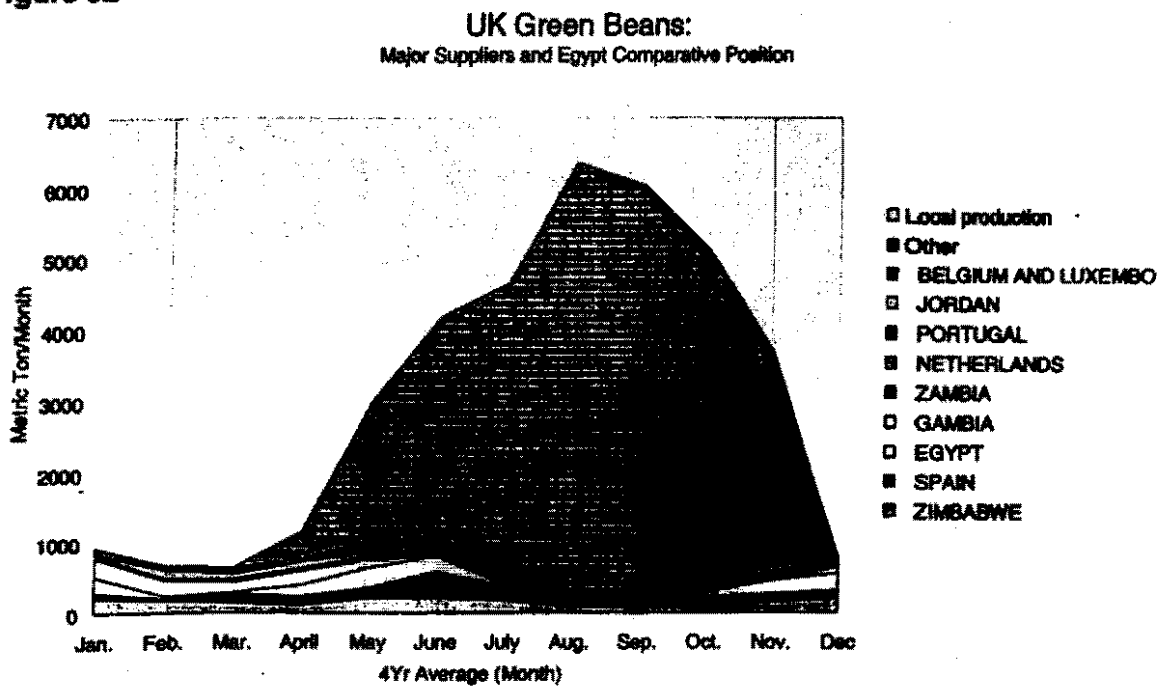
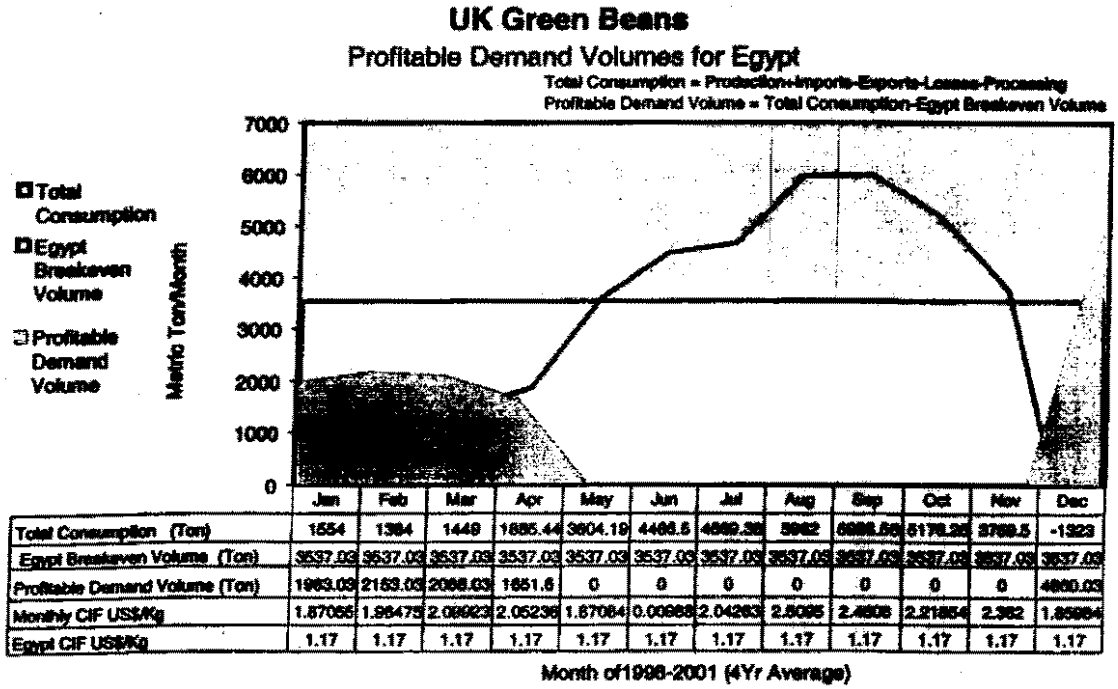



**Figure 33**




| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Consumption (Ton) | 1554 | 1384 | 1449 | 1695.44 | 3604.19 | 4466.5 | 4569.38 | 5962 | 6698.58 | 6178.26 | 3769.5 | -1323 |
| Egypt Breakeven Volume (Ton) | 3537.03 | 3537.03 | 3537.03 | 3537.03 | 3537.03 | 3537.03 | 3537.03 | 3537.03 | 3537.03 | 3537.03 | 3537.03 | 3537.03 |
| Profitable Demand Volume (Ton) | 1983.03 | 2153.03 | 2088.03 | 1851.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4860.03 |
| Monthly CIF US$/Kg | 1.87066 | 1.96475 | 2.09923 | 2.05236 | 1.87084 | 0.00688 | 2.04263 | 2.5095 | 2.4908 | 2.21864 | 2.382 | 1.85984 |
| Egypt CIF US$/Kg | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 |

As indicated earlier, prices are higher in the UK market than other countries, so potential profits are higher. This suggests that Egyptian exporters should concentrate on satisfying the 200 to 400 tonnes per month, which is not being supplied by competitors.

Several countries provide significant amounts of beans during the off-season. This creates a more competitive atmosphere for the Egyptian producer. The UK has a relatively large domestic production of beans, but only plays a strong part in the market during May and June. Kenya is the largest supplier, followed by Spain and Netherlands. It is possible that at

least parts of the Dutch exports to the UK in February – April are transhipments of Egyptian beans, since Dutch companies often engage in re-export.

## THE NETHERLANDS

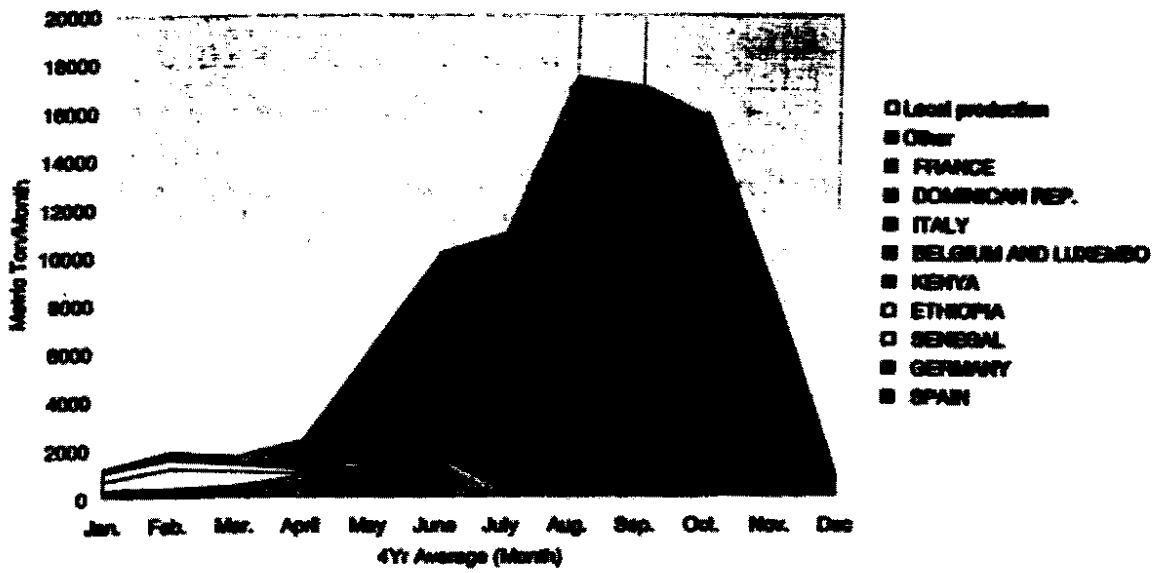
Netherlands imports have trended upward slightly since 1990, to about 30,000 tonnes per year. Germany and Spain are the main EU suppliers. The major non-EU supplier is Egypt, followed by Senegal and Kenya.

Between 1990 and 2001 Egyptian exports to Netherlands declined from 10,000 tonnes to 6,600 while Senegal increased its deliveries from 272 tonnes to over 2000 tonnes. Kenya's market share has been constant. Even the Dutch market has a growing preference for "fine" bean varieties rather than the "bobby" bean varieties produced and supplied by Egypt.

The Netherlands market is a very stable market with relatively low prices and minimal profit potentials. Profitable demand is estimated at 2000 tonnes per month. During the nine months market window, total potential annual demand would be 18,000 tonnes.

**Figure 34**

**The Netherlands Green Beans:**
**Major Suppliers and Egypt Comparative Position**

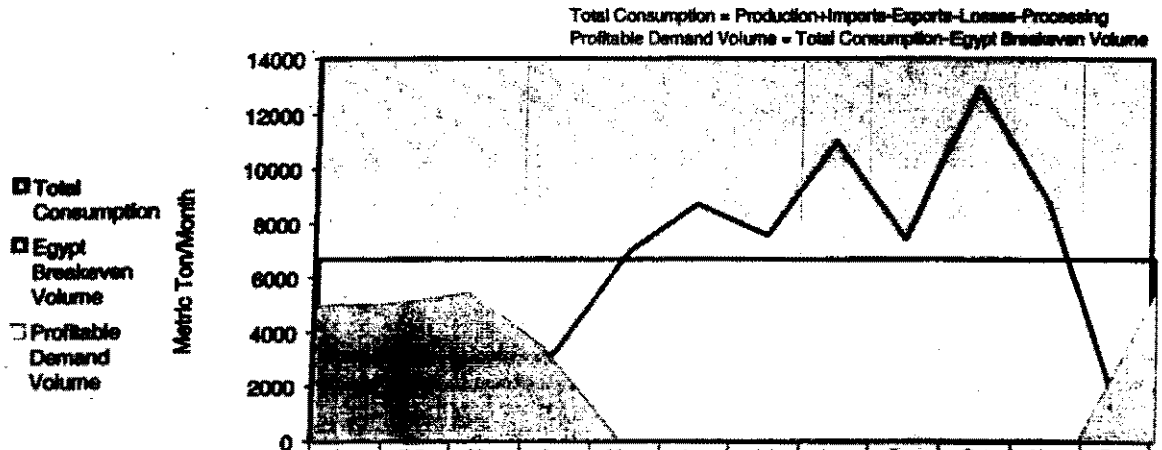



Only half of that potential demand is currently being met, which leaves for Egypt about 10,000 tonnes. France is the major supplier in the late summer, while Spain, Belgium-Luxembourg and Italy are other intra-EU suppliers with major shipments in April – July and somewhat smaller quantities in October – December. Egypt is the major supplier in the off-season (December – February). The other major non-EU supplier is Kenya. It is clear from the analysis of these four major EU markets that the Egyptian producer should try to fill the market window during the period of September to May. This is when competition is the weakest and when wholesale prices and potential profits are highest. Egypt is very well located, with the right climate, soil and water to quite profitably supply the huge unsatisfied demand for fresh beans in the EU countries. The four EU countries included in this analysis

can absorb the mind-boggling sum of over 15,800 metric tonnes per month at prices profitable to an Egyptian producer and exporters. *However, the reader must remember that this analysis focuses on "fine beans", not the traditional "bobby" varieties grown and exported by Egypt.* The analysis also assumes that Egyptian growers and exporters are prepared to dramatically change their cultural and management practices in order to assure delivery of the varieties and quality levels required to receive the average market price levels. Egyptian bean growers and exporters have not been able to do that in the past.

**Figure 35**

**The Netherlands Green Beans**
Profitable Demand Volumes for Egypt




| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Consumption (Ton) | 1714 | 1649 | 1257 | 3315 | 6668 | 6669 | 7572 | 11082 | 7488 | 12852 | 8822 | 1404 |
| Egypt Breakeven Volume (Ton) | 6676.08 | 6676.08 | 6676.08 | 6676.08 | 6676.08 | 6676.08 | 6676.08 | 6676.08 | 6676.08 | 6676.08 | 6676.08 | 6676.08 |
| Profitable Demand Volume (Ton) | 4962.08 | 5027.08 | 5419.08 | 3361.08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5272.08 |
| Monthly CIF US$/Kg | 1.51456 | 2.32315 | 2.35101 | 1.4529 | 1.2666 | 1.12592 | 1.48635 | 0.51998 | 0.776 | 0.54088 | 1.73088 | 1.59733 |
| Egypt CIF US$/Kg | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 |

Month of1998-2001 (4Yr Average)

## OTHER MARKETS

In addition to the above markets, other EU markets showed significant potential for Egypt; among those are Belgium and Luxembourg, Italy, Spain, and Denmark. The following graphs indicate the green beans export potential to those markets.

**Figure 36**

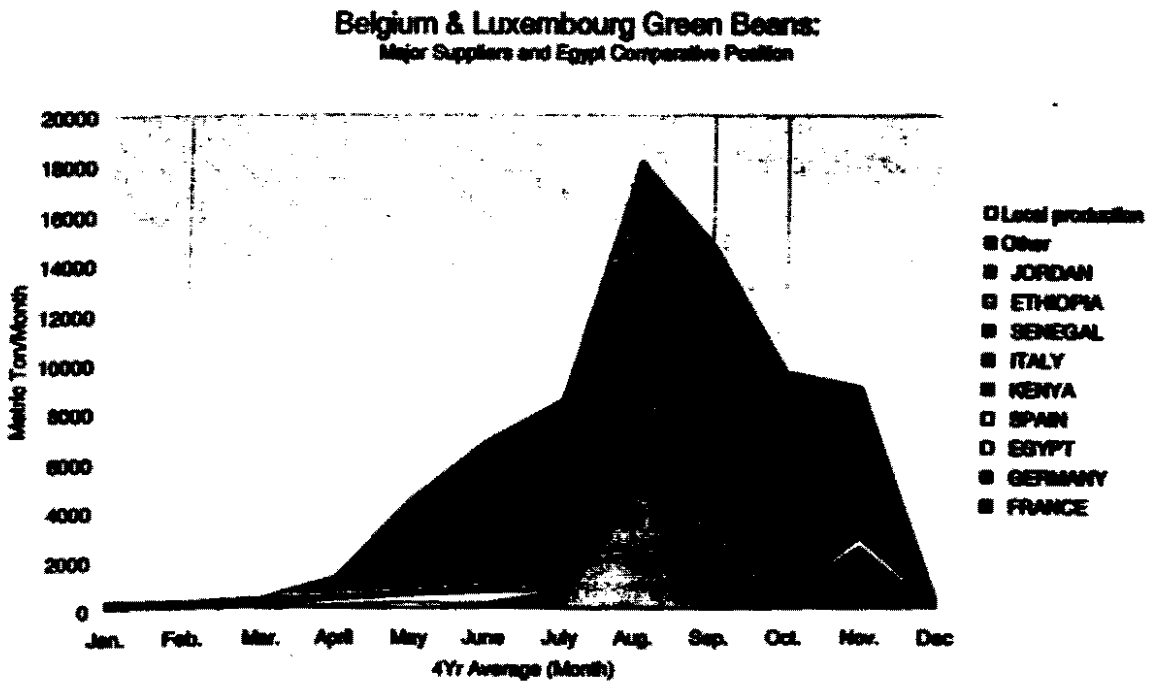



**Figure 37**

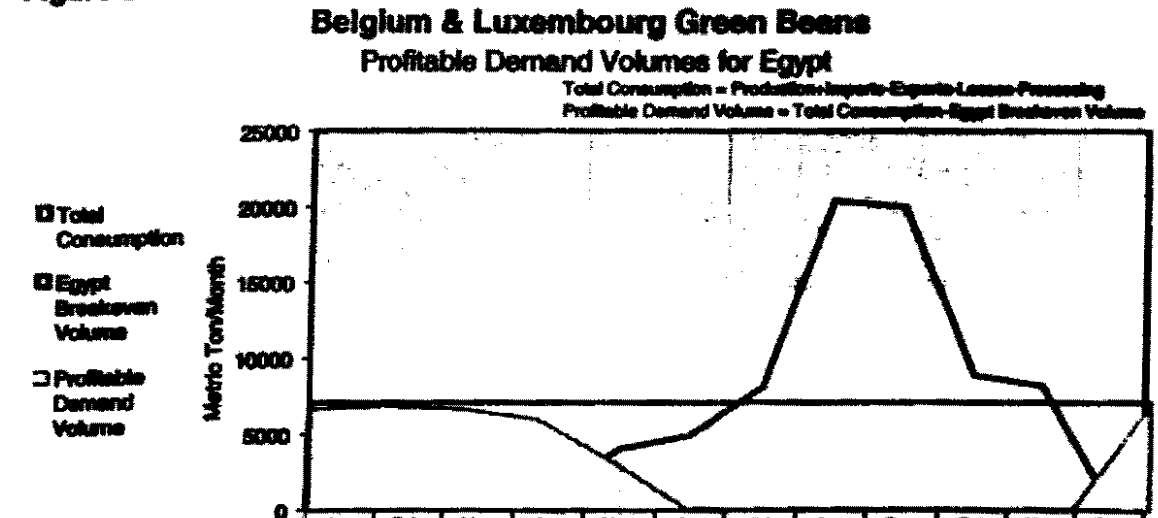







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**Figure 38**

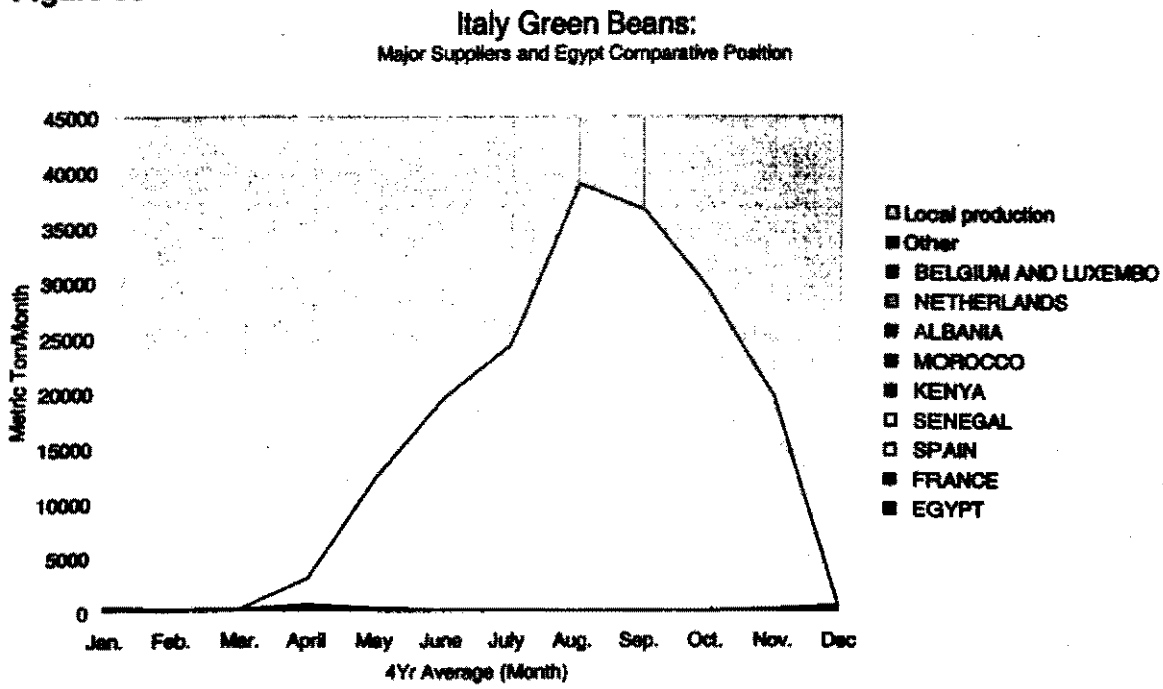
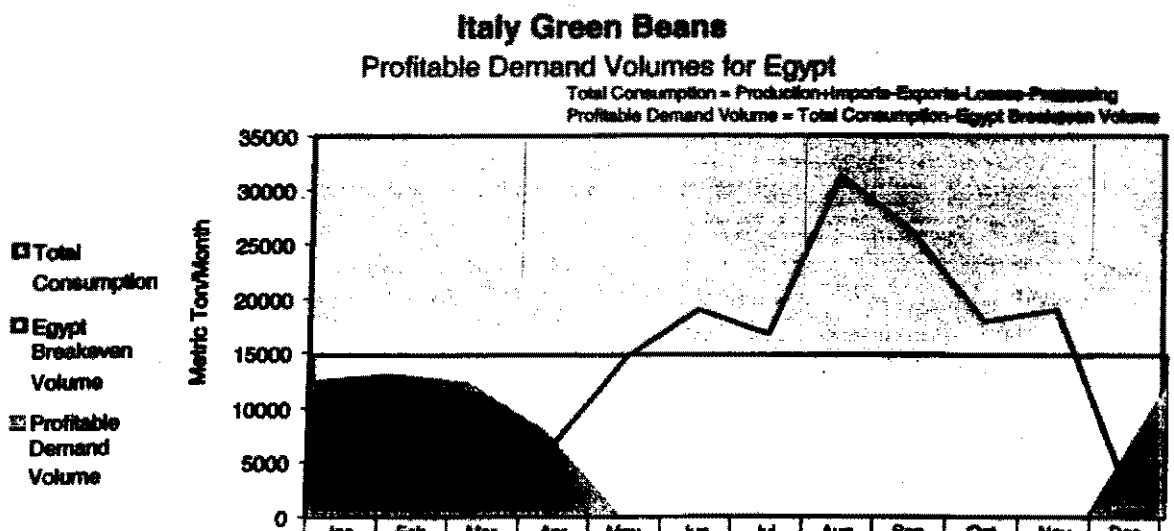



**Figure 39**




| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Consumption (Ton) | 2407 | 1767 | 2528 | 6839.71 | 14710.3 | 19003.1 | 16719.5 | 31230.2 | 26186.5 | 17868.7 | 19089.1 | 2950 |
| Egypt Breakeven Volume (Ton) | 14780.9 | 14780.9 | 14780.9 | 14780.9 | 14780.9 | 14780.9 | 14780.9 | 14780.9 | 14780.9 | 14780.9 | 14780.9 | 14780.9 |
| Profitable Demand Volume (Ton) | 12373.9 | 13013.9 | 12252.9 | 7941.18 | 70.6299 | 0 | 0 | 0 | 0 | 0 | 0 | 11830.9 |
| Monthly CIF US$/Kg | 1.58477 | 1.87108 | 1.94242 | 1.63418 | 1.28863 | 1.19402 | 1.19237 | 0.95553 | 0.99464 | 1.01402 | 1.5737 | 1.53312 |
| Egypt CIF US$/Kg | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 |



Prepared in cooperation with Agriculture-Led Export Businesses; USAID funded project; Implemented by Abt Associates, Inc.

**Figure 40**

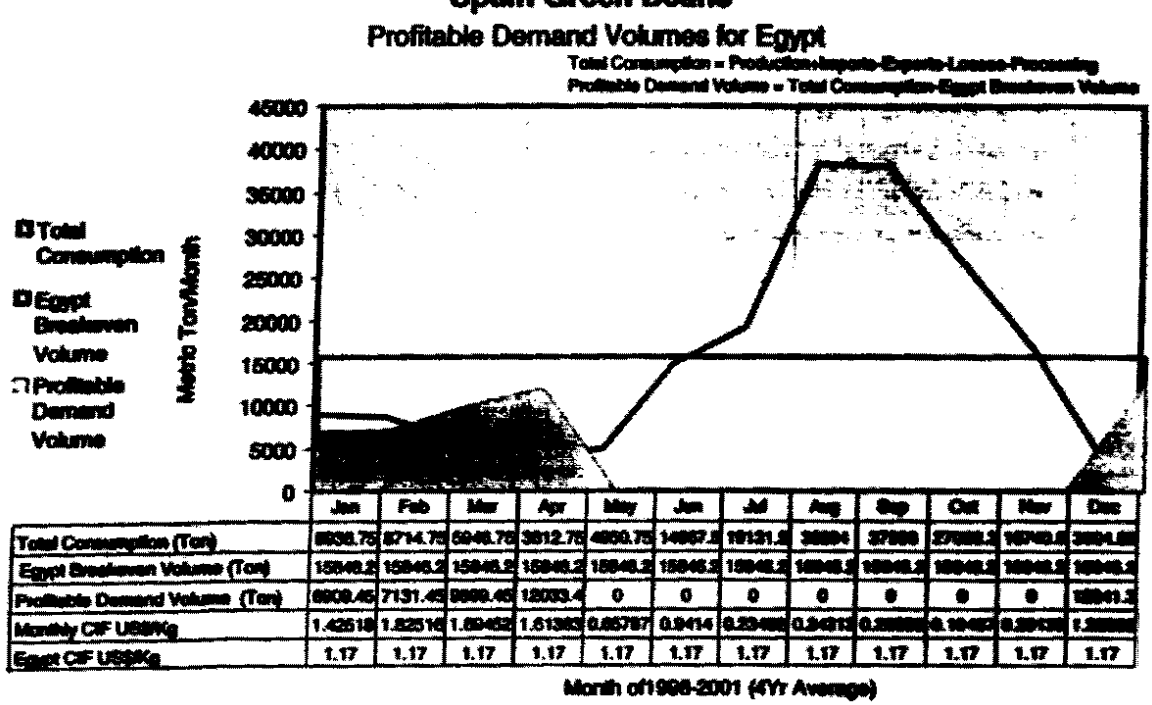



**Figure 41**

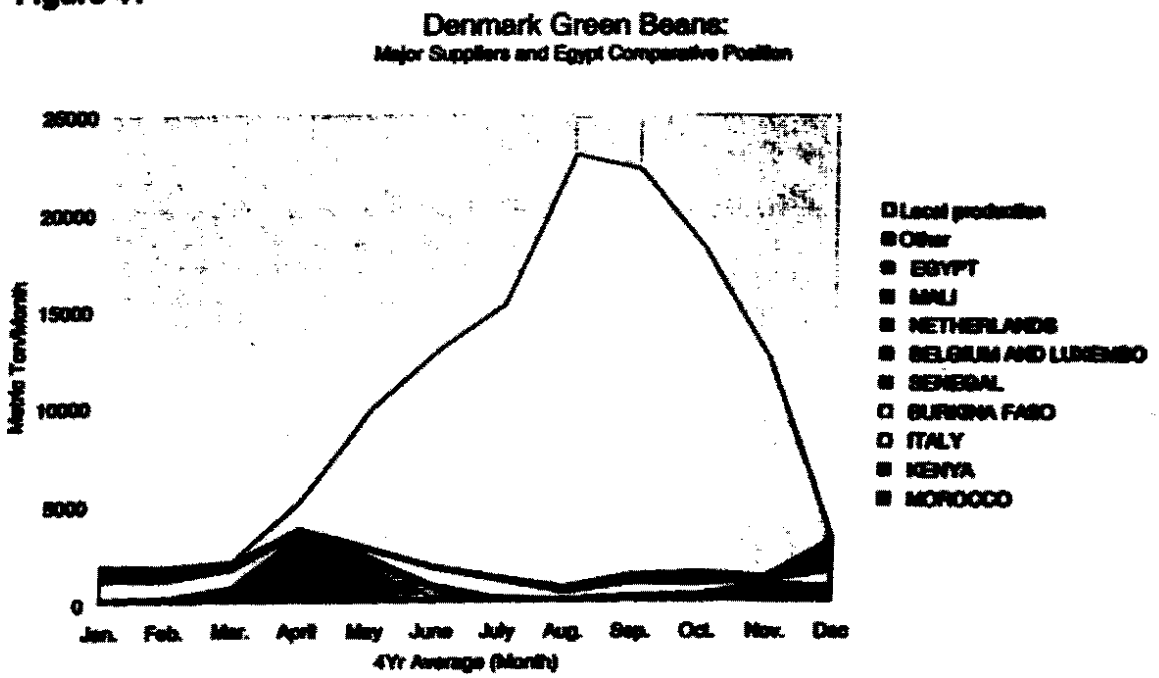
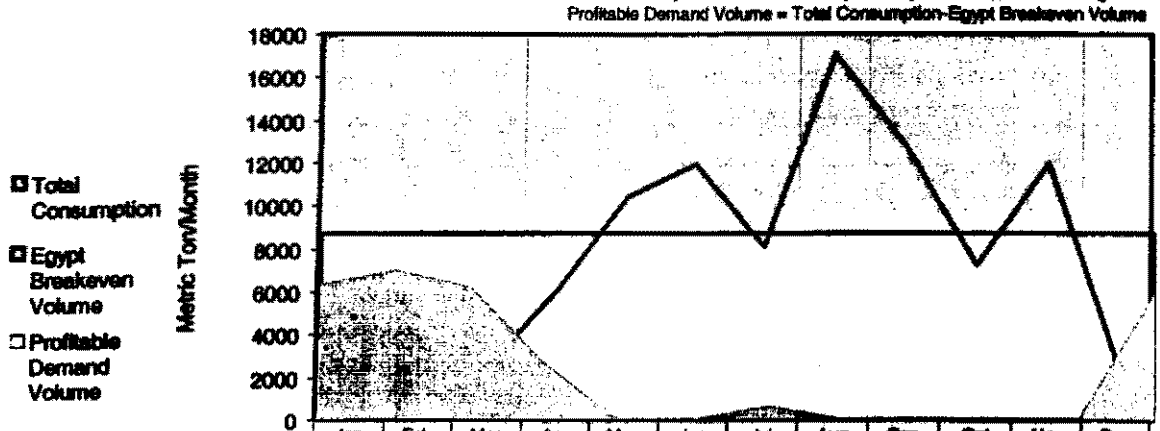


**Figure 42**

**Denmark Green Beans**

Profitable Demand Volumes for Egypt

Total Consumption = Production+Imports-Exports-Losses-Processing
Profitable Demand Volume = Total Consumption-Egypt Breakeven Volume




| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Consumption | 2407 | 1767 | 2528 | 6076.88 | 10413.5 | 11935.3 | 8128 | 17064.5 | 12812.6 | 7264.88 | 11971.3 | 2950 |
| Egypt Breakeven Volume | 8740.13 | 8740.13 | 8740.13 | 8740.13 | 8740.13 | 8740.13 | 8740.13 | 8740.13 | 8740.13 | 8740.13 | 8740.13 | 8740.13 |
| Profitable Demand Volume | 6333.13 | 6973.13 | 6212.13 | 2663.26 | 0 | 0 | 614.13 | 0 | 0 | 0 | 0 | 5790.13 |
| Monthly CIF US$/Kg | 1.58477 | 1.87108 | 1.94242 | 1.83418 | 1.26863 | 0.00609 | 1.19237 | 0.95553 | 0.99464 | 1.01402 | 1.5737 | 1.53312 |
| Egypt CIF US$/Kg | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 |

Month of1998-2001 (4Yr Average)

## Galia Melons

Among products showing very rapid increase and great potential for Egypt in the European markets are Galia melons. Major suppliers of melons to the EU market are Spain and Israel in addition to large volumes coming from Central America.

Egypt has certain advantages among current suppliers and can serve the increasing demand through the best quality price combinations compared to any other competitor.

The following summarizes the melons market in Europe and potential for Egypt.

## GERMANY

**Figure 43**

Germany imports of Galia melons increased dramatically over recent years. Imports increased from about 30,000 MT per year up to almost 90,000 MT. As local production is non-existent, total German consumption will be supplied by imports.

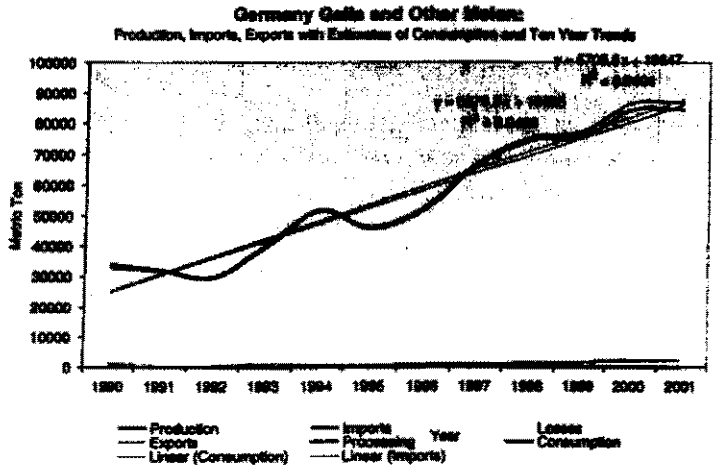





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**Figure 44**

Spain is the major Galia melon supplier to the German market, however imports from far away countries such as Costa Rica and South Africa play a significant role. The market is unsaturated during the winter months from Nov. – April, which opens up excellent market opportunities for Egypt.

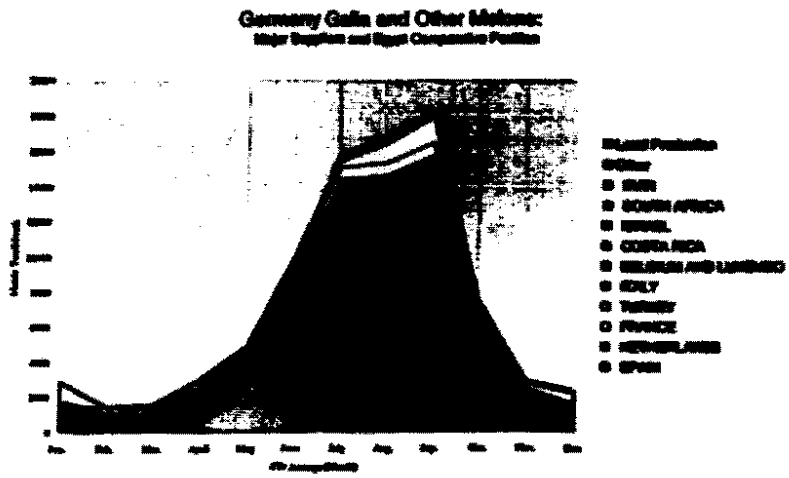
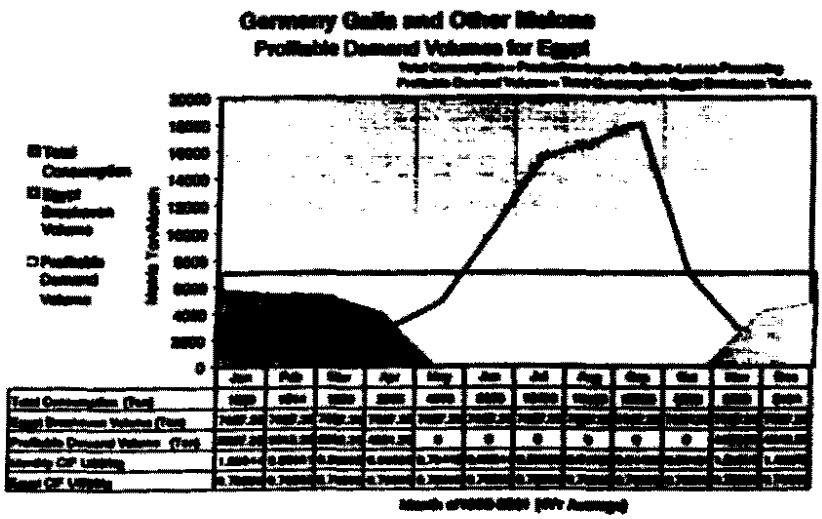



**Figure 45**

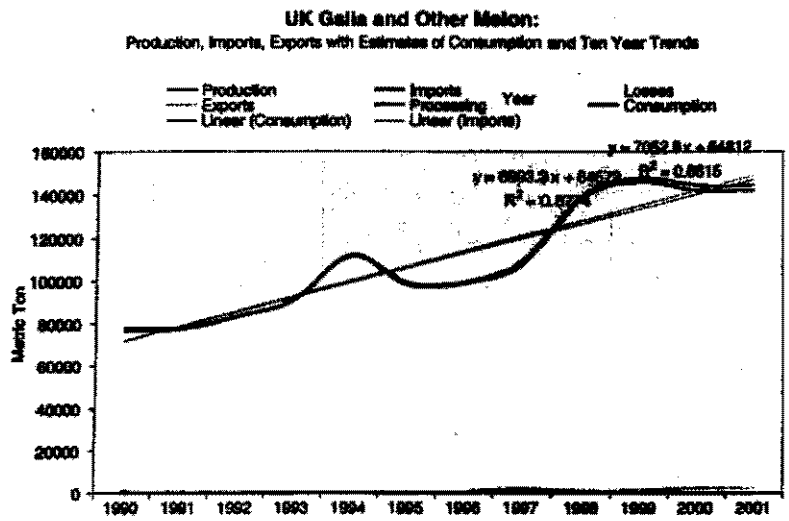
Germany offers serious suppliers with a market of more than 80 thousand metric tonnes during the winter season while prices never drop below the Egyptian break-even prices.



## THE UNITED KINGDOM

### Figure 46

United Kingdom imports of Galia melons almost doubled during the analysis period, which reflects the consumption patterns of this high export potential product.




### Figure 47

Imports from Northern America dominate the market and compete head-to-head with Spanish product.

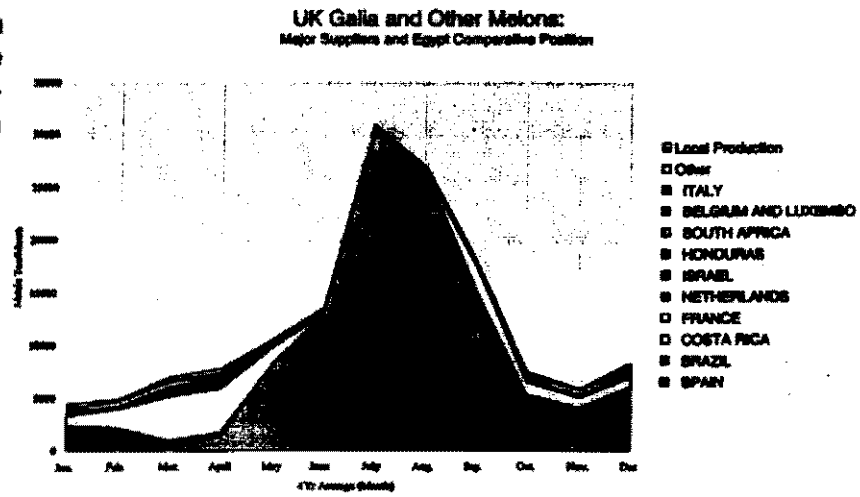





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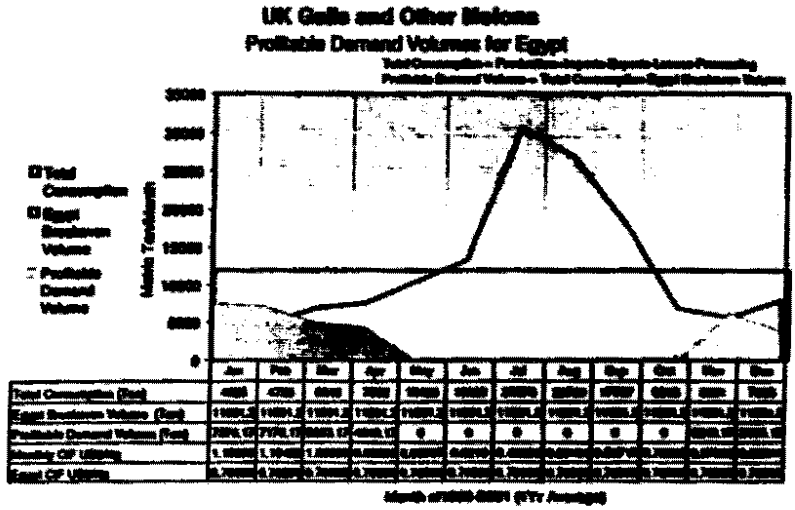
**Figure 48**

The United Kingdom offers Egyptian and other serious competitors with a market of more than 50 thousand metric tonnes of Galia melons each year.




## FRANCE

**Figure 49**

French people prefer another type of melon called Charantee. Import trends of this type of melon showed significant increases during the last few years, especially during the period 1996 – 2001.

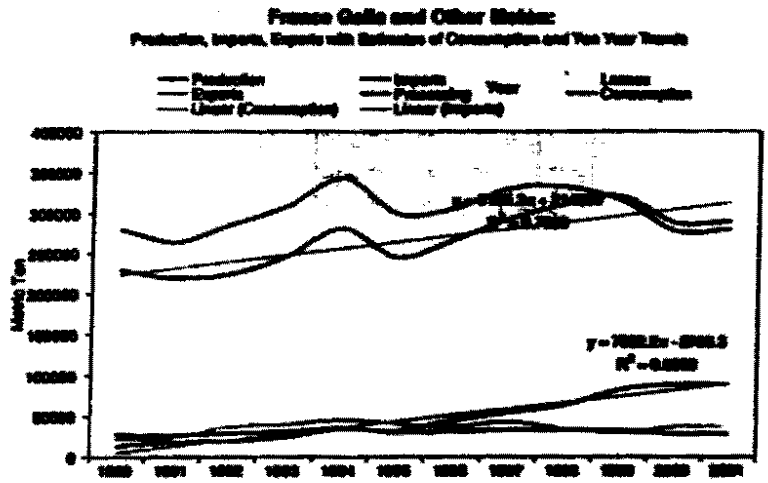


**Figure 50**

Morocco is the most important Non-European melon supplier to the French market. However, significant volumes of melons are shipped to the French market from Central America.

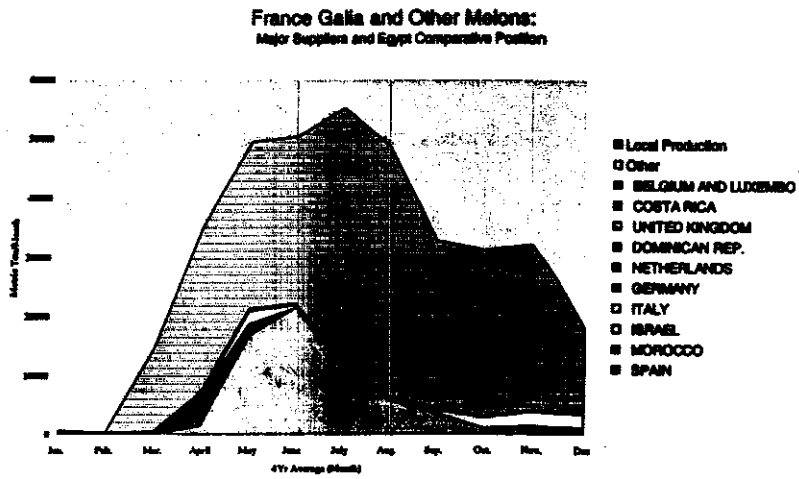
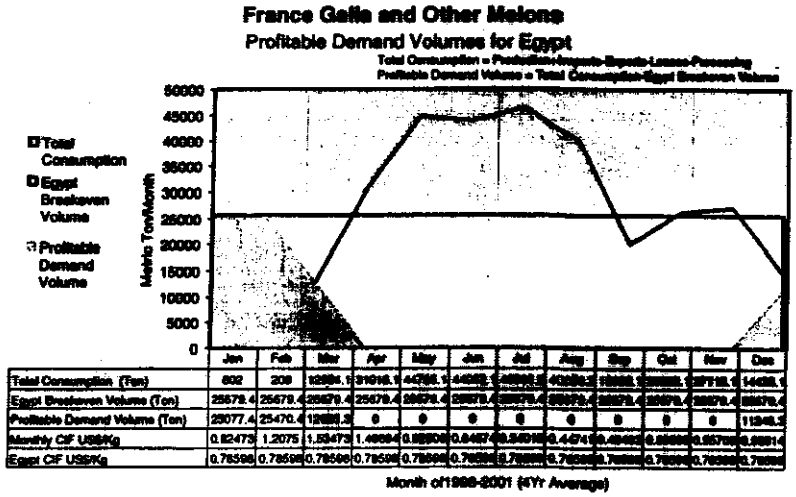



**Figure 51**

France offers Egyptian and other serious competitors a market with more than a 40 thousand metric tonne opportunity of Galia melons each year. ,



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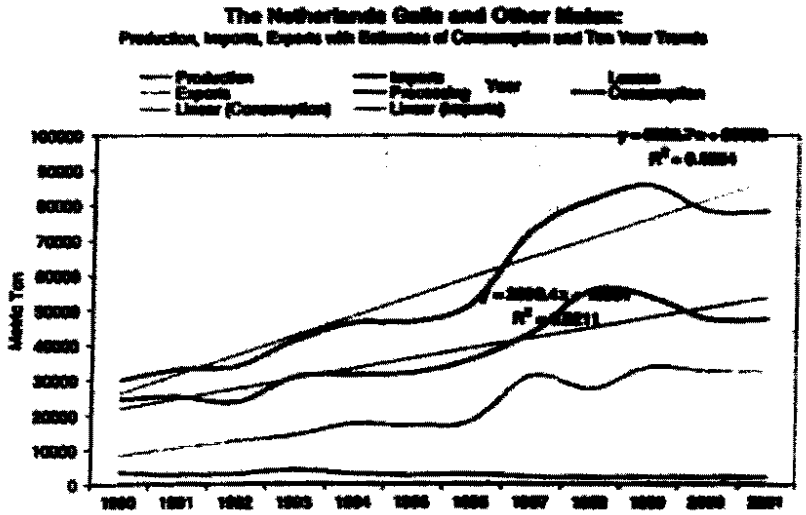
## THE NETHERLANDS

### Figure 52

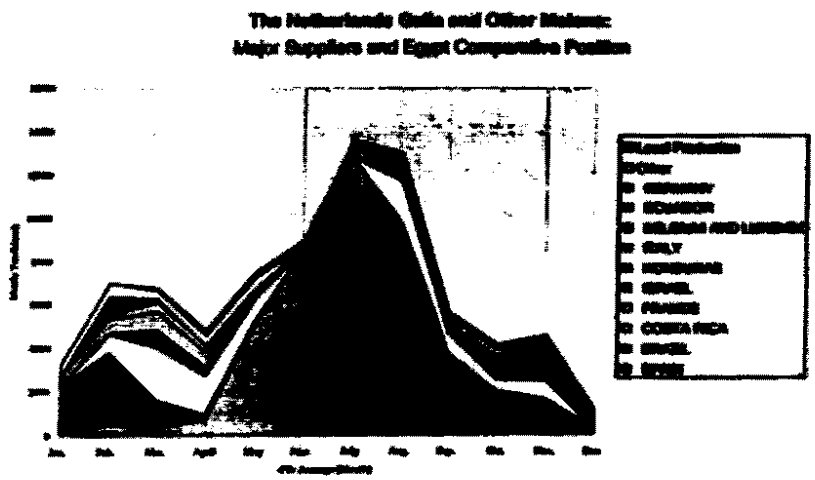
The Netherlands market showed very positive growth in melon imports during the period 1989 – 2001, as the local production is almost non-existent.

This graph clearly shows the Netherlands re-exports of melons to other importing markets, mostly in the northern part of the EU (Scandinavia countries)




### Figure 53

The Netherlands market is open to Non-EU melon supplies more than any other EU markets. Central American suppliers play a significant role in the Netherlands melon market.

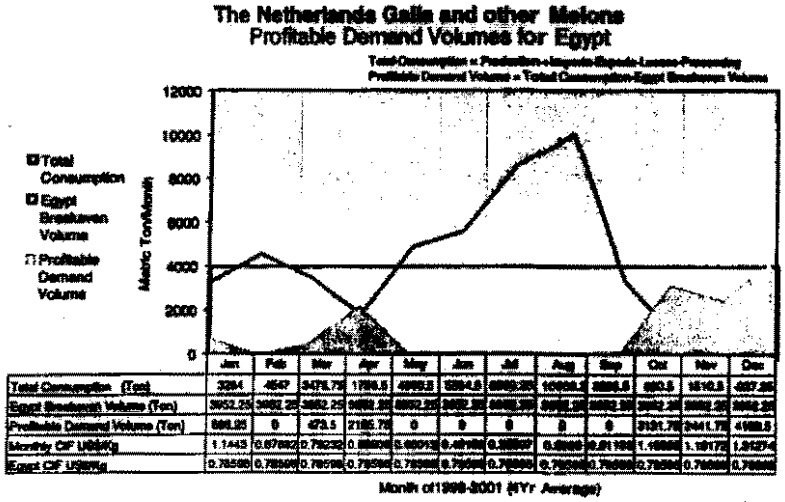




Prepared in cooperation with Agriculture-Led Export Businesses; USAID funded project; implemented by Abt Associates, Inc.

**Figure 54**

The Netherlands offers Egypt and other serious competitors with a market of more than 35 thousand metric tons of Galia melons each year.




## BELGIUM & LUXEMBOURG

**Figure 55**

Belgium & Luxembourg Galia melon imports almost trebled during the analysis period – from about 15,000 MT to more than 45,000 MT per year in 2001.

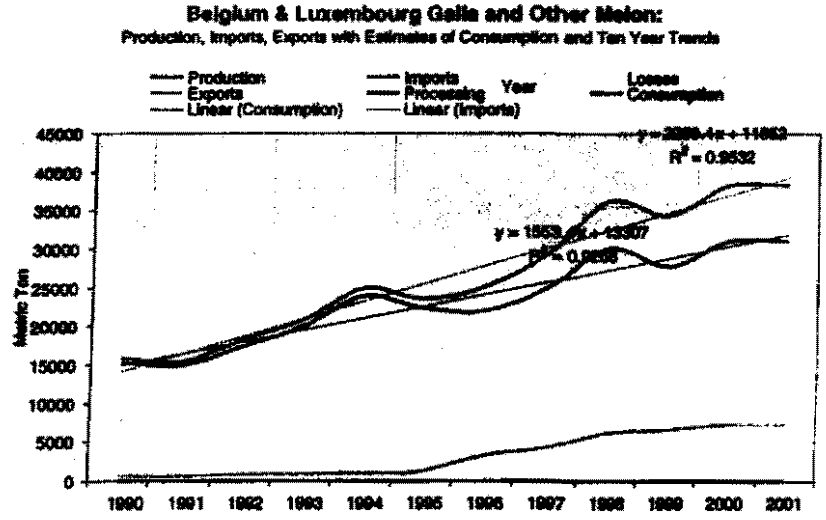


**Figure 56**

Central American countries, Israel, and Spain dominate Galia melon supplies to Belgium and Luxembourg markets with variations in seasonal supplies to avoid direct competition with the Spanish supplies.

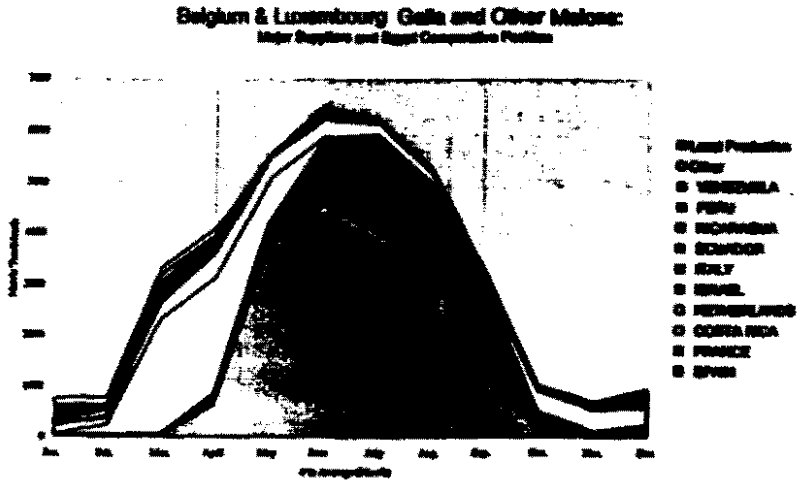
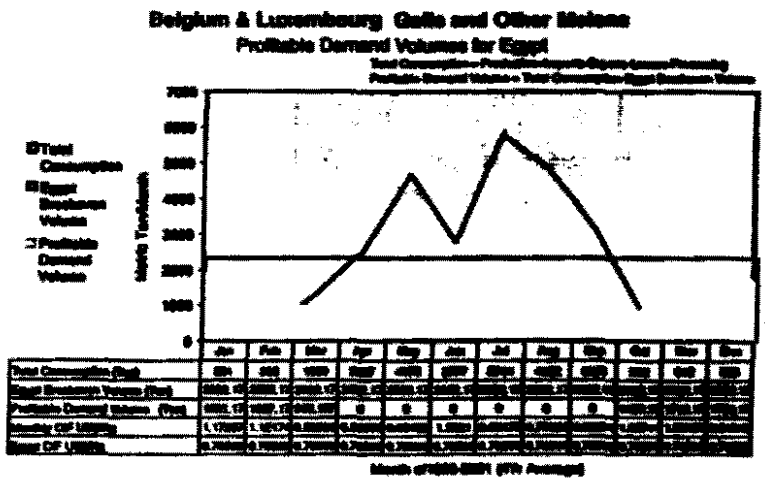



**Figure 57**

Belgium and Luxembourg markets offer attractive export opportunities for Egyptian melon suppliers.



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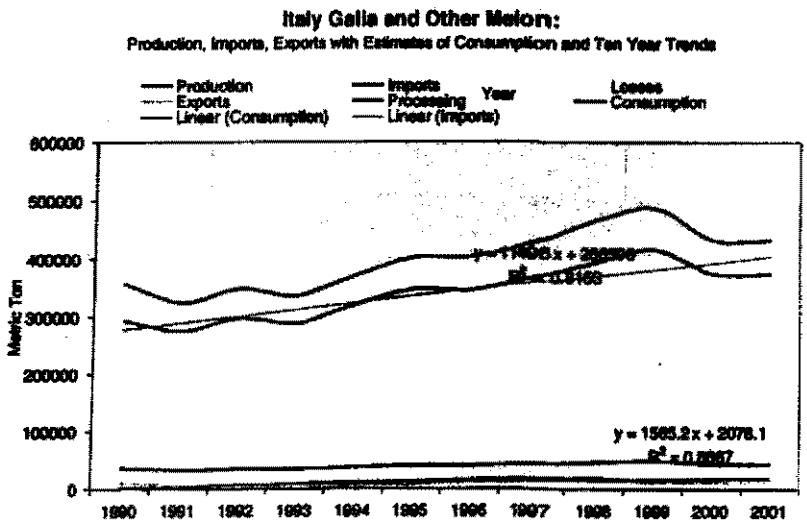
## ITALY

### Figure 58

Italian consumers showed very positive demand for Galia melons during the period of analysis. As local production is available, imports are satisfying only a small portion of the Italian demand. However imports in the last few years increased to reflect the fact that local production is limited and not able to satisfy the increasing market demand for Galia melons.




### Figure 59

Apart from local production, which satisfies demand during the summer period, significant volumes of Galia melons are imported from other countries. External demand is expected to increase over time.

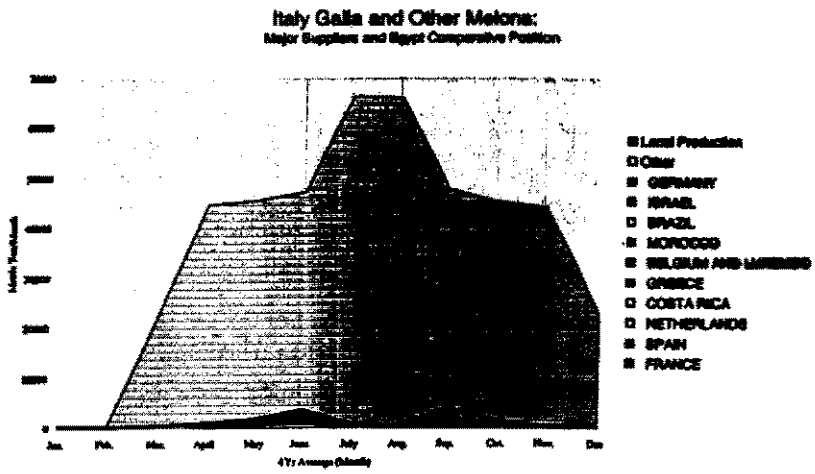





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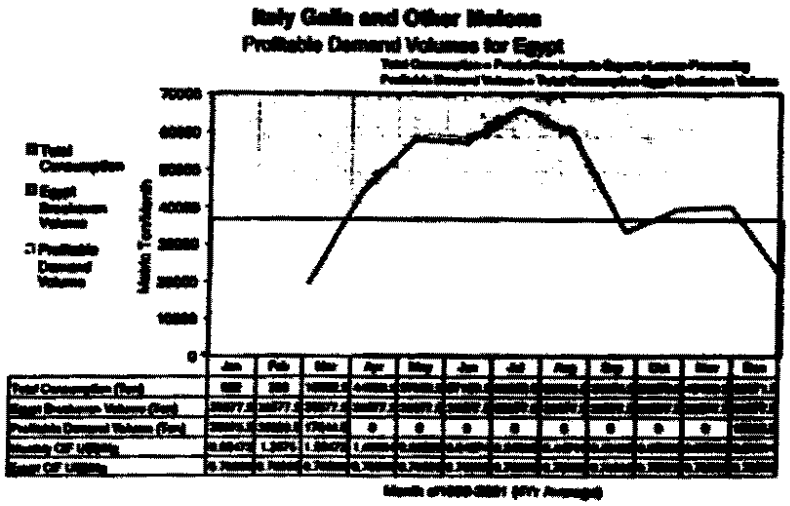
**Figure 60**

A volume of about 30 thousand metric tonnes of Galia melons in the Italian market could be easily recognized. This profitable demand volume is expected to increase in the coming years.




## OTHER MARKETS

Galia melons have started to gain popularity in the other EU markets in recent years, which potentially open more windows for Egyptian Galia melons in those markets as summarized in the following graphs:

**Figure 61**

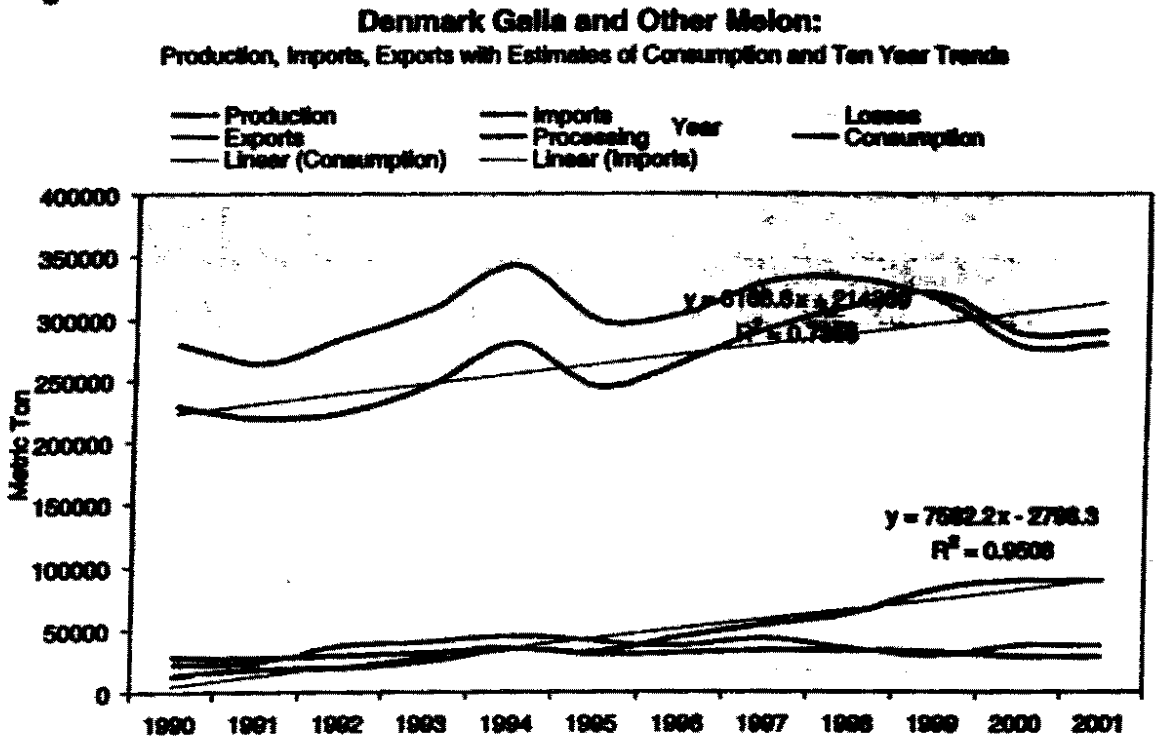
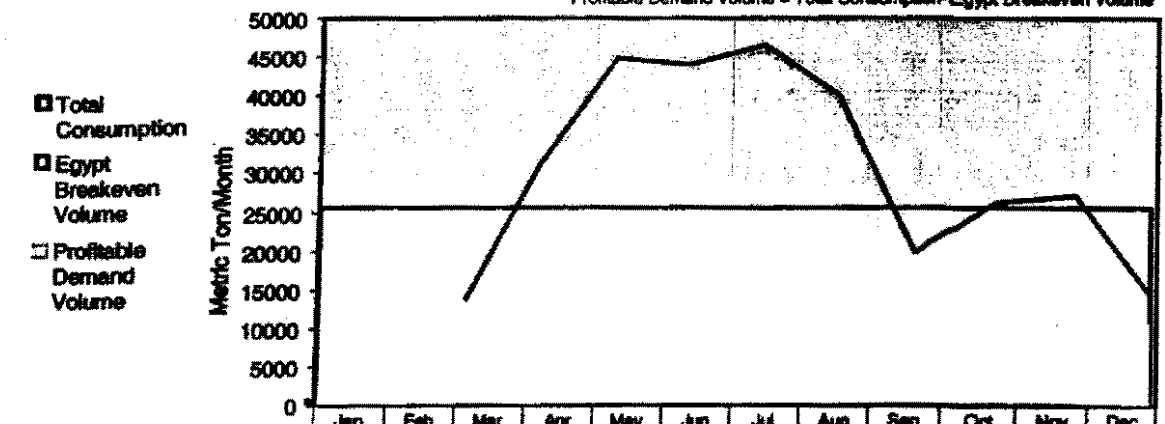


**Figure 62**

## Denmark Galia and Other Melons

Profitable Demand Volumes for Egypt

Total Consumption = Production+Imports-Exports-Losses-Processing
Profitable Demand Volume = Total Consumption-Egypt Breakeven Volume




| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Consumption (Ton) | 802 | 209 | 12994.1 | 31016.1 | 44785.1 | 44082.1 | 46586.2 | 40050.2 | 19999.1 | 26902.1 | 27113.1 | 14433.1 |
| Egypt Breakeven Volume (Ton) | 25679.4 | 25679.4 | 25679.4 | 25679.4 | 25679.4 | 25679.4 | 25679.4 | 25679.4 | 25679.4 | 25679.4 | 25679.4 | 25679.4 |
| Profitable Demand Volume (Ton) | 25077.4 | 25470.4 | 12685.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11246.3 |
| Monthly CIF US$/Kg | 0.82473 | 1.2075 | 1.53473 | 1.46894 | 0.82506 | 0.64574 | 0.34015 | 0.44741 | 0.49483 | 0.80808 | 0.95709 | 0.93314 |
| Egypt CIF US$/Kg | 0.78598 | 0.78598 | 0.78598 | 0.78598 | 0.78598 | 0.78598 | 0.78598 | 0.78598 | 0.78598 | 0.78598 | 0.78598 | 0.78598 |

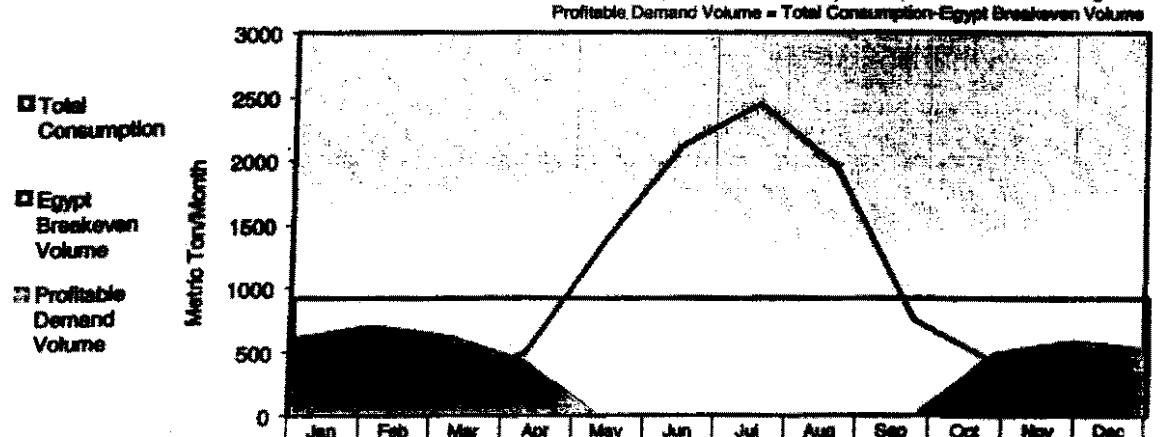
Month of1998-2001 (4Yr Average)

**Figure 63**

## Sweden Galia and Other Melons

Profitable Demand Volumes for Egypt

Total Consumption = Production+Imports-Exports-Losses-Processing
Profitable Demand Volume = Total Consumption-Egypt Breakeven Volume




| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Consumption (Ton) | 300 | 215 | 284 | 464 | 1371 | 2118 | 2444 | 1961 | 752 | 422 | 334 | 369 |
| Egypt Breakeven Volume (Ton) | 922 | 922 | 922 | 922 | 922 | 922 | 922 | 922 | 922 | 922 | 922 | 922 |
| Profitable Demand Volume (Ton) | 622 | 707 | 638 | 458 | 0 | 0 | 0 | 0 | 0 | 500 | 588 | 553 |
| Monthly CIF US$/Kg | 0.89433 | 1.45808 | 0.99444 | 1.05032 | 0.71755 | 0.72507 | 0.60744 | 0.62312 | 0.61466 | 0.80119 | 1.47602 | 1.46107 |
| Egypt CIF US$/Kg | 0.78598 | 0.78598 | 0.78598 | 0.78598 | 0.78598 | 0.78598 | 0.78598 | 0.78598 | 0.78598 | 0.78598 | 0.78598 | 0.78598 |

Month of1998-2001 (4Yr Average)



Prepared in cooperation with Agriculture-Led Export Businesses; USAID funded project; Implemented by Abt Associates, Inc.

**Figure 64**

**Finland Galia and Other Melon:**

Production, Imports, Exports with Estimates of Consumption and Ten Year Trends

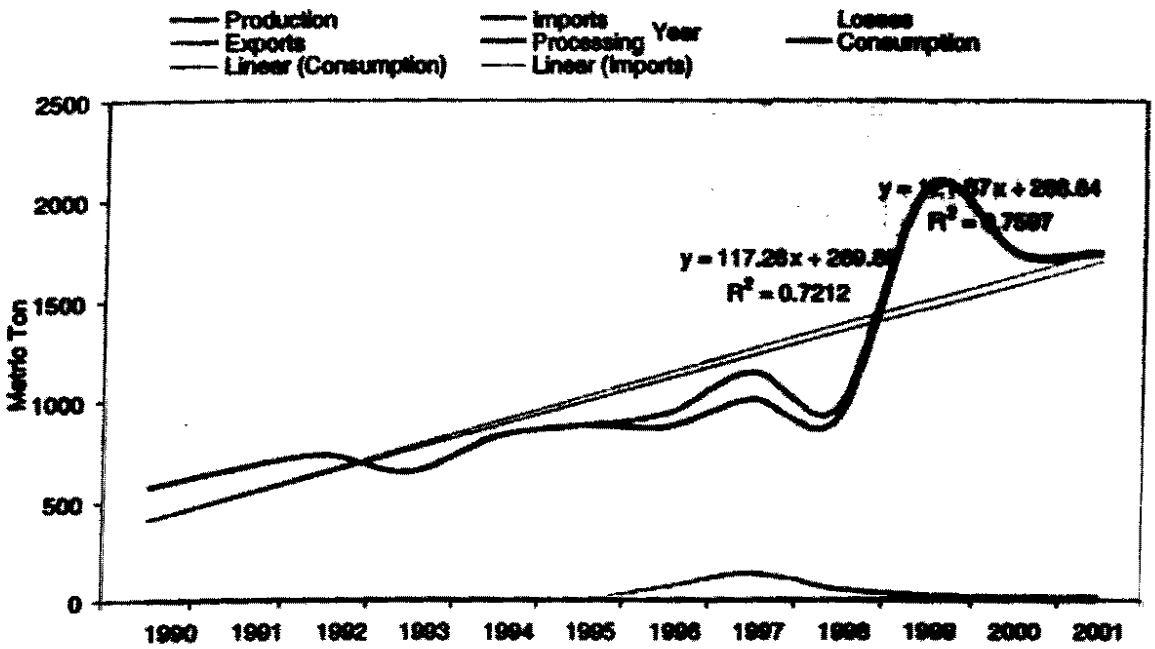
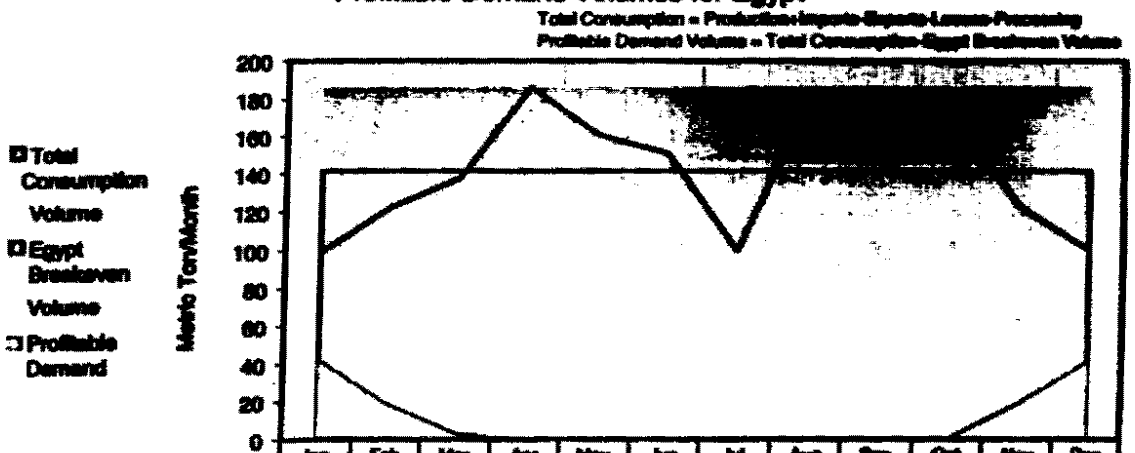



**Figure 65**

**Finland Galia and Other Melons**

Profitable Demand Volumes for Egypt



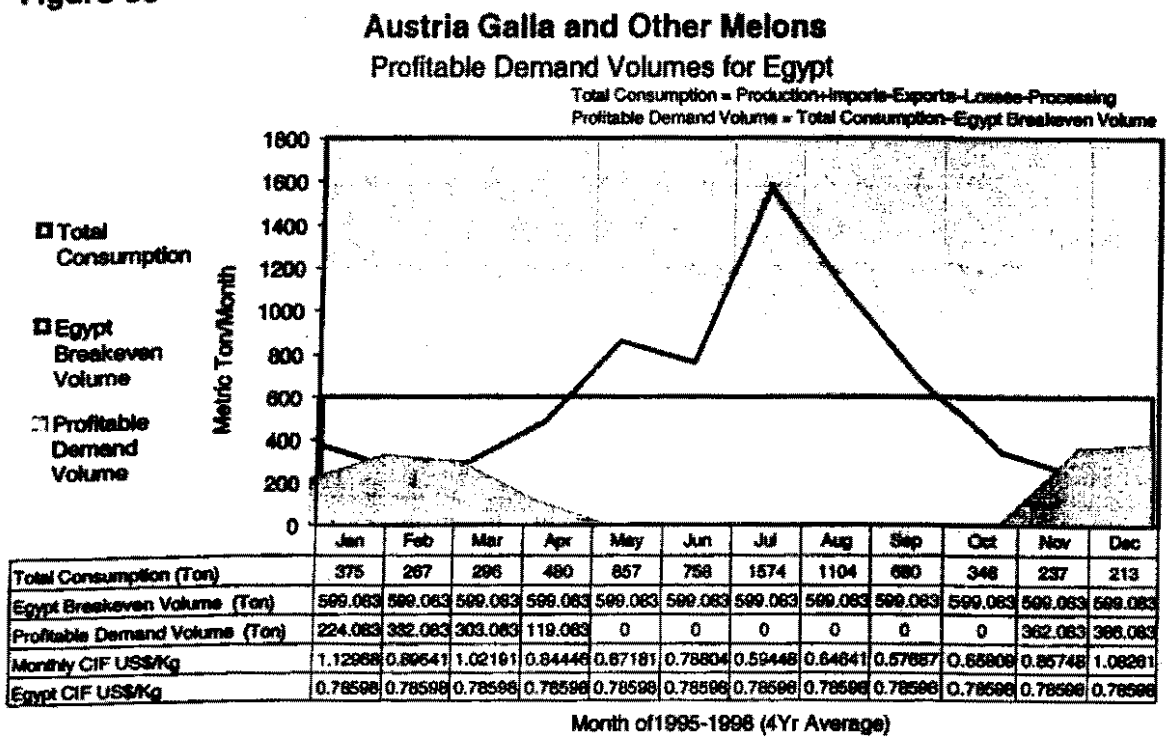

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Consumption (Ton) | 89 | 132 | 138 | 166 | 161 | 151 | 100 | 179 | 167 | 172 | 152 | 109 |
| Egypt Breakeven Volume (Ton) | 141.417 | 141.417 | 141.417 | 141.417 | 141.417 | 141.417 | 141.417 | 141.417 | 141.417 | 141.417 | 141.417 | 141.417 |
| Profitable Demand Volume (Ton) | 42.4167 | 19.4167 | 3.41667 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19.4167 | 41.4167 |
| Monthly CIF US$/Kg | 1.12207 | 0.8268 | 0.94809 | 1.00181 | 0.76236 | 0.71999 | 0.69408 | 0.69999 | 0.69999 | 0.76804 | 0.76999 | 0.81219 |
| Egypt CIF US$/Kg | 0.78500 | 0.78500 | 0.78500 | 0.78500 | 0.78500 | 0.78500 | 0.78500 | 0.78500 | 0.78500 | 0.78500 | 0.78500 | 0.78500 |

Month of1998-2001 (4Yr Averages)



Prepared in cooperation with Agriculture-Led Export Businesses; USAID funded project; Implemented by Abt Associates, Inc.

**Figure 66**




| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Consumption (Ton) | 375 | 267 | 296 | 480 | 857 | 758 | 1574 | 1104 | 680 | 346 | 237 | 213 |
| Egypt Breakeven Volume (Ton) | 599.083 | 599.083 | 599.083 | 599.083 | 599.083 | 599.083 | 599.083 | 599.083 | 599.083 | 599.083 | 599.083 | 599.083 |
| Profitable Demand Volume (Ton) | 224.083 | 332.083 | 303.083 | 119.083 | 0 | 0 | 0 | 0 | 0 | 0 | 362.083 | 386.083 |
| Monthly CIF US$/Kg | 1.12968 | 0.89641 | 1.02191 | 0.84446 | 0.67181 | 0.78804 | 0.59446 | 0.64641 | 0.57687 | 0.65809 | 0.85748 | 1.08261 |
| Egypt CIF US$/Kg | 0.78598 | 0.78598 | 0.78598 | 0.78598 | 0.78598 | 0.78598 | 0.78598 | 0.78598 | 0.78598 | 0.78598 | 0.78598 | 0.78598 |

**Figure 67**

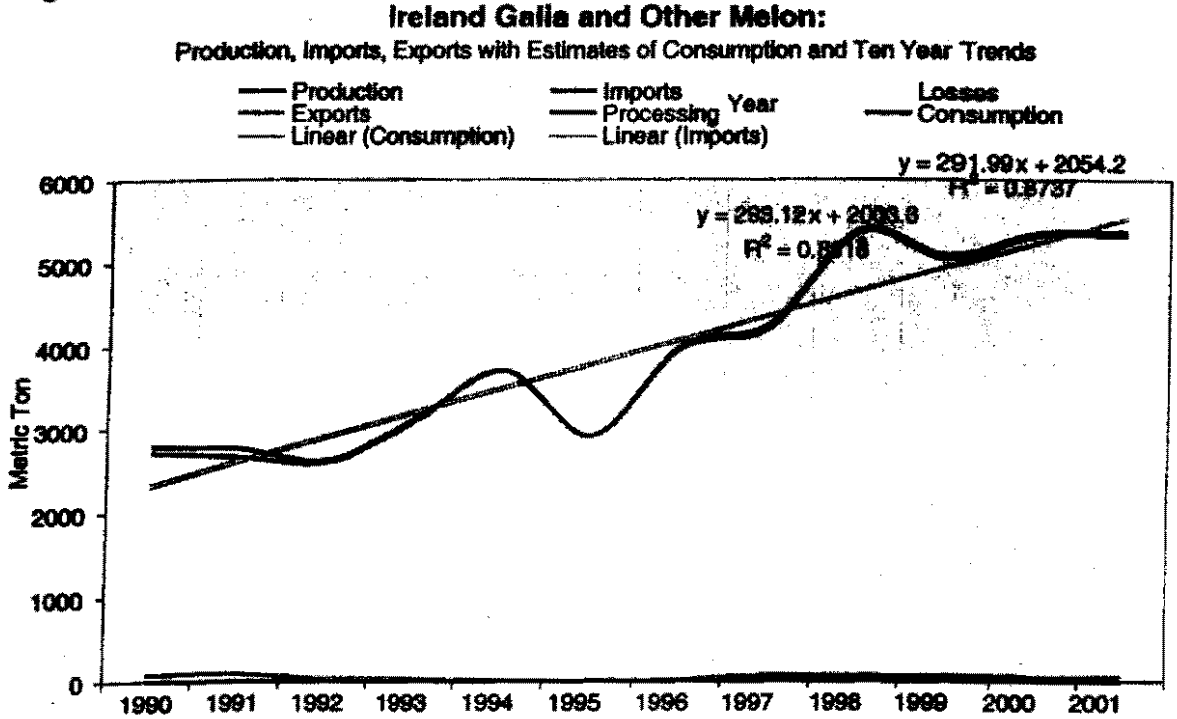





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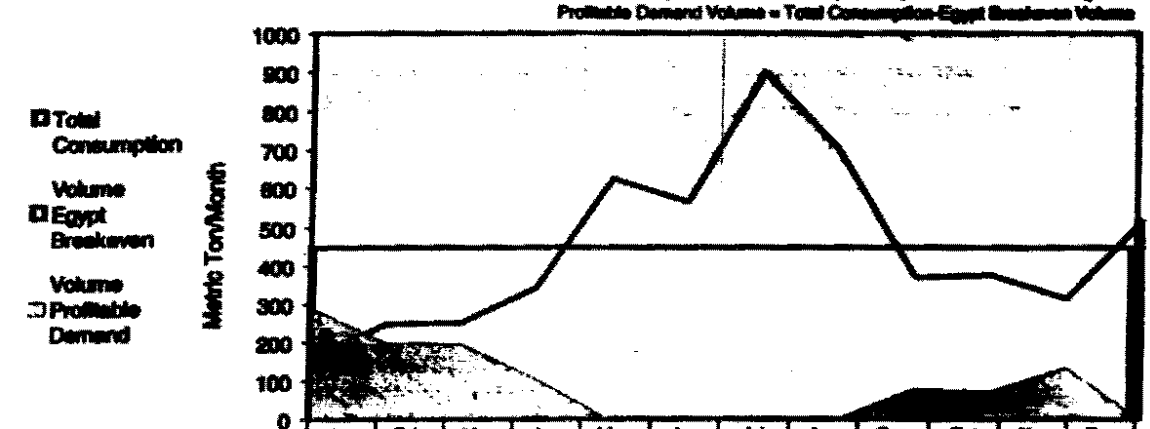
**Figure 68**

## Ireland Galia and Other Melons

### Profitable Demand Volumes for Egypt

Total Consumption = Production+Imports-Exports-Losses-Processing
Profitable Demand Volume = Total Consumption-Egypt Breakeven Volume




| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Consumption (Ton) | 157 | 248 | 252 | 339 | 625 | 595 | 902 | 701 | 369 | 376 | 311 | 515 |
| Egypt Breakeven Volume (Ton) | 446.583 | 446.583 | 446.583 | 446.583 | 446.583 | 446.583 | 446.583 | 446.583 | 446.583 | 446.583 | 446.583 | 446.583 |
| Profitable Demand Volume (Ton) | 289.583 | 198.583 | 194.583 | 107.583 | 0 | 0 | 0 | 0 | 77.5833 | 71.5833 | 135.583 | 0 |
| Monthly CIF US$/Kg | 0.80948 | 0.89071 | 1.01073 | 1.05151 | 0.84816 | 0.80503 | 0.52086 | 0.80831 | 0.8783 | 0.84583 | 0.83048 | 0.83767 |
| Egypt CIF US$/Kg | 0.78586 | 0.78586 | 0.78586 | 0.78586 | 0.78586 | 0.78586 | 0.78586 | 0.78586 | 0.78586 | 0.78586 | 0.78586 | 0.78586 |

Month of1998-2001 (4Yr Average)

# Appendices



Prepared in cooperation with Agriculture-Led Export Businesses; USAID funded project; Implemented by Abt Associates, Inc.

## Appendix

# EU Fresh Produce Market Access

### Entry-price system

In principle, the price setting of products in a free market is established on the basis of demand and supply. However, in the EU the price setting for imported fruit and vegetables is regulated following the so-called entry-price system. This system came to replace the reference price system, which set import duties on fruit and vegetables until the end of 1994.

The entry-price system became operational on January 1, 1995. The entry-price system establishes an EU entry (i.e. minimum) price. If a product's import price lies under this entry-price, a duty is imposed (depending on the difference between the two prices). The entry-price system applies to tomatoes, apples, lemons, cucumbers and courgettes the entire year and to other products during certain periods.

Following the entry-price system, the value of every imported 'party' (the terminology used in the official documents) must in principle conform to the entry price. If a 'party' is imported at a price under the entry-price, an extra agricultural duty will be applied in addition to the Customs duty. With this agricultural duty the price ranges between 100% and 102 % of the entry price. The agricultural duty is applied as follows:

- When the value of the imported party is between 92 percent and 94 percent of the entry-price, 8 percent of the entry-price will be added to the normal Customs duty
- When the value of the imported party is between 94 percent and 96 percent of the entry-price, 6 percent of the entry-price will be added to the normal Customs duty
- When the value of the imported party is between 96 percent and 98 percent of the entry-price, 4 percent of the entry-price will be added to the normal Customs duty
- When the value of the imported party is between 98 percent and 100 percent of the entry-price, 2 percent of the entry-price will be added to the normal Customs duty.

Parties, which are imported at less than 92 percent of the entry-price, will be penalized by an extra levy, known as the maximum tariff equivalent. For apples and pears the limit is set at 86 percent (following a protest by Chile) and for lemons at 84 percent of the entry price.

The following table lists the products to which the entry-price system applies, together with the periods during which the entry price is effective, the entry price and the maximum tariff equivalent. Please note that the list is not comprehensive but merely indicative.



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**Entry prices and maximum tariff equivalent for fresh fruit and vegetables (in € / 100 kg / net)**

| | Period | | Entry price | Maximum tariff equivalent |
|---|---|---|---|---|
| **Fresh Vegetables** | | | | |
| Tomatoes | 1/1– | 31/3 | 84.6 | 29.8 |
| | 1/4– | 30/4 | 112.6 | 29.8 |
| | 1/5– | 14/5 | 72.6 | 29.8 |
| | 15/5– | 31/5 | 72.2 | 29.8 |
| | 1/6– | 30/9 | 52.6 | 29.8 |
| | 1/10– | 20/12 | 62.6 | 29.8 |
| | 21/12– | 31/12 | 67.6 | 29.8 |
| Cucumbers | 1/1– | end/2 | 67.5 | 37.8 |
| | 1/3– | 30/4 | 110.5 | 37.8 |
| | 1/5– | 30/9 | 48.1 | 37.8 |
| | 1/10– | 10/11 | 68.3 | 37.8 |
| | 11/11– | 31/12 | 60.5 | 37.8 |
| Artichokes | 1/1– | 31/5 | 82.6 | 22.9 |
| | 1/6– | 30/6 | 65.4 | 22.9 |
| | 1/11– | 31/12 | 94.3 | 22.9 |
| Courgettes | 1/1– | 31/1 | 48.8 | 15.2 |
| | 1/2– | 31/3 | 41.3 | 15.2 |
| | 1/4– | 31/5 | 69.2 | 15.2 |
| | 1/6– | 31/7 | 41.3 | 15.2 |
| | 1/8– | 31/12 | 48.8 | 15.2 |
| **Fresh Fruits** | | | | |
| Oranges | 1/1– | 31/5 | 35.4 | 7.1 |
| | 1/12– | 31/12 | 35.4 | 7.1 |
| Mandarins; clementines wilkings and similar hybrids, clementines | 1/1– | end/2 | 64.9 | 10.6 |
| | 1/11– | 31/12 | 64.9 | 10.6 |
| Monreales and satsumas | 1/1– | end/2 | 28.6 | 10.6 |
| | 1/12– | 31/12 | 28.6 | 10.6 |
| Mandarins and wilkings | 1/1– | end/2 | 28.6 | 10.6 |
| | 1/11– | 31/12 | 28.6 | 10.6 |
| Tangerines | 1/1– | end/2 | 28.6 | 10.6 |
| | 1/11– | 31/12 | 28.6 | 10.6 |
| Other citrus hybrids | 1/1– | end/2 | 28.6 | 10.6 |
| | 1/11– | 31/12 | 28.6 | 10.6 |
| Lemons | 1/1– | 31/5 | 46.2 | 25.6 |
| | 1/6– | 31/10 | 55.8 | 25.6 |
| | 1/11– | 31/12 | 46.2 | 25.6 |
| Grapes | 21/7– | 31/10 | 54.6 | 9.6 |
| | 1/11– | 20/11 | 47.6 | 9.6 |
| Apples | 1/1– | 30/6 | 56.8 | 23.8 |
| | 1/7– | 31/12 | 45.7 | 23.8 |
| Pears | 1/1– | 30/4 | 51 | 23.8 |
| | 1/7– | 31/7 | 46.5 | 23.8 |
| | 1/8– | 31/10 | 38.8 | 23.8 |
| | 1/11– | 31/12 | 51 | 23.8 |
| Apricots | 1/6– | 20/6 | 107.1 | 22.7 |
| | 21/6– | 30/6 | 87.3 | 22.7 |



Prepared in cooperation with Agriculture-Led Export Businesses; USAID funded project; Implemented by Abt Associates, Inc.

| | | | | |
|---|---|---|---|---|
| | 1/7– | 31/7 | 77.1 | 22.7 |
| Cherries | 21/5– | 31/5 | 149.4 | 27.4 |
| | 1/6– | 31/7 | 125.4 | 27.4 |
| | 1/8– | 10/8 | 91.6 | 27.4 |
| Peaches and nectarines | 11/6– | 20/6 | 88.3 | 13 |
| | 21/6– | 31/7 | 77.6 | 13 |
| | 1/8– | 30/9 | 60 | 13 |
| Plums | 11/6– | 30/9 | 69.6 | 10.3 |

The value of parties, which are imported under 92 percent, is not relevant to the amount of the maximum tariff equivalent. The amount of this penalty is fixed, regardless of whether the import value is 91 percent or 60 percent. In most cases, the tariff equivalent amounts to a significant percentage of the entry price.

Consequently, the value of the imported product can be raised far above the entry price, making the price of the product less competitive. During the first years in which the new system was operational, most entry prices were lower than the former reference prices. However, during specific periods, the entry prices of certain products are higher than the reference prices.

It is possible for an importer to clear a shipment through Customs using either the invoice value or a set value. In order to avoid a punitive tax (the maximum tariff equivalent), the CIF value must at least be on the same level as the established entry price for the product in question.

***Special safeguard clause***

In order to protect European producers and consumers against exceptional, market disrupting influences, France and the Mediterranean member states first advocated the special safeguard clause. In the case of an excess supply by the European producers, the imports from extra-EU countries must be limited. During crop failures, a more generous admission policy must apply to imports. For certain products in certain periods, reaction levels are determined, i.e. the so-called 'trigger volume'.

If the imported quantities of these products exceed the trigger volume, a supplementary duty is imposed on the extra imported quantity, being equal to one third of the normal Customs duty. This is under the condition, however, that the highest specific import duty (maximum tariff equivalent) is already being applied to the lot concerned and that the import takes place during the period in which the supplementary duty is applicable.

**Value Added Tax (VAT)**

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

# International Trade Centre
## UNCTAD/WTO

# *TradeSim (second version), a gravity model for the calculation of trade potentials for developing countries and economies in transition*

***Explanatory notes***

**Market Analysis Section, May 2003**

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WTO OMC

## LIST OF ABBREVATIONS

| | |
|---|---|
| ACP | African Caribbean and Pacific |
| AGOA | African Growth and Opportunity Act |
| CIF | Cost, Insurance and freight |
| COMESA | Common Market for Eastern and Southern Africa |
| EBA | Everything but Arms |
| ECOWAS | Economic Community of West African States |
| EIU | Economist Intelligence Unit |
| EPZ | Export Processing Zone |
| EU | European Union |
| FAO | Food and Agriculture Organization of the United Nations |
| FDI | Foreign Direct Investment |
| FOB | Free on board |
| GDP | Gross Domestic Product |
| HS | Harmonized Commodity Description and Coding System |
| IMF | International Monetary Fund |
| ITC | International Trade Centre |
| LDC | Least Developed Countries |
| MIGA | Multilateral Investment Guarantee Agency (World Bank Group) |
| MTS | Multilateral Trade System |
| NEPAD | New Partnership for Africa's Development |
| Nes | Not elsewhere specified |
| OECD | Organisation for Economic Cooperation and Development |
| p.a. | Per annum |
| PPP | Power Purchase Parity |
| RTA | Regional Trade Agreement |
| SACU | Southern African Customs Union |
| SITC | Standard International Trade Classification |
| SMEs | Small and medium-sized enterprises |
| TBT | Technical barrier to trade |
| UEMOA | Union Economique et Monetaire Ouest-Africaine |
| UNCTAD | United Nations Conference on Trade and Development |
| UNSD | United Nations Statistics Division |
| USA | United States of America |
| WTO | World Trade Organisation |

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This document has not been formally edited by the International Trade Centre UNCTAD/WTO.



Comments and suggestions for amelioration are welcome. Please contact the Market Analysis Section at email: MAS@intracen.org, tel: +41-22-730.04.13.

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# 1. The design and applications of gravity models

## A. Design

Numerous empirical studies showed that trade flows follow the physical principles of gravity: two opposite forces determine the volume of bilateral trade between countries - the level of their economic activity and income, and the extent of impediments to trade. The latter include in particular transportation costs, trade policies, uncertainty, cultural differences, limited overlap in consumer preference schemes, various bottlenecks etc. National borders are among these impediments, even for industrialised countries (Mac Callum, 1995). While trade potential is the result of matched export capacities and import demands at the microeconomic level, on a more aggregated level of analysis, proximity in demand, in per capita income, in space, and in culture, are key macroeconomic determinants of export potentials. Thus various combinations of macro-economic variables, such as gross domestic products and populations with geographic distance, are powerful predictors of trade potentials. Hence gravity equations have been used extensively in the empirical literature on international trade. (Havrylyshin and Pritchett, 1991; Frankel and Wei, 1993; Bayoumi and Eichengreen, 1995).

Within this expanding literature, gravity equations share a common design that can be customised for different purposes:

- First, a gravity equation is *bilateral*. It explains a trade-related dependent variable, by the combination of macroeconomic variables (size, income, exchange rates, prices etc.) for both countries. Indicators of transportation costs between the two countries and more generally market access variables are added.

- Second, a gravity equation *may be used in order to estimate either determinants of the volume or determinants of the nature of trade flows*. In the latter case, the purpose is to use an index of intra-industry trade as dependent variable[1].

-Third, *theory* definitively *provides strong* foundations *to a modelling based on rough indicators*, which is quite useful when the purpose is to integrate a large number of countries in the sample or when the statistical background for (developing) countries is limited.

-Fourth, there is inevitably a discrepancy between the theoretical model and the « ideal» equation that would fit the data well. Border trade, seasonal trade, trade preferences or regional integration may be controlled for with specific effects by pair of country; such a solution however jeopardises any attempt to use the model for forecasting purposes[2]. This justifies the *introduction of cultural, historical or institutional determinants* in equations designed for an applied purpose.

Lastly, given the type of variables under consideration, gravity-type econometric models are estimated using rather aggregated data. Numerous studies run equations on total exports.

[1] While income per capita is a good indicator of demand and trade volumes, differences in per capita incomes reflect differences in factor proportions: rich countries are generally relatively well endowed in physical and human capital, in contrast to developing countries. Hence, large differences in per capita income will be associated with a lower share of intra-industry trade in bilateral trade.

[2] This is the solution suggested by Hummels and Levinsohn (1995). In contrast, Fontagné, Freudenberg and Pajot (1999) highlight the difficulty in applying these models for simulation purposes.



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The most common design is the following:

$$[1] \qquad X_{ij} = \alpha_0 Y_i^{\alpha_1} Y_j^{\alpha_2} L_i^{\alpha_3} L_j^{\alpha_4} D_{ij}^{\alpha_5} P_{ij}^{\alpha_6} e^{u_{ij}}$$

With:

$X_{ij}$ the total exports from $i$ to $j$,

$Y_i$, $Y_j$ the countries' incomes,

$L_i$, $L_j$ the countries' population,

$D_{ij}$ the geographical distance between $i$ and $j$,

$P_{ij}$ a measure of market access from $i$ to $j$, and

$u_{ij}$ the normal random error term

Such an equation can be alternatively written (Sanso et al. 1993):

$$[2] \qquad \begin{aligned} & X_{ij} = \alpha_0 y_i^{\alpha_1} y_j^{\alpha_2} L_i^{\alpha_3} L_j^{\alpha_4} D_{ij}^{\alpha_5} P_{ij}^{\alpha_6} e^{u_{ij}} \\ & y = \frac{Y}{L}; \alpha_3^* = \alpha_1 + \alpha_3; \alpha_4^* = \alpha_2 + \alpha_4 \end{aligned}$$

or

$$[3] \qquad \begin{aligned} & X_{ij} = \alpha_0 y_i^{\alpha_1} y_j^{\alpha_2} Y_i^{\alpha_3} Y_j^{\alpha_4} D_{ij}^{\alpha_5} P_{ij}^{\alpha_6} e^{u_{ij}} \\ & \alpha_1^* = -\alpha_3; \alpha_2^* = -\alpha_4; \alpha_3^* = \alpha_1 + \alpha_3; \alpha_4^* = \alpha_2 + \alpha_4 \end{aligned}$$

It is generally estimated in a log-linear form such as [4]. Such a specification provides elasticities of bilateral trade to income, country size and distance.

$$[4] \qquad \begin{aligned} & \log X_{ij} = \alpha_0^* + \alpha_1^* \log y_i + \alpha_2^* \log y_j + \alpha_3^* \log Y_i + \alpha_4^* \log Y_j + \alpha_5 \log D_{ij} + \alpha_6 P_{ij} + u_{ij} \\ & \alpha_0^* = \log \alpha_0; P_{ij} = (1,0) \end{aligned}$$

Models generally use nominal incomes at current exchange rates. However, the associated trade-to-income elasticities may be biased when developing countries or countries in transition are integrated in the sample. Using PPPs also affect the trade-to-income elasticities. It is sometimes argued that PPPs would be much more appropriate to estimate trade potentials in the long run, an horizon in which all exchange rate adjustments towards equilibrium have taken place. In contrast, current income would be more appropriate to analyse short-term trade potentials. However, in our model, estimating trade equations using PPPs variables leads to unreliable and highly sensitive elasticities. Hence, the alternative solution adopted here is to estimate elasticities with current exchange rates, but using a sub-sample of developing countries trading with all their partners, developing or industrialised.

*Other determinants of trade*

It is common to expand the basic gravity model by adding other variables, For instance variables are added to control for common language, common border, common colonial history, common currency, land-lockedness and insularity. Usually these variables are introduced as dummies in the gravity equation. Hummels (2001) also found that shipping time is an important trade barrier, faster transport over time (air shipping and faster ocean vessels) being equivalent to reducing tariffs from 20% to 5.5% from 1950 to 1998. Bilateral FDI is also a crucial aspect in explaining bilateral trade flows (see Fontagné 1999).

## B. Applications

Gravity equations are one of the most popular tools in empirical studies addressing issues in international trade. Four categories of applications can be mentioned: estimating the cost of the border, explaining trade patterns, identifying effects related to regionalism and lastly tabulating trade potentials, the major objective of *TradeSim*.

*1) Cost of the border*

If the presence of a common border facilitates bilateral trade between nations *i* and *j*, the same border is also an hindrance to trade. Hence, ceteris paribus, trade between regions of *i* should be more developed than trade between regions of *i* and regions *j*. This is the so called "border effect". Using data for inter-provincial trade, McCallum (1995) has shown that trade between Canadian provinces is 20 times larger than between these provinces and the United States. Wei (1996) relaxes the need for internal trade data. Country's trade with itself is simply the difference between its output and its aggregate exports to other nations. Using this type of definition, the border effect is 3 to 10 for OECD countries, according to specifications. In total, estimating an equation in which the imports of country from country *j* are divided by imports of country *i* (including internal imports) may identify the implicit protectionism of countries. Head and Mayer (1998) calculate such relative imports. The latter are explained using a gravity type equation disaggregated by industry. The border effect internal to the EU is 12 to 20 according to specifications. Crossing a border is equivalent to four times the average distance between national markets in the sample. To put it differently the average ad-valorem equivalent tariff of the borders in the single market is 37%.

*2) Explaining trade patterns*

Trade patterns have also been investigated using gravity-type equations. The trade overlap (i.e. two-way trade within industries) is examined in Bergstrand (1989) and Hummels and Levinsohn (1995): they tabulate bilateral indexes of intra-industry trade at the industry level. These indexes are then aggregated and their weighted average is explained using a gravity equation. Trade types, an alternative method used to disentangle trade in intra-industry versus inter-industry flows, are explained in Fontagné, Freudenberg and Péridy (1998). They calculate trade types at the 8-digit product level and aggregate the results at the industry level. These trade types are explained using equations integrating gravity-related variables. However, the three papers consider trade shares rather than trade volumes, which departs slightly from the bulk of work on gravity equations.

*3) Regionalism effects: Trade creation versus trade diversion*

Gravity models have been extensively used to address the issue of the impact of trade policies on trade flows like the impact of regional trade agreements. Consider that our two countries *i* and *j* sign a regional agreement. Introduce one dummy: 1 for «both in» (*i* and *j* in the agreement) and 0 otherwise.

If the parameter estimate is positive and significant there is trade creation due to regionalism. This exercise can be done in order to simulate trade potentials corresponding to any regional integration scheme between any groupings of countries. Geraci (1991), for example, research involved South-South regional trade arrangements.

*a) Calculation of trade potentials*

The tabulation of trade potentials is certainly the line of related research that has been studied the most extensively by economists. This methodology has been in particular used extensively for Central and Eastern European Countries. (Wang and Winters, 1991; Hamilton and Winters, 1991; Baldwin, 1993; Gros and Gonciarz, 1993; Schumacher, 1995 and 1997; Pesmazoglou, 1996). The first step consists of selecting the sample of countries between which trade is supposed to have reached its potential. Bilateral trade flows are considered between these countries in a symmetric manner[1]. A gravity equation explaining bilateral exports is then the sample is then estimated. This equation is used in simulation to obtain natural bilateral trade between any pair of countries, given that distance, GDPs and populations are systematically available. Such simulated bilateral exports are compared with observed ones in order to infer bilateral export potentials. Such a methodology can be applied either at the aggregated or industry level. In the case developed here, its application will be carried out at the aggregated level.

[1] It is however technically possible to consider mirror relations only for some non-reporting countries.

## 2. Description of *TradeSim*, second version (2003)

ITC's econometric gravity model, *TradeSim*, has been developed specifically for analysing the trade potential of developing countries and economies in transition. The first version of *TradeSim* was developed in 1999 using 1995-97 trade data. This initial version also provided estimates at the sectoral level, using 14 broad sectors. The $R^2$ values for the sectoral models in *TradeSim, version 1* are listed in Table 0. By construction, the fit for the total trade ($R^2$ of 0.76) is much better for the total trade than for the different sectors, which a $R^2$ ranging from 0.36 to 0.68. The main reason of a poorer sectoral fit is the lack of accurate (or output) data per sector. Hence total GDP is used as a proxy for sectoral output. This approach worked quite well for some sectors, such as chemicals or miscellaneous manufacturing but was not satisfactory for petro-chemicals or transport equipment.

In this version, we are rather focusing on having a robust model for total trade. Sector-specific results are not made available to the public, through our website, taking account the previous limitation on output data.

**Table 0. $R^2$ values for the sectoral models in *TradeSim*, first version**

| Sector | $R^2$ |
|---|---|
| 1. Fresh food and agro-based products (live animals, vegetables, cotton etc.) | 0.62 |
| 2. Processed food and agro-based products (milk, cereal preparations, tobacco, manufactured, essential oils etc.): | 0.62 |
| 3. Wood, wood products and paper: | 0.67 |
| 4. Yarn, fabrics and textiles: | 0.63 |
| 5. Chemicals (rubber, chemical elements, medicaments, polymers, plastics, etc.): | 0.68 |
| 6. Leather and leather products (including footwear): | 0.61 |
| 7. Metal and other basic manufacturing (cement, pottery, glass, iron, steel, tools, etc.): | 0.68 |
| 8. Non-electric machinery (engines, turbines, machine-tools, pumps etc.): | 0.66 |
| 9. Computers, telecommunication equipment, consumer electronics: | 0.56 |
| 10. Electronic components: | 0.61 |
| 11. Transport equipment (motor vehicles, cycles, aircraft, ships etc.): | 0.57 |
| 12. Clothing: | 0.59 |
| 13. Miscellaneous manufacturing (railway equipment, measure instruments, watches, ammunition, musical instruments etc.): | 0.59 |
| 14. Petroleum products (excluding crude petroleum): | 0.36 |
| **Total of sectors 1 to 14** | **0.76** |

For the new version of *TradeSim*, additional variables have been used, especially in order to better capture trade barriers, such as import duties. Other variables like language diversity, literacy rates, FDI stock and telecommunication infrastructure have also been introduced in this updated version. Particular attention has been applied in building a robust database. As described in Fouquin, Pajot and Pasteels (2002), the sensitivity of the estimated parameters to the sample of countries can be very high.

### *A. Sample of countries*

The model has been estimated on the basis of 86 exporting economies (from the developing world) towards 58 importing countries. The list of countries is shown in Table 1. On the exporting side,

except Mexico, the selected countries are non-OECD members. Oil-exporters[4] were also excluded from the sample of exporting countries, but are included as importing countries.

In addition, significant re-exporters, such as Panama, Hong Kong and Singapore, have been excluded from the sample of exporting and importing countries. In order to obtain robust estimates and reliable trade-to-income elasticities[5], countries with a GDP below $ 14 bn in 1999-2000 have been excluded. For example, Guatemala (GDP of $18 bn) and Tunisia (GDP of $21 bn) are in the sample, unlike Mali (GDP of 2.6 bn) or Ecuador (GDP of $12 bn).

Using relatively small countries in a gravity model has several dangers. It adds significant noise to the models since smaller countries from the developing world are usually specialised in exporting a few primary commodities. Hence, their direction of trade is heavily determined by product complementarities. For example, cotton exporters, such as Mali or Benin, tend to trade more to apparel-manufacturing countries in Asia than what the law of gravity predicts. Similarly, fish & crustacean producers like Mauritania export more to Japan than other developing countries.

All these observations can introduce many distortions in the parameters of the model.

In addition, introducing many small countries in the sample brings in many zeros (no trade between pairs of countries) in the data set, limiting the statistical interest.

**Table 1: Countries selected for all estimates**

| Exporting countries | Importing countries |
|---|---|
| Argentina | Algeria, Argentina, Australia, Austria |
| Bangladesh, Belarus, Brazil | Belarus, Belgium-Lux, Brazil |
| Chile, China, Colombia, Croatia, Cuba | Canada, Chile, China, Colombia, |
| Czech Republic | Czech Republic |
| Dominican Republic | Denmark |
| Egypt | Egypt |
| | Finland, France |
| Guatemala | Germany, Greece, Guatemala |
| Hungary | Hungary |
| India, Indonesia | India, Indonesia, Iran, Ireland, Israel, Italy |
| | Japan |
| Korea, Republic of | Kazakstan, Korea (Rep.) |
| Malaysia, Mexico, Morocco | Malaysia, Mexico, Morocco |
| | Netherlands, New Zealand, Nigeria, Norway |
| | Oman |
| Pakistan, Peru, Philippines, Poland | Pakistan, Peru, Philippines, Poland, Portugal |
| Romania, Russian Federation | Romania, Russian Federation |
| Slovakia, Slovenia, Sri Lanka | Saudi Arabia, Slovenia, SACU, Spain, Sri Lanka |
| | Sweden, Switzerland |
| Thailand, Tunisia, Turkey | Thailand, Tunisia, Turkey |
| Ukraine, Uruguay, Uzbekistan | United Kingdom, USA, Uruguay |
| Viet Nam | Venezuela |

[4] Crude petroleum oil and gases accounting for more than 40% of total exports.
[5] The trade-to-GDP elasticities appear to be too high when using a large sample of countries (see Table 5).

**Table 2: Other countries with available data**

| Exporting countries | Importing countries |
|---|---|
| Albania, Armenia | Albania |
| Barbados, Belize (*) Benin, Bolivia, Bosnia and Herzegovina, Bulgaria, Burkina Faso (*), Burundi (*) | Bahrain, Barbados, Belize, Bolivia |
| Cambodia (*), Cameroon | Costa Rica, Côte d'Ivoire |
| Costa Rica, Côte d'Ivoire, Cyprus | |
| Dominica (*) | Dominica |
| Ecuador, El Salvador, Estonia, Ethiopia | Ecuador, El Salvador, Estonia, Ethiopia |
| Fiji (*) | |
| Georgia, Ghana, Grenada, Guinea, Guyana (*) | Georgia, Ghana, Grenada |
| Haiti, Honduras (*) | Honduras |
| Jamaica, Jordan | Jamaica, Jordan |
| Kenya, Kyrgyzstan | Kenya, Kyrgyzstan |
| Lao PDR (*), Latvia, Lebanon, Lithuania | Latvia, Lithuania |
| Madagascar (*), Malawi (*), Maldives (*), Mali (*) | Madagascar, Maldives, Malta, |
| Malta, Mauritania (*), Mauritius, | Mauritius |
| Moldova (Rep), Mongolia (*), Mozambique (*), Myanmar | Moldova, Republic of |
| Nepal, Nicaragua (*), Niger (*) | Nepal, Nicaragua |
| Paraguay | Papua New Guinea, Paraguay |
| Senegal, Seychelles, Suriname | Suriname |
| Tanzania, Togo | Tanzania, Trinidad and Tobago, Turkmenistan |
| Uganda | Uganda |
| Zimbabwe | Zimbabwe |

(*): for these countries the fixed effects have extreme values (very large or very small), indicating that the total exports of the country are not well explained by the model and that other factors, specific to the country, have to be considered. Usually it concerns very small economies. The results are consequently not showed on ITC's website.

## *B. Trade data*

The 1999-2000 average is considered for all figures. Hence we use cross-sectional estimates as a basis for simulation. Total trade is considered with the exclusion of fuels and mineral deposits, simply because trade in minerals refer to absolute advantages (or disadvantages) and consequently present little interest for the analysis of trade potential. Most of the authors who estimate gravity models do not usually take this precaution.

The source of trade data is COMTRADE, the U.N. trade database[6]. Trade data has been checked and adjusted for potentially unreliable data (see Annex 1). Data for China has been adjusted, following a discussion with UNCTAD and WTO trade specialists, who argued that the eight East Chinese Provinces account for more 80% of Chinese trade. Consequently, the Chinese GDP of this "exporting China" is underestimated in most gravity models, leading to unexpected results. The adjustments for China are explained in Annex 2.

## *C. Variables*

### 1) Bilateral measure of market access

Since the model is by construction bilateral, we need to use a bilateral measure of market access that takes into account all preferential regimes.

Unlike most studies carried out, along with the initial version of *TradeSim* that captures trade agreements using dummy variables, we have used an original approach: a bilateral measure of market access. The construction and the interpretation of the bilateral database, called *MAcMap* are explained in Bouet et al. (2001). This very sophisticated measure includes not only applied tariffs, but also specific duties (for example 0.2$ per kilo), tariff quotas and anti-dumping duties. All these barriers are converted into and ad-valorem equivalents and summarised in one measure. This measure is computed initially at the tariff line level. It is also possible to calculate average bilateral measures at more aggregated levels, for sectors or even for the entire economy.

In *MAcMap*, an original aggregation methodology, based on country grouping, is used in order to limit the effect of an endogeneous aggregation bias[7].

*MAcMap* takes into account all preferential regimes for each importing country versus all its partner countries.

Table 3 gives an abstract of the *MAcMap* database for Argentina, as an exporting country to selected partner countries. For example, the average tariff rate (and other measure converted into ad-valorem equivalents) faced by Argentina in the Chinese and Swiss markets is very high (above 25%), while Canada and Chili are much more open to Argentina's goods.

[6] See unstats.un.org/unsd/comtrade

[7] A high (low) tariff implies limited (large) imports and its contribution to the overall protection is then reduced (increased). Using national imports as weights leads to an under-valuation of the protection level of a country.

**Table 3: *MAc Map* aggregated data for Argentina, as an exporting country to selected partner countries.**

| | |
|---|---|
| Belgium | 19% |
| Canada | 6% |
| Switzerland | 27% |
| Chili | 8% |
| China | >30% |
| Cote d'Ivoire | 11% |

The use of this indicator provides precisely what we want to measure: the impact of market restrictions on trade. Conversely, dummy variables of regional agreements do not allow for the analysis of the sole impact of the trade agreement on trade, but instead also capture border effects (countries in a regional agreement are usually very close to each other) and cultural factors (share of a common colonial past, like UEMOA).

### 2) GDP at current prices

Data are in current billion US$ converted using the World Bank Atlas method. We consider the average GDP for 1999 and 2000 in US$ taken from World Bank, World Development Indicators 2001.

### 3) Cultural factors

A common culture variable, ranging from 0 to 1 has been created. It takes into account common national languages (official or not), as well as links established during the colonial period. The official languages were taken from *Exporters Encyclopedia 1998/99*. The following languages were considered: Arabic, Amerindian, Cantonese, Dutch, English, French, German, Irish, Greek, Hungarian, Italian, Japanese, Mandarin, Malay, Portuguese, Russian, Spanish, Swedish, Swahili and Turkish.

For each country, we have distinguished primary and secondary languages. Secondary languages may not be official and include languages spoken by large communities of immigrants, such as Turkish immigrants in Germany and Latin-American immigrants in the USA. This allows us to capture influence of diaspora on trade.

One country may have up to three main languages and three secondary languages. Malaysia has, for instance, two main languages, Mandarin and Malay, and two secondary languages, English and Hindi. The variable can take four values: 0, 0.25, 0.5 and 1, according to Table 4.

**Table 4: Intensity of common culture**

| Cases | Value taken by the culture variable |
|---|---|
| The two countries share a common main language | 1 |
| Country *i* (or *j*) was a former colony of country *j* (or *i*) | 1 |
| The two countries, *i* and *j*, share a common language, that is a main language in one country (*i* or *j*) but a secondary language in the other (*j* or *i*) | 0.5 |
| The two countries share a common second main language. | 0.25 |

### 4) Transport and transaction costs

Usually, transport and transaction costs in gravity models are captured by two variables: the physical distance between two countries and the existence of a common border. We have followed the same approach. In addition, we have considered other variables proposed recently by Loungani, Mody and Razin (2002), who have investigated alternative ways of modeling transaction and transport costs. The authors argue, "distance captures more than transport costs and that large distance may be associated with greater information and search costs". That explains why the trade-to-distance elasticity (ranging from –0.8 to –1.5 in most studies) is so high, in comparison to theory. In an other study, Grossman (1998) calculated that if shipping costs are of the order of 5% of the value of traded goods, then the distance elasticity should be around -0.03.

The authors suggest including variables that capture the role of informational infrastructure. They introduce two variables: bilateral telephone traffic and telephone densities (telephone lines per capita) and obtain very good results. Unfortunately, bilateral telephone traffic is only available for a limited number of countries. Consequently, we have used the bilateral telephone densities, measured as the product of telephone lines per capita in the two countries. The source for the data is the World Bank's World Development Indicators.

The distance is the great circle distance between *i's* and *j's* capital (or main) cities. Having transformed the latitude $\varphi$ and the longitude $\lambda$ into radians $(\times\Pi/360)$, the formula used to calculate the distance between the pair of countries is [5].

$$[5] \quad \begin{aligned} \Delta_{ij} &= \lambda_j - \lambda_i \\ D_{ij} &= Arc\cos\left\{\sin\varphi_i \sin\varphi_j + \cos\varphi_i \cos\varphi_j \cos\Delta_{ij}\right\} x \end{aligned}$$

with $x$= 6367 for km and 3956 for miles. We used km as a unit.

For the USA and Canada, different economic centres have been used: New York and San Francisco for the USA, and Montreal and Vancouver for Canada. For Russia, Moscow is considered here as the only economic centre since Novosibirsk and Vladivostok are not cities of similar economic importance. The border dummy variable used in conjunction with the distance allows the capture of extra-trade with neighbours (e.g. between Russia and Mongolia).

## 5) Language diversity and literacy

Two variables of language diversity and literacy have also been considered. The use of these variables is discussed in detail in Mélitz (2002). Linguistic diversity at home promotes foreign trade. The ability to read and write also influences foreign trade.

The source of the data is Grimes (2000). It is also available on the Internet (**www.ethnologue.com**). The index of linguistic diversity is available for a large number of countries. The index is interpreted, as "the probability that any two people in the country picked at random will have different mother tongues". The higher the index – the closer to one – the higher the probability that a random pair of individuals will have different mother tongues. For instance, the language diversity index equals 0.65 in Belgium (two main languages, Dutch and French), 0.24 in France and 0.35 in the USA.

Note: the literacy rate is strongly related to the level of development and GDP per capita. Consequently, to avoid strong colinearity, GDP per capita should not be used in a model that already includes literacy rate.

## 6) FDI stock per capita

Other variables like bilateral FDI flows are particularly relevant in explaining bilateral trade flows. For example, Fontagné (1999) obtains very sound results. Unfortunately, bilateral FDI flows are only available for OECD countries. Hence, we expect than bilateral FDI would account for an important share in residuals in our model. Nevertheless, we found it interesting to include total inward FDI figures, since this data is available for most countries. The source of this data is UNCTAD's Division on Investment, Technology and Enterprise Development (DITE) (r0.unctad.org/en/subsites/dite/).

We have considered in particular the inward FDI stock per capita of the exporting country, which captures the attractiveness of the country for foreign investors. FDI usually brings technology, know-how and international marketing and generally increases international competitiveness. Nevertheless, the impact of FDI on exports depends on the nature of the investment and the target market. Investments in the manufacturing sector in an export-oriented perspective are likely to have a stronger impact on national exports than privatisation of a national telecommunication company. It is also a matter of market size. Investment in large countries, such as Brasil or Russia, is targeted primarily at the domestic market, as opposed to FDI in Estonia, Hungary or Belgium.

FDI attractiveness is also a proxy for economic openness, political stability and an attractive regulating framework (financial incentives for foreign investors, possibility to repatriate profits, existence of free-economic zones).

## 7) Other variables

Other variables have been tested, even though they do not appear in the final model. Annex 3 shows alternative models that have been tested.

An indicator of **paved roads** (as a percentage of all the country's roads, measured in length), taken from World Bank's World Development Indicators, has been tested. It is not included in the final model, since it is strongly correlated with the number of telephone lines (see Annex 4) and consequently the estimated parameter has an unexpected sign (see Annex 3).

A dummy variable of **transit trade** has also been tested. It takes the value 1 if one country is landlocked and its partner country has access to the sea and is one of its neighbours. In this case, there is a strong suspicion that trade between the two countries will include transit trade (on both sides).

Cases in point include the pairs Senegal-Mali and Kenya-Uganda. The variable is highly significant on the largest sample of countries (see Annex 3) but not the selected one. It is explained by the smaller pairs of observations in the selected sample and also by the limited importance of transit trade (or more accurate recording of final destinations and origins of products) for richer land-locked countries, such as Hungary or the Czech Republic, than for Mali or Uganda. Since the transit variable is strongly correlated with the border dummy variable (see Annex 4), we do not include it in the model. Transit trade should however be taken into account when analysing the results for land-locked countries.

A variable of **conflict intensity** between pairs of countries has been tested. The source of the data is the Heidelberg Institute for International Conflict Research (www.hiik.de)[8]. According to this source, the term "conflict" is defined as the clashing of overlapping interests (positional differences) around national values and issues (independence, self-determination, borders and territory, access to or distribution of domestic or international power); the conflict has to be of some duration and magnitude for at least two parties (states, groups of states, organizations or organized groups) that are determined to pursue their interests and win their case. At least one party is the "organized state." According to their definition, there are four types of conflicts:

- Latent conflict; completely nonviolent
- Crisis; mostly nonviolent
- Severe crisis; sporadic, irregular use of force, 'war-in-sight' crisis
- War; systematic, collective use of force by regular troops

Over 85 reported conflicts between countries in the sample have been taken into account for this model. The conflict index is calculated as combination of its duration (t) and intensity (from 1 to 4). Only recent conflicts have been taken into account; conflicts that ended before 1990 have been discarded, assuming that the effect of conflict on trade-potential declines the more distant the conflict.

The variable is statistically significant over the whole sample of countries, but not on the selected one (see Table 5), due to a lack of observations.

The total area of the country is also taken into account as a proxy for the internal distance. Big countries will tend to trade more with themselves than smaller countries would. The source of the data is World Bank's World Development Indicators. Since the area is correlated with the GDP, we have also considered the population density (population divided by area) as an alternative to population and land area.

[8] We would like to thank Professor Jurgen Brauer, from Augusta State University, for the collected data and the suggestions about the construction of the intensity of conflict variable.

## D. The equation

The final model used for the calculations of the trade potential is the following:

$$[6]\quad \begin{aligned}\log X_{ij} = {} & -9.01 + 1.54\cdot\log Y_i + 1.04\cdot\log Y_j + 0.39\cdot\log Dens_i + 0.11\cdot\log Dens_j - 0.07\cdot\log Conflict_{ij} \\ & + 0.27\cdot\log FDI_i + 0.85\cdot\log Literacy_i + 0.25\cdot\log Langdiv_i + 0.11\cdot\log Tele_{ij} - 1.01\cdot\log D_{ij} \\ & + 0.9\cdot Border_{ij} - 0.21\cdot Tariff_{ij} + 1.18\cdot Culture_{ij} + u_{ij}\end{aligned}$$

where:

$i$: the exporting country

$j$: the importing country

$X_{ij}$: trade from country $i$ to country $j$

$Y_i$: GDP of country $i$

$FDI_i$: Per capita inward FDI stock in country $i$

$Dens_i$: population density in country $i$

$Literacy_i$: literacy rate in country $i$

$Langdiv_i$: language diversity in country $i$

$Tele_{ij}$: product of telephone densities in countries $i$ and $j$

$D_{ij}$: distance between $i$ and $j$

$Border_{ij}$: $i$ and $j$ are neighbouring countries (=1) or not (=0)

$Tariff_{ij}$: bilateral market access measure (for trade from $i$ to $j$)

$Culture_{ij}$: bilateral measure of common culture

Equation [6] results from several steps, parameter estimates (including significance probabilities) are shown in column [A] of Table 5.

We have proceeded in a general-to-specific approach. Firstly, we considered all countries with available data. We also considered all types of variables, described in the previous section. Column [C] of Table 5 shows the estimates when using the whole sample of countries and without imposing any restriction on the parameters. Annex 3 includes two alternative specifications to [C], considering in addition to variables included in [C], the transit trade variable (column [D]) and the paved roads rate (column [E]). The transit trade variable is strongly correlated with the border variable and hence has been discarderd (see correlation matrix in Annex 4). Similarly, the paved roads rate is highly correlated to the telephone density, resulting in inconsistent estimates (unexpected sign in [D]).

The estimated coefficients of [C] have all the expected signs and most of them are statistically significantly different from 0 at the 1% probability level. The population density-elasticities are statistically significantly different from 0 at the 6% probability level but not at the 1% level. The intensity of conflict on trade seems to have a limited but non-negligible negative impact on trade, with a 5% significance probability. Alternative measures of conflict intensity have not been tested here. It would certainly deserve a deeper analysis.

The impact of literacy (elasticity of 0.63) and to a lesser extend of language diversity (elasticity of 0.13) on trade is high and confirms the results of Mélitz (2002). Similarly, the common culture index has a

strong impact on trade (2.65). This latter impact seems to be over-estimated, in particular in comparison with most other studies and the initial version of *TradeSim* (0.83). The latter situation is largely explained by the introduction of informational infrastructure (telephone densities) to the model.

**Table 5: Three model specifications**

| Variable | [A] (equation [6]) Selected sample, with restrictions | | [B] Selected sample, no restrictions | | [C] Whole sample, no restrictions | |
|---|---|---|---|---|---|---|
| | Estimate | Pr > \|t\| (1) | Estimate | Pr > \|t\| (1) | Estimate | Pr > \|t\| (1) |
| Intercept | -9.01 | | -8.58 | | -14.08 | |
| Log GDP exporter | 1.54 | | 1.54 | | 1.90 | |
| Log GDP importer | 1.04 | | 1.04 | | 1.59 | |
| Log population density exporter | 0.39 | | 0.41 | | 0.07 | .042 |
| Log population density importer | 0.11 | .008 | 0.11 | .008 | 0.25 | .052 |
| Log literacy rate exporter | 0.85 | | 0.86 | | 0.63 | |
| Log FDI exporter | 0.27 | | 0.27 | | 0.31 | |
| Log language diversity exporter | 0.25 | | 0.25 | | 0.13 | |
| Log of the product of telephone densities of exporter and importer | 0.11 | .040 | 0.13 | .016 | 0.12 | |
| Border dummy variable | 0.90 | .001 | 0.89 | .004 | 0.80 | .016 |
| Log of distance | -1.01 | | -1.00 | | -1.89 | |
| Bilateral measure of common culture | 1.18 | | 1.18 | | 2.65 | |
| Log of market access measure | -0.21(r) | | -0.12 | .025 | -0.21 | |
| Log of conflict measure | -0.07(r) | | -0.01 (*) | .632 | -0.07 | .05 |
| $R^2$ | 0.55 | | 0.56 | | 0.62 | |
| Number of observations | 2204 | | 2204 | | 9144 | |

Notes: (r) : restricted parameters. (1) Significance probabilities lower than 0.0001 are not displayed.
(*): Estimates not statistically significantly different from 0, at the 5% significance probability.
In shaded, estimates that differ significantly according to the sample countries.

The negative impact of distance on trade also looks over-estimated (-1.89). In most studies, it varies between -0.8 and -1.5, with –1.4 for the previous version of *TradeSim*. As we will see later on, it is a matter of country sample, since transport costs (measured here by the distance) are a stronger impediment to trade in the developing world. As described earlier, the use of informational infrastructure (telephone densities) allows to capture transaction costs and hence provides a complement to the traditional distance variable.

The "tariff-to-trade" elasticity equals -0.21, meaning that decreasing tariffs by 50% (dividing them by two) would increase trade by 10.5%. At first sight, this elasticity seems to be under-estimated. There are however two factors explaining this low impact on trade. Firstly, the model is of macro-economic nature and secondly, it is a partial equilibrium model.

At the product level the tariff (or more exactly price) elasticity varies usually between –3 and –7, for price-elastic goods. At the sector level, the price-elasticities vary usually between –2 and –3, while at the macro-economic level, they are between 0 and –1.

The partial equilibrium nature of the gravity model, that does not capture dynamic effects and cross-industry linkages, also contributes to a weak tariff-to-trade elasticity. Using a general equilibrium model, Francois et al. (1996) estimated that the Uruguay Round, which on average decreased tariffs by 40%, increased world trade by 14%, meaning a underlying "tariff-to-trade" elasticity of –0.35, which is not far from our estimate (-0.21).

The $R^2$ value is estimated to be around 0.62. When introducing fixed effects on the exporter's side (dummy variable $F_i$ equals to 1 when $i$ is the exporting country and 0 otherwise), the $R^2$ gets close to



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0.75. The absence of fixed effects in the model is justified in the next section, explaining the calculation of bilateral trade potential for countries.

The major problems of model specification [C] are the trade-to-GDP elasticities, which appear to be too high when using this large sample of countries, that include many small economies. The trade-to-GDP elasticity of the exporter is close to 1.9 and trade-to-GDP elasticity of the importer is close to 1.6. In theory, one would expect an income-to-trade elasticity close to 1. In most existing studies, the elasticity varies between 1 and 1.5, including the initial version of *TradeSim* (1.33 for the exporter elasticity and 1.05 for the importer).

**Selected sample of countries**

In order to obtain more robust estimates, we have proceeded to a selection of countries. Since the problem is related to the existence of small countries in the sample, we have used a simple criteria, total GDP. When selecting countries, both on the importing and exporting side, with an annual nominal GDP higher to $ 14 billion, we obtain the estimates listed in column [B] of Table 5. As listed in Table 1, the sample includes 36 exporting countries (from the developing world) and 58 importing countries.

All parameters of column [B] are in accordance with the theory. The income-to-trade elasticities are now closer to one, 1.54 for the exporting country and 1.04 for the importing country. Other parameters have also been sensible to the change of country sample.

Indeed, the influence of borders and distances on trade looks quite different when using a different sample of developing countries. Distance between big nations does not have the same impact (elasticity of -1.0) than when including smaller economies in the sample (elasticity of -1.89).

On the other side, the border effect is more significant for large economies than for smaller ones. These results are particularly significant from a South-South trade promotion perspective. They confirm that transport costs are a stronger impediment to trade in the developing world, in particular developing countries endowed with a poor transport infrastructure. For example, transport costs between London and Nairobi (Kenya) are comparable to those between Nairobi and Kampala, the capital of Uganda (Hummels 1998). In addition, being land-locked is a crucial matter in Africa in particular. For example, Limao & Venables (2002) showed that the average transport cost is much higher in developing countries without any access to the sea. Transport costs are higher between countries like Uganda and Mali, than between Nigeria and Cameroon, explaining why intra-African trade between the east coast and west coast is insignificant.

Finally, it is worth highlighting a lower tariff-to-trade elasticity (-0.12 versus −0.21) when using a sample of larger economies. This result is very interesting and confirms that dismantling trade barriers between developing countries is as important as dismantling South-to-North barriers. Another possible interpretation is that in most developing countries, technical barriers to trade are less important than in industrialised economies and hence our measure of bilateral market access captures trade obstacles more completely than when considering only a sample of richer countries, which tend to develop more complex trade regulations.

The impact of conflict on trade is no longer significant. This is due primarily to a lack of observations when selecting larger countries. Hence, for estimating this impact, the whole sample seems to be more appropriate, since it captures more conflicts.

Finally, in specification [B], three variables play a more significant role in explaining bilateral trade flows than when including smaller economies, namely the population density, the literacy rate and the language diversity in the exporting country.

For the calculation of trade potentials, our ultimate goal, we have used a slightly different version of model [B], by adding two parameter restrictions, on the conflict and market access measures. For those variables, we impose the use the parameters estimated in [C] for the bilateral measures of protection (-0.21) and conflict (-0.07). Indeed, since country size does not directly influence the bilateral level of

protection and conflict intensity, the whole sample captures more observations and hence provides more accurate estimates. The parameters of this model specification is shown in column [A] of Table 5. and in equation [6]. The two parameter restrictions do not influence much the other estimates.

### *E. Calculation of trade potential*

Trade potential is calculated on the basis of the parameter estimates shown in [6]. The formula is applied to the whole country sample. Hence for each exporting country *i* from the developing world, we calculate the $\hat{X}_{ij}$ to 96 partner countries according to [6]. In order to adjust the trade potential from systematic effects, we define an "a posteriori" fixed effect $F_i$ defined as:

$$F_i = \sum_j X_{ij} \Big/ \sum_j \hat{X}_{ij}$$

The trade potential $TP_{ij}$ is calculated as: $TP_{ij} = F_i \cdot \hat{X}_{ij}$

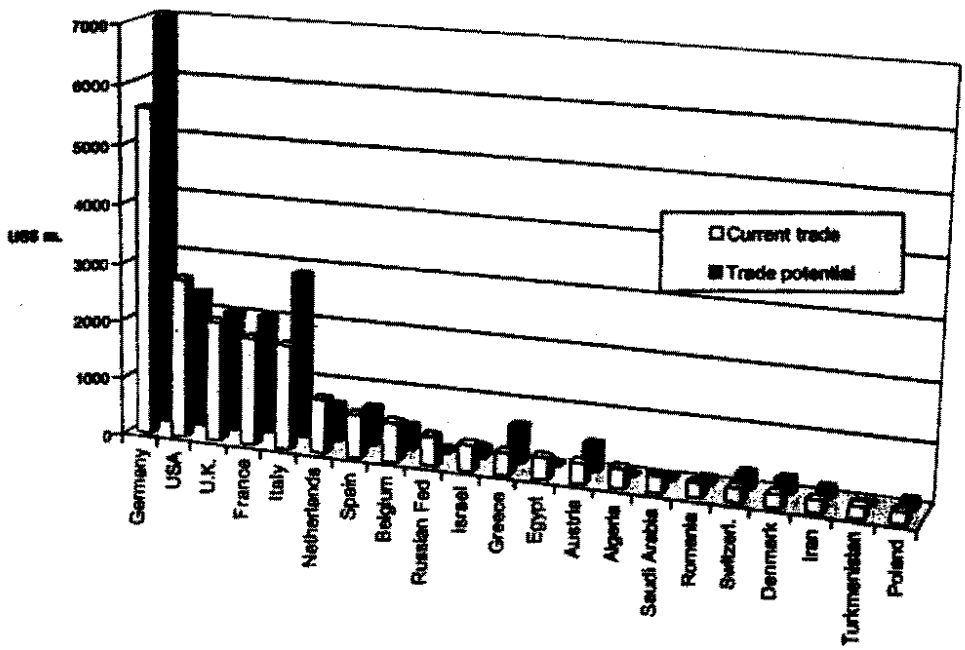
This procedure calculates trade potential using so-called "fixed effects" for out-of-sample countries or, in other words, for countries not used in estimating [6].

These systematic effects capture the factors that would explain why a country would trade more (less) with the rest of the world than if it was based solely on the determinants of trade in [6]. It includes, for example, the attraction of export-oriented FDI in the manufacturing sector (Tunisia e.g.), successful export-oriented strategy (such as Mauritius), etc.

## *F. Results*

Unlike the first version of *TradeSim*, we have opted here for a "zero-sum" approach. In other words, for each exporting country, the sum of present trade flows to all of its partners is equal to the sum of trade potential flows. Table 6 illustrates the output table for Turkey, while Chart 1 shows the graphic output for the same country. Table 6 only presents the results to Turkey's leading export markets. The table available on the website lists the results to 95 partner countries. In addition to the current trade and the trade potential, the table includes the relative difference between these two flows and a qualitative assessment of bilateral market access, distance and telephone lines.

Chart1: Leading export markets & market potential for Turkey




The relative difference varies between –100 (current trade is nil, trade potential is >0) and +100 (trade potential is nil, current trade is >0) and is defined as:

Relative difference = 100 * (Current trade-Trade potential) / (Current trade+Trade potential)

The import duty is based on the bilateral market access measure, according the following table of correspondence:

| Qualitative assessment of import duty | Range |
|---|---|
| Negligible or duty-free | ≤ 1% |
| Low | >1% and ≤ 10% |
| High | > 10% and ≤ 19% |
| Peak | > 19% and ≤ 28% |
| Prohibitive | > 28% |



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The distance is based on the geodesic distance, according the following table of correspondence:

| Qualitative assessment of distance | Range |
|---|---|
| Very closed | ≤ 1,000 km |
| Rel. closed | >1,000 km and ≤ 4,000 km |
| Average | > 4,000 km and ≤ 7,000 km |
| Rel. far | > 7,000 km and ≤ 10,000 km |
| Very far | > 10,000 km |

The telephone lines are based on the geometric average of the number of telephone lines in the exporting and the importing countries (number of fixed lines per 1,000 habitant), according the following table of correspondence:

| Qualitative assessment of telephone lines | Range |
|---|---|
| Very poor | ≤ 40 lines |
| Rel. poor | >40 lines and ≤ 80 lines |
| Average | > 80 lines and ≤ 120 lines |
| Rel. good | > 120 lines and≤ 200 lines |
| Very good | > 200 lines |

In addition, in order to highlight interesting results, the lines of the table are coloured according to the value of the relative difference. When the two countries trade currently much more than the gravity models predicts (relative difference is higher than +30%) or in other words there is a very successful bilateral partnership, the corresponding line of the table is indicated in light blue and bold. When the two countries trade much less than in theory (the difference is lower than -30%), or in other words there seems to be an untapped trade potential, the corresponding line of the table is shaded.

When the relative difference between the current trade and the trade potential is included between –30% and 30%, the corresponding lines are left in white. For example in Table 6, for Turkey's eight leading export markets, the current trade is close to its potential, indicating that the gravity model works relatively well for Turkey. Turkish exports to Russia and Israël are the above estimated trade potential, indicating a successful partnership, not fully captured by the determinants of trade used in this model. The strong trade with Israel is largely explained by the bilateral military and economic cooperation agreement signed in the late 1990s. Exports to Turkmenistan are also above what the theory predicts. A potential explanation is the importance of Turkish investments in Turkmenistan.

On the other hand, Japan is a largely untapped market for Turkish exporters. The factors behind this low volume of trade should be further explored. Nevertheless, we can assume that there are predominant explanatory factors such as the relative low level of Japanese investments in Turkey, Turkish trade policy and Turkish specialisation. In fact, Turkey is strongly oriented to the EU, benefiting from a preferential market access for all manufactures (and in particular for its textile & clothing), while it does not benefit from any privilege in the Japanese market.

Within the EU, Turkey is very successful. However, exports to Finland and Greece seem still to be under their theoretical potential.

**Bilateral profile for developed market economies**

For developed market economies, such as the USA or France, only included as importing countries in the sample, we provide results similar to Table 6 and Chart 1, but looking at USA and France as export markets for developing countries. Similarly, the fixed effects are now specific to the importing country $j$. Formally, the "a posteriori" fixed effect $F_j$ is defined as:

$$F_j = \sum_i X_{ij} \Big/ \sum_i \hat{X}_{ij}$$

Accordingly, the trade potential $TP'_{ij}$ is calculated as: $TP'_{ij} = F_j \cdot \hat{X}_{ij}$

It is important to note that the trade potentials calculated with a fixed effect for the importer ($TP'_{ij}$) are different from the trade potentials calculated with a fixed effect for the exporter ($TP_{ij}$).

Table 6: Output table for Turkey

| Importi ng country | Current trade 1999-2000, US$ th. | Trade Potential, US$ th. | Relative difference | Import duty | Distance | Telephone lines |
|---|---|---|---|---|---|---|
| Germany | 5,615,934 | 6,982,941 | -11 | Very low or duty-free | Rel. closed | Very good |
| USA | 2,744,667 | 2,338,265 | 8 | Low | Rel. far | Very good |
| U.K. | 2,054,583 | 2,049,861 | 0 | Very low or duty-free | Rel. closed | Very good |
| France | 1,844,373 | 2,047,450 | -5 | Low | Rel. closed | Very good |
| Italy | 1,793,505 | 2,841,318 | -23 | Low | Rel. closed | Very good |
| Netherlands | 932,757 | 634,334 | 19 | Very low or duty-free | Rel. closed | Very good |
| Spain | 729,066 | 642,362 | 6 | Very low or duty-free | Rel. closed | Very good |
| Belgium | 666,066 | 401,403 | 25 | Low | Rel. closed | Very good |
| Russian Fed | 503,424 | 26,985 | 90 | Average | Rel. closed | Very good |
| Israel | 436,146 | 195,182 | 38 | Low | Rel. closed | Very good |
| Greece | 374,667 | 617,570 | -24 | Low | Very closed | Very good |
| Egypt | 370,941 | 75,786 | 66 | Very high | Rel. closed | Rel. good |
| Austria | 353,334 | 475,008 | -15 | Very low or duty-free | Rel. closed | Very good |
| Algeria | 337,202 | 16,694 | 91 | High | Rel. closed | Rel. good |
| Saudi Arabia | 283,807 | 50,678 | 70 | High | Rel. closed | Rel. good |
| Romania | 252,395 | 113,531 | 38 | Average | Very closed | Very good |
| Switzerland | 246,140 | 265,894 | -7 | Average | Rel. closed | Very good |
| Denmark | 220,564 | 276,656 | -11 | Very low or duty-free | Rel. closed | Very good |
| Iran | 215,414 | 186,217 | 7 | Low | Rel. closed | Very good |
| Turkmenistan | 204,528 | 901 | 99 | Very high | Rel. closed | Rel. good |
| Poland | 191,401 | 150,223 | 12 | Very high | Rel. closed | Very good |
| Sweden | 184,618 | 280,882 | -21 | Very low or duty-free | Rel. closed | Very good |
| Portugal | 176,865 | 96,375 | 28 | Low | Rel. closed | Very good |
| Canada | 172,301 | 121,241 | 17 | Low | Rel. far | Very good |
| Tunisia | 162,708 | 12,148 | 86 | Very high | Rel. closed | Rel. good |
| Ireland | 126,571 | 79,422 | 23 | Very low or duty-free | Rel. closed | Very good |
| Japan | 125,732 | 1,174,616 | -81 | Low | Rel. fa | Very good |
| Hungary | 113,041 | 70,236 | 23 | Average | Rel. closed | Very good |
| Pakistan | 103,664 | 15,494 | 74 | High | Rel. closed | Rel. poor |
| Morocco | 98,977 | 10,202 | 81 | Very high | Rel. closed | Average |
| Georgia | 97,648 | 9,463 | 82 | Average | Rel. closed | Rel. good |
| Czech Rep. | 96,116 | 49,354 | 32 | High | Rel. closed | Very good |
| Norway | 91,345 | 98,626 | -4 | Low | Rel. closed | Very good |
| Kazakhstan | 90,492 | 4,197 | 91 | Low | Rel. closed | Rel. good |
| Australia | 86,718 | 29,578 | 48 | Average | Very far | Very good |
| Jordan | 86,615 | 6,589 | 86 | Average | Rel. closed | Rel. good |
| India | 84,546 | 118,670 | -17 | High | Average | Average |
| Korea Rep. | 84,394 | 102,514 | -10 | Average | Rel. far | Very good |
| Finland | 72,563 | 144,641 | -33 | Very low or duty-free | Rel. closed | Very good |
| China | 58,509 | 79,635 | -15 | High | Rel. far | Rel. good |
| Albania | 58,419 | 5,157 | 84 | Average | Very closed | Average |
| S.A.C.U. | 52,027 | 18,748 | 47 | Average | Rel. far | Rel. good |

In light blue and bold: successful partnership (trade >> potential)
In dark: untapped trade potential (potential >> trade)

## G. Limitations for small and weakly diversified economies

By definition, trade specialisation or more exactly trade complementarity between the countries under analysis is not taken into account in the gravity approach and explains to a great extent large residuals. This is particularly true for small or weakly diversified economies. For example, a country such as Benin, which relies strongly on cotton, will export more to Asian countries than what the theory predicts, since there are product complementarities between Benin and Asian economies, which import cotton fibre for their large textile and apparel industries. Similarly, seafood producers, such as Mauritania, will export more to Japan (the largest seafood importer worldwide) than what the gravity model predicts.

Hence, the trade potential should be considered as highly indicative for countries that are poorly diversified, relying on a few products. *TradeSim* actually gives the trade potential of a country, if it was relatively diversified. In the case of Benin, an adequate interpretation would be: "If Benin was more diversified, it would trade more with European countries than with Asia."

To conclude, results from *TradeSim*, a macro-economic approach, should be complemented with a deeper sector-specific or product-specific analysis in order to capture the trade complementarities between the countries under analysis. Some ITC's tools such as the Trade Performance Index, or the National Export and Import Profiles provide useful information at this respect.

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## Annex 1: Trade data estimates

Exports are extracted from *COMTRADE*. Unlike most existing models (that are based on IMF's DOTS), we exclude crude oil and other extracted raw materials. Since there is a discrepancy between reporting country and partner declarations for a given trade flow, and according to the better quality of import declarations, unless one of the two does not report data we consider a weighted average of both declarations. By default, if both reporters are considered to have the same level of data reliability, the 2/3 rule (2/3 for importers' data & 1/3 for the exporter's data) is used. If one of the two countries has more reliable data[9], more weight is put on the data reported by the "reliable" country. If the importer is a more reliable reporter than a weighted combination of 0.8 – 0.2 has been used. If the exporter is a more reliable reporter than a weighted combination of 0.6 – 0.4 has been used. In addition, in some special cases, data has been adjusted for important bilateral discrepancies, for example, Indonesia-Singapore (use of Indonesia's data as Singapore reports 0, mentioning that due to smuggling, they do not trust their own data) and Belarus-Russia (Belarus' declarations have been used as Russia does not report data by product with Belarus).

The table below gives the list of countries according to the consistency of their trade data with their partner countries.

Consistency of trade data with partner countries:

| Country/territory with consistent trade data | Country/territory with inconsistent trade data |
|---|---|
| Argentina, Australia, Austria, Barbados,<br>Belgium-Lux, Bolivia<br>Brazil, Canada, Chile, Colombia, Costa Rica, Croatia<br>Denmark, Dominica, Ecuador, Finland<br>France, Germany, Greece, Hungary<br>Iceland, India, Indonesia, Ireland<br>Israel, Italy, Jamaica, Japan, Korea, Republic of<br>Malaysia, Malta, Mauritius, Mexico<br>Netherlands, New Zealand, Norway<br>Peru, Philippines, Poland, Portugal<br>Romania, Singapore, Slovakia, Slovenia<br>Spain, Sweden, Switzerland, Thailand<br>Tunisia, Turkey, United Kingdom<br>United States of America, Uruguay | Albania, Burundi, China, Côte d'Ivoire<br>Cyprus, Egypt, El Salvador, Estonia<br>Guatemala, Honduras, Kazakstan<br>Kyrgyzstan, Latvia, Lithuania<br>Madagascar, Maldives,<br>Moldova, Republic of<br>Morocco, Nicaragua, Niger<br>Paraguay, Russian Federation<br>Southern African Customs Union<br>Suriname, Tanzania |

[9] Based on a recent ITC study, which calculates indicators of consistencies of trade data (see ITC web site). Countries are considered as reliable (such as Canada) when the global indicator is <0.30, non-reliable (e.g. Russia) when >0.35 or with average reliability bewteen these two values.

## Annex 2: Adjustments for China

In this version, we have applied the following adjustments, based on macro-economic statistics by provinces. China is considered as "exporting China", the eight Eastern provinces, which accounted in 2000 for around 85% of national trade, 30% of total population, 52% of national GDP and 30% of total land. These eight provinces attracted almost 90% of inward FDI over the 1990s.

Trade data has been adjusted roughly, by multiplying bilateral trade flows by 0.86% for exports and 0.84% for imports and assuming that the direction of trade of "exporting China" does not differ significantly from the whole China. An alternative, much more time-consuming, would have been to use Chinese statistics by province.

## *Annex 3: Selected tested alternative models*

| Variable | [C] Whole sample | | [D] Whole sample with paved roads | | [E] Whole sample, With transit | |
|---|---|---|---|---|---|---|
| | Estimate | Pr > \|t\| (1) | Estimate | Pr > \|t\| (1) | Estimate | Pr > \|t\| (1) |
| Intercept | -14.06 | | -12.15 | | idem | |
| Log GDP exporter | 1.90 | | idem | | idem | |
| Log GDP importer | 1.59 | | idem | | idem | |
| Log population density exporter | 0.07 | .042 | 0.14 | .001 | idem | |
| Log population density importer | 0.25 | .052 | 0.30 | | idem | |
| Log literacy rate exporter | 0.63 | | idem | | idem | |
| Log FDI exporter | 0.31 | | idem | | idem | |
| Log language diversity exporter | 0.13 | | idem | | idem | |
| Log of the product of telephone densities of exporter and importer | 0.12 | | 0.18 | | idem | |
| Border dummy variable | 0.80 | .018 | 0.76 | .026 | 0.20 (*) | .610 |
| Log of distance | -1.89 | | idem | | idem | |
| Bilateral measure of common culture | 2.65 | | idem | | idem | |
| Log of market access measure | -0.21 | | idem | | idem | |
| Log of conflict measure | -0.07 | .05 | idem | | idem | |
| Log of the product of paved roads ratios of exporter and importer | | | -.17 | .001 | | |
| Transit dummy variable | | | | | 2.4 | .001 |
| $R^2$ | 0.62 | | 0.63 | | 0.62 | |
| Number of observations | 9049 | | 8846 | | 9049 | |

Notes: (1) Significance probabilities lower than 0.0001 are not displayed. Idem means very closed value to [C]
(*): Estimates not statistically significantly different from 0, at the 5% significance probability.

## Annex 4: Correlation matrices

Correlation between country-specific variables (having the same value whatever the importing country)

| | Log literacy rate exporter | Log language diversity exporter | Log area exporter |
|---|---|---|---|
| Log language diversity exporter | -0.23 | | |
| Log area exporter | -0.20 | 0.45 | |
| Log GDP exporter | 0.25 | 0.09 | 0.57 |

Note: all estimates are statistically significantly different from 0, at the 5% significance probability. Calculated on the whole sample of countries.

Correlation between variables defined bilaterally

| | Log of the conflict intensity | Log of the product of telephone densities of exporter and importer | Log of bilateral market access measure | Border dummy variable | Log of distance | Bilateral measure of common culture |
|---|---|---|---|---|---|---|
| Log of the product of telephone densities of exporter and importer | 0.01* | | | | | |
| Log of bilateral market access measure | -0.01* | -0.03* | | | | |
| Border dummy variable | 0.35 | 0.00* | -0.05 | | | |
| Log of distance | -0.16 | -0.11 | 0.15 | -0.35 | | |
| Bilateral measure of common culture | 0.10 | -0.11 | -0.03* | 0.15 | -0.16 | |
| Transit dummy variable | 0.16 | -0.06 | -0.03* | 0.49 | -0.15 | 0.09 |
| Log of the product of paved roads | 0.01* | 0.65 | -0.02* | -0.03* | -0.21 | -0.08 |

(*): estimates statistically not significantly different from 0, at the 1% significance probability. Calculated on the whole sample of countries.

# The Trade Performance Index

## Background paper

## ITC

Document prepared by ITC Market Analysis Section

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## SUMMARY

ITC developed the Trade Performance Index (TPI) with the aim of assessing and monitoring the multi-faceted dimensions of export performance and competitiveness by sector and by county. At present, the TPI covers 184 countries and 14 different export sectors. The index calculates the level of competitiveness and diversification of a particular export sector using comparisons with other countries. In particular, it brings out gains and losses in world market shares and sheds light on the factors causing these changes. Moreover, it monitors the evolution of export diversification for products and markets. The TPI is limited by its purely quantitative approach, although it does provide a systematic overview of sectoral export performance and comparative and competitive advantages.

For each country and each sector, the TPI provides three types of indicators: a *general profile*, a country *position* for the latest available year and *changes* in export performance in recent years. Altogether, the TPI makes use of around two dozen quantitative performance indicators. For ease of reference, these indicators are presented in absolute terms and, in addition, ranked among the 184 countries covered by the TPI.

Moreover, two composite rankings are calculated. One of these rankings refers to the overall *position* of a country and sector and another ranking refers to *changes in performance*. The composite ranking referring to the overall *position* is based on five criteria, namely the value of net exports, per capita exports, the world market share, the diversification of products, and the diversification of markets. The composite ranking referring to *changes in performance* is based on five criteria, namely the change in the world market share, the change in the cover ratio (exports divided by imports), the level of specialisation in dynamic products, the change in product diversification and the change in market diversification.


### Introduction

The trade performance of individual countries tends to be a good indicator of economic performance since well performing countries tend to record higher rates of GDP growth. The majority of developing countries have joined the World Trade Organization (WTO) and have taken initiatives aimed at opening their economies. Nevertheless, the outcome has not always been systematically positive with export performance sometimes remaining disappointing. It is difficult to establish an all embracing definition of successful trade performance. Trade champions contrast with certain specialised exporters that suffer from a deterioration in their terms of trade. For example, some developing countries record high growth rates by specialising in niche markets and concentrating their export markets, while other developing countries record more moderate rates of growth with a well

diversified array of products and partner countries. In other cases, successful performance is the result of a favourable product or market penetration since the beginning. Successful performance can also be gauged in terms of a country's ability to adapt its export profile to changing patterns of world demand. The last approach is the most dynamic and demand-driven trade policy stance.

The Trade Performance Index (TPI thereafter) designed by ITC aims to tackle the complex and multidimensional nature of trade patterns. This index is computed using the world's largest trade database, COMTRADE (of the United Nations Statistics Division), covering 184 countries[1], where more than 90% of world trade in 3,500 products is reported at the 5-digit level of the SITC[2]. Since COMTRADE captures around 90 % of world trade, the TPI is calculated not only for countries that report their own trade data, but also for over one hundred primarily low-income countries that do not report national trade statistics.

Given that such an amount of information would be overwhelming to the final user, products are grouped into 14 sectors (see appendix 2). Calculations are made at the product level and results are presented at the sectoral level and for the economy as a whole. For each country and each sector, the TPI provides a *general profile*, indicators on a country's *position* and indicators on *changes* in export performance in recent years.

The rest of the paper covers the objectives, methodology and results of the TPI framework.

## 1- Motivation for developing the Trade Performance Index

Generally, trade performance is characterised by rough indicators, such as the level of openness (total trade in goods and services divided by GDP) or growth of exports over a given period (such as the World Bank's *World Development Indicators*).

Recent research on the relationship between trade and growth suggests that openness alone is not a sufficient criteria for determining high levels of growth. Other factors, such as the type of product available, the level of market and economic diversification, the positioning on quality ladders, are also significant in explaining growth. In addition, it is important to determine the reasons for country differences in export growth and to determine the redistributive process of market shares among competitors.

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[1] In the case of non-reporting countries, the trade is reconstituted on the basis of partner country statistics (mirror statistics). This approach does not capture trade among non-reporting countries.
[2] Standard International Trade Classification.

Departing from the rough indicators referred to above, microeconomic and generally qualitative indicators are used to characterise the competitiveness of nations. In this light, the "Microeconomic index of competitiveness" (Porter and Christensen, 1999), is based on the micro-foundations of a country's competitiveness. Launched in 1998 as part of the Global Competitiveness Report, this index is based on a survey of some 4,000 businessmen and government officials in 58 countries, including OECD countries[3]. Regressing income per capita on this index explains more than 80% of the variance of income in the sample. A quantitative method was developed in order to complement the qualitative approach, which may be criticised on the ground of being limited to a small number of developing countries.

It appears that the relative position of a country or product on the international market, and its development over time, is a good indicator of competitiveness. Trade statistics capture these changes. Trade statistics have the advantage of being available for a substantial number of countries. For those countries which do not report trade statistics, their trade profile can be (partially) completed by using mirror statistics. Lastly, trade data is broken down at the industry and product levels, which provides a disaggregated insight into trade performances.

On this basis, developing countries can be ranked according to their trade performance, based on various criteria. A ranking can be provided by country, sector, or a combination of different criteria.

It must be stressed that the performance of individual countries cannot be determined on the basis of a restricted sample of countries or products. The derivation of the relative export performance is achieved by including a significant number of countries, together with a detailed product breakdown.

## 2- Content of the TPI

For each country and each sector, the TPI provides indicators on a country's general profile, on a country's position and on changes in a country's export performance. Altogether, the TPI consists of 22 quantitative indicators of trade performance. For ease of reference, these indicators are presented in absolute terms and, in addition, combined to form a ranking among the countries. Two composite rankings are calculated, one for the overall position of the country and sector under review and another one for the change in performance.

[3] Indicators range from the overall infrastructure quality to administrative infrastructure, information infrastructure, capital availability, human resources etc.

All this information is grouped under three categories referring to "general profile", "position" and "change".

Firstly, descriptive indicators are provided, which will not be used in the calculation of the ranking. It is worthwhile computing their values since they provide valuable additional information for trade performance analysis. These are, for a given group of products:

G1. The value of exports (in thousand US $) in 1998

G2. The (weighted) trend of exports (94-98)

G3. The share in national exports in 1998

G4. The share in national imports in 1998

G5. The average annual change in per capita exports (94-98)

G6. The relative unit value in 1998

G7. The average annual change in relative unit value (94-98)

G8. The revealed comparative advantage.

A decreasing rank is calculated for the trend in exports and also for the change in per capita exports. However, these are indicative rankings that do not enter into the final ranking. Complementing this first set of information, the country specialisation index for the group of products considered is calculated and presented separately. Such an indicator should be considered separately since competitiveness and specialisation refer to two separate concepts: competitiveness refers to the advantage a country has in exporting a certain product over other countries, while specialisation refers to the allocation of resources within the exporting sector, under the assumption of balanced total trade.

Then, the TPI provides a second set of indicators related to *positions*:

P1. Value of net exports (in thousand US $)

P2. Per capita exports (US$/inhabitant)

P3. Share in world market (%)

P4-a. Product diversification (number)

P4-b. Product spread (ranking)

P5-a. Market diversification (number)

P5-b. Market spread (ranking)

For each of these indicators, a ranking is established, by decreasing performance, which will be used in the calculation of a composite ranking of *position*. The reasons for calculating two separate indicators of diversification for products and markets are clarified below. The composite index of *position* considers a simple average of the corresponding two ranks (average of the rankings for P4-a and P4-b for instance).

Lastly, the TPI provides a second set of indicators related to *change*:

C1. Percentage change in world market share

C2. Trend of import coverage by exports

C3. Matching with dynamics of world demand

C4-a. Change in product diversification

C4-b. Change in product spread

C5-a. Change in market diversification

C5-b. Change in market spread

The percentage change of world market share (C1) is divided into four complementary effects that are quantified separately, namely the competitiveness effect, the impact of initial geographic and product specialisation and the adaptation to changes in the patterns of world demand.

All these indicators enter into a composite ranking of change.

## 3- Calculation of indicators

This section examines the rationale and the calculation of each indicator entering in the TPI. General profile indicators, position-related indicators and change-related indicators are surveyed respectively.

All indicators are calculated for each of the 14 sectors at the product level. Original data used in the computation is at the 5-digit level of the SITC nomenclature, corresponding to some 3,500 products as a whole.

A first set of indicators aims at giving the general profile for the country considered. However, these indicators are not used in the calculation of the final ranking provided by the TPI, as already mentioned.

G1- Value of exports

Value of total country exports by sector is given in million of US$ for 1998. Exports are given in FOB terms if the country is a direct reporter to the COMTRADE database or in CIF terms when using mirror statistics.

G2- Trend of exports

The weighted trend measures, for each country and each sector, the annual percentage growth of exports from 1994 to 1998. The index is calculated using the ordinary least squares method. In this index the trend is weighted against the individual weight of specific products within the sector. This technique aims to render the results more stable and minimise the effect of strong fluctuations. The ranking of the 184 countries is proportional to the average growth rate of their respective exports.

G3 (G4)- Share in national exports (imports)

This refers to the share of exports (imports) by sector in relation to total country exports (imports), for the year 1998.

G5- Change in per capita exports

The level of exports is determined by the demand for a country's products on world markets and a country's ability to satisfy that demand, which can be related to its size. Hence, the value of per capita exports shows how outward looking is a country, and the extent to which the population produces for the world market. The change in per capita exports reflects changes in a country's outward looking stance and performance for the group of products considered.

G6- Relative unit value

The RUV of each sector is calculated as the ratio of the average unit value of exports for a country to the world average unit value. The reference point or average relative unit value is 1 (the unit value in the targeted country equals the unit value in the world market). If the RUV is below (above) 1, then the country exports its product at a lower (higher) price than the world average unit price.

Traditionally, the comparison of unit values for homogeneous products gives an indication of exporters' relative prices. However, according to the new theories of international trade, products are differentiated by quality, which is often reflected by differences in price. Accordingly, prices are considered as an indirect indicator of the quality of differentiated products: assuming that a consumer has access to product information, two products of different quality cannot be sold at the same price. However, since prices are not available for individual products, or even for industries, unit values (values divided by quantities) are taken as proxies for prices. Higher unit values are considered as reflecting a higher quality, other things being equal, and not as an indication of poor price competitiveness.

G7- Change in relative unit value

The change in Relative Unit Value represents the average annual evolution of the RUV index over the period (1993-1998).

G8- Comparative advantage (not displayed)

In trade flows analysis, an indicator of comparative advantage aims at measuring specialisation. The specialisation of a country is an indication of how a given country allocates its resources to its various industries, under the assumption of balanced total trade. The rationale underpinning this assumption is that the contribution of any product or industry to the theoretical level of specialisation must be isolated from business cycle related effects, such as the impact on trade of changes in the real exchange rate. This is the goal of the index measuring the contribution to the net trade balance developed by CEPII[4] and used in the present analysis. Accordingly, the indicator has a structural character.

The index, measured in thousand parts of trade, gives the contribution of each sector (and market) to the overall trade balance. It is calculated as the difference between the actual net balance and the theoretical net balance. The theoretical net balance corresponds to the net value that the sector (or market) under analysis would register when global equilibrium occurs in the country's trade. The aim of this index is to identify for each country those sectors with the highest levels of specialisation, rather than to compare countries.

Since this indicator compares levels of specialisation for different industries in a given country, it is not presented in the synthetic table but in a separate graph.

[4] Centre d'études prospectives et d'informations internationales, Paris.

According to equation (0), the revealed comparative advantage is standardised by total trade for the exporting country considered.

$$RCA^t_{icl} = \frac{1000}{\left(X^t_{i.} + M^t_{i.}\right)} * \left[\left(X^t_{icl.} - M^t_{icl.}\right) - \left(X^t_{i.} - M^t_{i.}\right) * \frac{\left(X^t_{icl.} + M^t_{icl.}\right)}{\left(X^t_{i.} + M^t_{i.}\right)}\right] \quad (0)$$

with:

$X^t_{i.}$ and $M^t_{i.}$ respectively country *i* total exports and imports in year *t*

$X^t_{icl}$ and $M^t_{icl}$ respectively country *i* total exports and imports of products belonging to the cluster *cl* in year *t*

$\left(X^t_{icl.} - M^t_{icl.}\right)$ the observed trade imbalance of country *i* for the cluster *cl* in year *t*.

$\frac{\left(X^t_{icl.} + M^t_{icl.}\right)}{\left(X^t_{i.} + M^t_{i.}\right)}$ the weight of cluster *cl* in country *i* exports in year *t*.

$\left(X^t_{i.} - M^t_{i.}\right) * \frac{\left(X^t_{icl.} + M^t_{icl.}\right)}{\left(X^t_{i.} + M^t_{i.}\right)}$ the theoretical imbalance of country *i* for the cluster *cl* in year *t*.

P1- Value of net exports

Net exports are defined as exports less imports. A country's net exports are a reliable indicator of its position on the world market for two reasons. Firstly, net exports eliminate re-exports, which would otherwise introduce a bias into the raw data. Secondly, the indicator takes into account the international division of production processes, since a large part of imported intermediate products found within exports usually belong to the same sector (e.g. electronic parts and assembled computers). Hence, net exports provide a very simple but reliable correction for dealing with the globalisation of production processes and the induced vertical specialisation of countries at various stages of production.

P2- Per capita exports

The value of per capita exports indicates the level of outward lookingness of a country and the extent to which a country's population produces for the world market.

P3- Share in world market (percentage share of world exports)



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The world market share for a specific country is the ratio of total country exports to total world exports. The market share can also be defined as the country's share in national markets for each partner country, and the importance of each of these partners in world trade.

Equation (1) defines the market share $PM_i^t$ of country $i$ at year $t$.

$$PM_i^t = \sum_j \sum_k \frac{X_{ijk}^t}{X_{..}^t} = \sum_j \sum_k \left[ \frac{X_{ijk}^t}{X_{.jk}^t} * \frac{X_{.jk}^t}{X_{..}^t} \right] \quad (1)$$

with

$X_{ijk}^t$ country $i$ exports of product $k$ to country $j$ at year $t$.

$X_{.jk}^t$ total exports of product $k$ to country $j$ at year $t$.

$X_{.j.}^t$ total exports to country $j$ at year $t$.

$X_{..}^t$ world exports of all products at year $t$.

$\frac{X_{ijk}^t}{X_{.jk}^t}$ the market share of country $i$ in country $j$ for the product $k$ at year $t$.

$\frac{X_{.jk}^t}{X_{..}^t}$ the weight of the importing market in world imports.

P4- Product diversification

Diversification, measured through exports, is a good indicator of production structures and industry's development level. Diversification limits the dependence on a small number of products and hence reduces a country's vulnerability to industry-specific external shocks.

In order to capture the degree of product diversification, two separate indicators are calculated: the equivalent number of products and the spread. The spread is the inverse of the corresponding concentration. The equivalent number (EN=1/Herfindal), is a theoretical value which represents the number of markets of identical size that would lead to the degree of export concentration exactly equal to the observed one. Because this indicator is not highly sensitive to activities of relatively weak importance, it is a measurement that is suited to sectoral studies. We start by presenting these indicators and then turn to an example illustrating the value added of combining the two indicators.

Calculating product differentiation by means of the equivalent number distinguishes for each country the equivalent number of exported goods of equal importance (either within each sector or in the whole national economy) leading to the same concentration of exports. The increase in rank is a function of the increase in the level of diversification (both for products and markets). The larger the index value, the greater the diversification of exports, and consequently the better the ranking.

The *spread index* complements the equivalent number. Spread indices measure the dispersion between the highest and lowest value in a given statistical serie. They are calculated using a weighted standard error. The spread index for products calculates for each country the distribution of export products and compares it to the average export value. The greater the distribution (i.e. spread) of exports from a country as compared to the average, the higher the value of the index.

If all countries export all products, one of these indicators would be sufficient. Since this is not the case, the combination of the two indicators is useful. The value added of combining the two indicators of dispersion can be illustrated by the example in Table 1.

For example, we consider 4 countries and 10 industries. Country A exhibits uniformity in the level of specialisation in its industries, thereby achieving the highest level of diversification. Country B is specialised with equal intensity in 5 out of the 10 industries. Country C exports products in 8 industries and is highly specialised in industry 7, which accounts for 35% of its exports. Lastly, country D exhibits the same specialisation patterns but tenfold. The choice between the two indicators is not the same for country A and B on the one hand, and B and C and the other hand. Neither indicator discriminates simultaneously between countries belonging to each of these pairs.

Consider the country pair A and B: the spread is zero in both cases (indicating uniformity in the specialisation in industries) whereas the equivalent number is twice as large for country A (indicating that country A is diversified twice as much as B). The spread does not take into account the number of industries in which a country is active, but only the share of each industry in total exports. The equivalent number, on the other hand, ignores the differences in each industry's share to total exports and only focuses on the number of industries a country is active in. Hence, the spread indicator does not distinguish any differences between country A and country B, whereas the equivalent number finds differences between them.

In the case of countries B and C, the opposite result is obtained. The equivalent number of markets of equal size is 5 in both cases. However, since the dispersion is much larger in country C, the spread can rank these two countries.

In sum, country A is the most diversified country, followed by B. Countries C and D are the least diversified.

Lastly, the comparison of results for countries C and D highlights the advantage of using the weighted spread to the standard deviation. Using the standard deviation, the dispersion in country D is ten times larger than in country C, even though only their size differs.

**Table 1: An example of complementarity between the two indicators of diversification**

| | Country A | Country B | Country C | Country D |
|---|---|---|---|---|
| industry 1 | 20 | | 20 | 200 |
| industry 2 | 20 | | 15 | 150 |
| industry 3 | 20 | | 26 | 260 |
| industry 4 | 20 | | 20 | 200 |
| industry 5 | 20 | | 20 | 200 |
| industry 6 | 20 | 40 | | |
| industry 7 | 20 | 40 | 74 | 740 |
| industry 8 | 20 | 40 | 5 | 50 |
| industry 9 | 20 | 40 | 20 | 200 |
| industry 10 | 20 | 40 | | |
| Total exports | 200 | 200 | 200 | 2000 |
| **equivalent number** | **10.00** | **5.00** | **5.00** | **5.00** |
| standard deviation | 0.00 | 0.00 | 20.71 | 207.10 |
| **weighted spread** | **0.00** | **0.00** | **0.104** | **0.104** |
| Rank EN | 1 | 2 | 2 | 2 |
| Rank weighted spread | 1 | 1 | 3 | 3 |
| ***Ranking*** | ***1*** | ***2*** | ***3*** | ***3*** |



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In technical terms, the equivalent number (for products) is calculated as in equation (2) below:

$$NE^t_{icl} = \frac{1}{\sum_{k=1}^{n} \left( X^t_{i,k} / X^t_{i,cl} \right)^2} \quad (2)$$

with: $X^t_{i,k}$ the export of product $k$ by country $i$ at year $t$.

$X^t_{i,cl}$ country $i$ exports of all products belonging to the cluster $cl$ at year $t$.

$X_{i,k} / X_{i,cl}$ the share of product $k$ in total exports of country $i$ in cluster $cl$.

Turning to the index of weighted spread, equation (3) indicates that the standard deviation divided by the number of products times the average value of exports for individual products has been used.

$$S^t_{cl} = \left[ \frac{\sqrt{\sum_{k=1}^{cl} \left( X^t_{i,k} - \overline{X}^t_{i,cl} \right)^2}}{N(\overline{X}^t_{i,cl})} \right] \quad (3)$$

with:

$X^t_{i,k}$ country $i$ exports of product $k$ to market $i$ in year $t$.

$\overline{X}^t_{i,cl}$ the average value of country $i$ exports in year $t$ for the cluster $cl$.

$\left( X^t_{i,k} - \overline{X}^t_{i,cl} \right)$ the deviation to the average of product $k$ in cluster $cl$ for country $i$.

$\sqrt{\sum_{k=1}^{cl} \left( X^t_{i,k} - \overline{X}^t_{i,cl} \right)^2}$ the standard deviation.

$S^t_{cl}$ the weighted spread.

P5- Diversification of markets

Diversifying partner countries reduces a country's dependence on a small number of export markets and hence the vulnerability to shocks within destination countries.

In order to capture the degree of market diversification, the same two complementary indicators referred to above are used: the equivalent number of markets and the spread.

The equivalent number used for calculating market diversification (equation 4) distinguishes for each country, the number of partner countries weighed according to their importance. The increase



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in rank is a function of the increase in the level of diversification of markets. The bigger the index value, the greater the diversification of markets and consequently the better the ranking.

$$NE_i^t = \frac{1}{\sum_{j=1}^{p} \left( X_{ijcl}^t / X_{i.cl}^t \right)^2} \quad (4)$$

with :

$X_{ijcl}^t$ country $i$ exports of all products belonging to the cluster $cl$ to country $j$ in year $t$.

$X_{i.cl}^t$ country $i$ total exports of all products belonging to the cluster $cl$

$X_{ijcl} / X_{i.cl}$ the share of market $j$ in country $i$ total exports of products belonging to the cluster $cl$.

Spread indices measure the existing dispersion between the highest and lowest value of a given statistical series. They are calculated using the weighted standard error (equation 5). The spread index for markets compares for each country, the share of its exports directed to different partner countries with the average export value. The greater the dispersion of exports from this country (i.e. the greater the spread) as compared to the average, the higher the value of the index.

Concerning positions, the ranking of the 184 countries is a function of the degree of diffusion of exported products (of a country's exports to partner countries). The smaller the index, the more exported products are evenly distributed (amongst partner countries) and the better the ranking.

$$S_{icl}^t = \left[ \frac{\sqrt{\sum_{j=1}^{p} \left( X_{ijcl}^t - \overline{X}_{icl}^t \right)^2}}{N(\overline{X}_{icl}^t)} \right] \quad (5)$$

with:

$X_{ijcl}^t$ country $i$ total exports to market $j$ in cluster $cl$ in year $t$.

$\overline{X}_{icl}^t$ country $i$ average export to the $p$ markets of products belonging to the cluster $cl$ in year $t$.

$\sqrt{\sum_{k=1}^{cl} \left( X_{ijcl}^t - \overline{X}_{icl}^t \right)^2}$ the standard deviation.

C1- Change in world market share

Turning to variations, the decomposition of the variation in the world market share provides information on the competitiveness of the country considered. The market share variation can be tabulated as the simple average of the rankings according to four criteria: competitiveness, initial geographic specialisation, initial product specialisation and responsiveness to changes in world demand. These indicators are calculated by decomposing changes in a country's market share in elementary markets.

An elementary market is defined as the destination market "j" for a specific product "k". The market share of country "i" in the world market can be written as the sum of partner countries (markets "j") as well as products (sectors "k"), weighted by the share of these markets in world exports.

The variation in country "i"'s market share is the total derivative of this weighted average. The equation can be written as the sum of the following components:

*Competitiveness effect* p.a.: Gains in market shares due to increased competitiveness. It is calculated as the change in the exporting country's share in destination market imports, multiplied by the initial share of the partner countries' imports in world trade.

*Initial geographic specialisation* p.a.: This effect captures the benefits associated with the initial specialisation of domestic exports on dynamic markets. Quantitatively, it is calculated as the initial market share of the exporting country in partner countries, multiplied by the change in the share of partner countries in world trade.

*Initial product specialisation* p.a.: This effect captures the benefits associated with the initial sector specialisation of domestic supply on products facing a dynamic demand. Quantitatively, it is calculated as the change in the share of elementary markets in world trade, multiplied by the difference between the initial share of the exporting country in elementary markets and the initial market share of the exporting country in destination markets.

*Adaptation* p.a.: This effect captures the ability to adjust the supply of exports to changes in world demand. This is obtained by calculating the cross variation of changes in country "i"'s market share and the change in its share of elementary markets in world imports. If both changes are positive (+,+), this indicates that over the period studied, country "i" has experienced an increase in its market share on dynamic elementary markets. It follows that the outcome from the cross variation is positive. If both changes are negative (-,-), it means that over the period studied, country "i" has experienced a decrease in its market share on recessive elementary markets. Thus, the cross variation is once again positive. In contrast, increasing market shares on recessive markets (+,-) or losing market shares on dynamic markets (-,+) leads to a negative cross variation.

In sum, the *ranking* for the change in market share is calculated as the simple average of the rankings for the 4 following items: competitiveness, geographic specialisation, product specialisation and responsiveness to changes in world demand.

More formally, the change in world market share can be written as in (3).

$$\partial PM_i = \sum_{j\ k} \partial\left[\frac{X_{ijk}}{X_{.jk}}\right] * \left[\frac{X^0_{.jk}}{X^0_{..}}\right] + \sum_{j\ k} \left[\frac{X^0_{ijk}}{X^0_{.jk}}\right] * \partial\left[\frac{X_{.jk}}{X_{..}}\right] + \sum_{j\ k} \partial\left[\frac{X_{ijk}}{X_{.jk}}\right] * \partial\left[\frac{X_{.jk}}{X_{..}}\right] \quad (3)$$

This is the sum of three terms, namely:

the gains or losses in market shares associated with changes in competitiveness:

$$\sum_{j\ k} \partial\left[\frac{X_{ijk}}{X_{.jk}}\right] * \left[\frac{X^0_{.jk}}{X^0_{..}}\right]$$

the benefits of the initial specialisation on dynamic markets:

$$\sum_{j\ k} \left[\frac{X^0_{ijk}}{X^0_{.jk}}\right] * \partial\left[\frac{X_{.jk}}{X_{..}}\right]$$

the adaptation to the changes in world demand:

$$\sum_{j\ k} \partial\left[\frac{X_{ijk}}{X_{.jk}}\right] * \partial\left[\frac{X_{.jk}}{X_{..}}\right]$$

It is possible to split the effect of initial specialisation (the second term in equation 3) into two parts corresponding to the benefits of the initial specialisation by destination market and by product.

$$\sum_{j\ k} \left[\frac{X^0_{ijk}}{X^0_{.jk}}\right] * \partial\left[\frac{X_{.jk}}{X_{..}}\right] = \sum_{j} \left[\frac{X^0_{ij.}}{X^0_{.j.}}\right] * \partial\left[\frac{X_{.j.}}{X_{..}}\right] + \sum_{j\ k} \left[\frac{X^0_{ijk}}{X^0_{.jk}} - \frac{X^0_{ij.}}{X^0_{.j.}}\right] * \partial\left[\frac{X_{.jk}}{X_{..}}\right] \quad (4)$$

The first term on the right side of equation (4) corresponds to the effect of the initial specialisation on destination markets. The impact is positive if the country benefits from strong initial positions on dynamic markets. The second term refers to the impact of the initial product specialisation. The two terms are not symmetric since it is impossible to fully disentangle the geographic and sectorial impacts.

C2- Trend of the coverage of imports by exports

The index is calculated as the average annual growth rate of the cover ratio between 1994-1998 (based on the ordinary least-squares method). It indicates the evolution of the trade balance for a group of products. A positive index will be associated with a positive trend.

C3- Adapting to world demand

This index is calculated with a view to ranking countries according to their ability to adapt to the dynamics of world demand. It is based on Spearman's rank correlation between the ranking share of the exporting countries' export products in its total exports, and the rank of growth trends in worldwide exports of those products.

Each country is given a correlation index that takes a value between 1 and –1. A value of 1 (-1) indicates that the relative importance of a country's exported goods is in full accordance (discordance) with the ranking of world export growth rates for the same goods.

The country ranking is dependent on the rank correlation index. The closer the index is to 1, the better the country ranking under analysis.

C4 : Change in the diversification of products

The change in the product diversification of a given country represents the average annual variation over the period 1994-1998 in the number of equivalent export products.

The change in the product spread of a given country represents the average annual variation over the period 1994-1998 in the concentration of export products.

C5 : Change in market diversification

The change in the product diversification of a given country represents the average annual variation over the period 1994-1998 in the number of equivalent export markets.

The change in the product spread of a given country represents the average annual variation over the period 1994-1998 in the concentration of export markets.

## 4- Interpretation of the results

In addition to a general profile, the TPI ranks countries for each indicator according to two criteria: the *position*, which is essentially a "snapshot" of a country's performance at a given point of time, and the *evolution* of export performance over a given time period (5 years). The TPI positions the export sectors of member countries by export competitiveness, both from a static and dynamic perspective.

There are 5 groups of indicators for the *position* and the *evolution* based ranks (Table 2). The TPI is tabulated independently for the position and evolution of each country, and alternatively by combining the *position* and *evolution* into a synthetic index.

**Table 2: Content of the TPI**

| | Indicator | Unit | Weight in the ranking |
|---|---|---|---|
| G1 | Value of exports | Thousand current dollars, 1998 | No ranking |
| G2 | Trend in net exports | Percent, 1994-98 | 0 |
| G3 | Share in national exports | Percent | No ranking |
| G4 | Share in national imports | Percent | No ranking |
| G5 | Change in per capita exports | Percentage variation, 1994-98 | 0 |
| G6 | Relative unit value | No unit | 0 |
| G7 | Change in relative unit value | Percentage variation, 1994-98 | 0 |
| G8 | Comparative advantage (Not displayed) | Per thousands of exporter's trade | No ranking |
| P1 | Value of net exports | Thousand current dollars, 1998 | 1 |
| P2 | Per capita exports | Current dollars, 1998 | 1 |
| P3 | World market share | Percent | 1 |
| | Diversification of products | | (1) |
| P4-a | Equivalent number | No unit | 0.5 |
| P4-b | Product spread | No unit | 0.5 |
| | Diversification of markets | | (1) |
| P5-a | Equivalent number | No unit | 0.5 |
| P5-b | Market spread | No unit | 0.5 |
| C1 | Change in world market share reflecting: | Percentage variation, 1994-98 | (1) |
| | Change in competitiveness | Percentage variation, 1994-98 | 0.25 |
| | Initial geographic specialisation | Percentage points | 0.25 |
| | Initial product specialisation | Percentage points | 0.25 |
| | Adaptation to changes in world demand | Percentage points | 0.25 |
| C2 | Trend of the coverage of imports by exports | Percent, 1994-98 | 1 |
| C3 | Matching with the dynamics of world demand | No unit | 1 |
| | Change in the diversification of products | | (1) |
| C4-a | Variation of the equivalent number | No unit, only the ranking displayed | 0.5 |
| C4-b | Spread variation | No unit, only the ranking displayed | 0.5 |
| | Change in the diversification of markets | | (1) |
| C5-a | Variation of the equivalent number | No unit, only the ranking displayed | 0.5 |
| C5-b | Spread variation | No unit, only the ranking displayed | 0.5 |
| | TOTAL | | 10 |

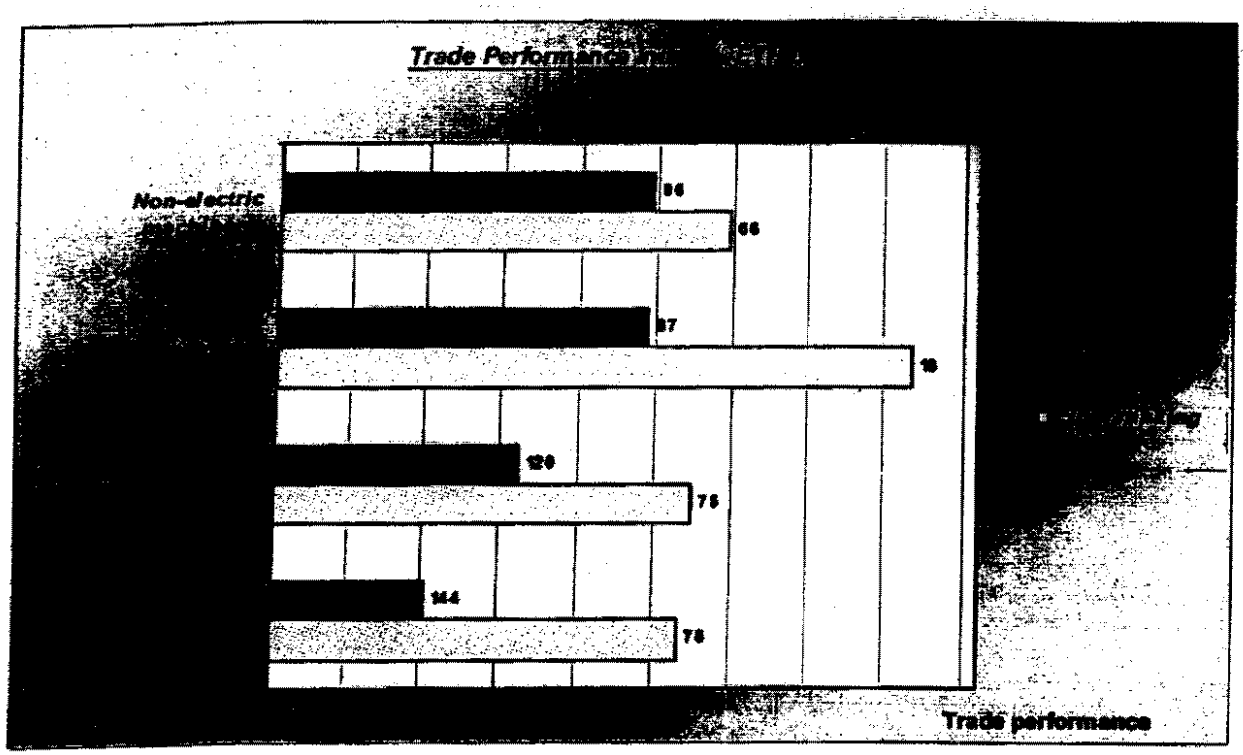
The final ranking is a weighted average of the individual rankings for each of the different indices. The improvement in the ranking reflects improvements in its trade performance (both in absolute and relative terms). As an example, table 3 shows the standard output of the TPI for Ethiopia. Three types of indicators are presented in the table, namely the general profile, the position in 1998 and the change over 1994-98.

**Table 3: Results of the TPI for Ethiopia, 1998.**

| | | ETHIOPIA | Fresh food | | Non-electric machinery | | Misc. manufacturing | | Minerals | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Value | Ranking | Value | Ranking | Value | Ranking | Value | Ranking |
| General profile | G1 | Value of exports ($ 000) | 462,891 | | 7,911 | | 7,286 | | 6,697 | |
| | G2 | Trend of exports (94-96) p.a. | 14% | 47 | -9% | 87 | 7% | 89 | 0% | 116 |
| | G3 | Share in national export | 93% | | 2% | | 1% | | 1% | |
| | G4 | Share in national import | 7% | | 22% | | 7% | | 1% | |
| | G5 | Average annual change in per capita exports | 14% | 27 | -11% | 108 | 13% | 61 | 269% | 11 |
| | G6 | Relative unit value (world average = 1) | 1.6 | | 0.6 | | 0.1 | | 1.1 | |
| | G7 | Average annual change in relative unit value | 4% | | -2% | | -18% | | -3% | |
| Position in 1998 | P1 | Value of net exports ($ 000) | 418,479 | 36 | -197,777 | 83 | -84,416 | 99 | 878 | 73 |
| | P2 | Per capita exports ($/inhabitant) | 8.3 | 142 | 0.1 | 108 | 0.1 | 104 | 0.1 | 174 |
| | P3 | Share in world market | 0.02% | 89 | 0.00% | 86 | 0.00% | 109 | 0.00% | 134 |
| | P4a | Product diversification (N° of equivalent products) | 2 | 104 | 1 | 114 | 1 | 133 | 1 | 145 |
| | P4b | Product spread (concentration) | | 110 | | 84 | | 110 | | 135 |
| | P5a | Market diversification (N° of equivalent markets) | 7 | 91 | 1 | 83 | 1 | 116 | 2 | 128 |
| | P5b | Market spread (concentration) | | 99 | | 83 | | 116 | | 140 |
| Change 1994-1998 | C1 | Percentage change of world market share* p.a. | 0.17% | | -0.12% | | 0.10% | | 2.88% | |
| | | Sources: Competitiveness effect p.a. | 0.17% | 22 | -0.10% | 89 | 0.03% | 81 | 2.20% | 7 |
| | | Sources: Initial geographic specialisation p.a. | -0.01% | 120 | 0.00% | 28 | 0.01% | 36 | 0.00% | 83 |
| | | Sources: Initial product specialisation p.a. | 0.01% | 70 | 0.10% | 1 | 0.04% | 12 | 0.00% | 86 |
| | | Sources: Adaptation p.a. | -0.01% | 99 | -0.14% | 83 | 0.01% | 26 | 0.68% | 6 |
| | C2 | Trend of import coverage by exports | 41% | 12 | -18% | 109 | 9% | 33 | 121% | 9 |
| | C3 | Matching with dynamics of world demand | | 91 | | 11 | | 17 | | 85 |
| | C4a | Change in product diversification (N° of equiv. | | 93 | | 89 | | 121 | | 140 |
| | C4b | Change in product spread (concentration) | | 95 | | 77 | | 122 | | 144 |
| | C5a | Change in market diversification (N° of equiv. markets) | | 41 | | 28 | | 118 | | 89 |
| | C5b | Change in market spread (concentration) | | 43 | | 29 | | 113 | | 89 |

Figure 1 plots the TPI rankings reported in Table 3. For each exporting sector, the first bar represents the performance according to the end of period position. In the case of Ethiopia, non-electrical machinery is the most performant export sector in 1998. The second bar represents the performance according to changes over the period under consideration. Fresh food products recorded the greatest progress in performance between 1994 and 1998. It should be noted that Ethiopia only exports in 4 clusters out of 14.

**Figure 1: Sectorial TPI rankings for Ethiopia, 1998**




Lastly, comparative advantages do not enter in the ranking and are displayed separately. There is a definition of comparative advantage for each industry, whereas all the previous indicators are related to exports or market shares only for those sectors in which the country exports.

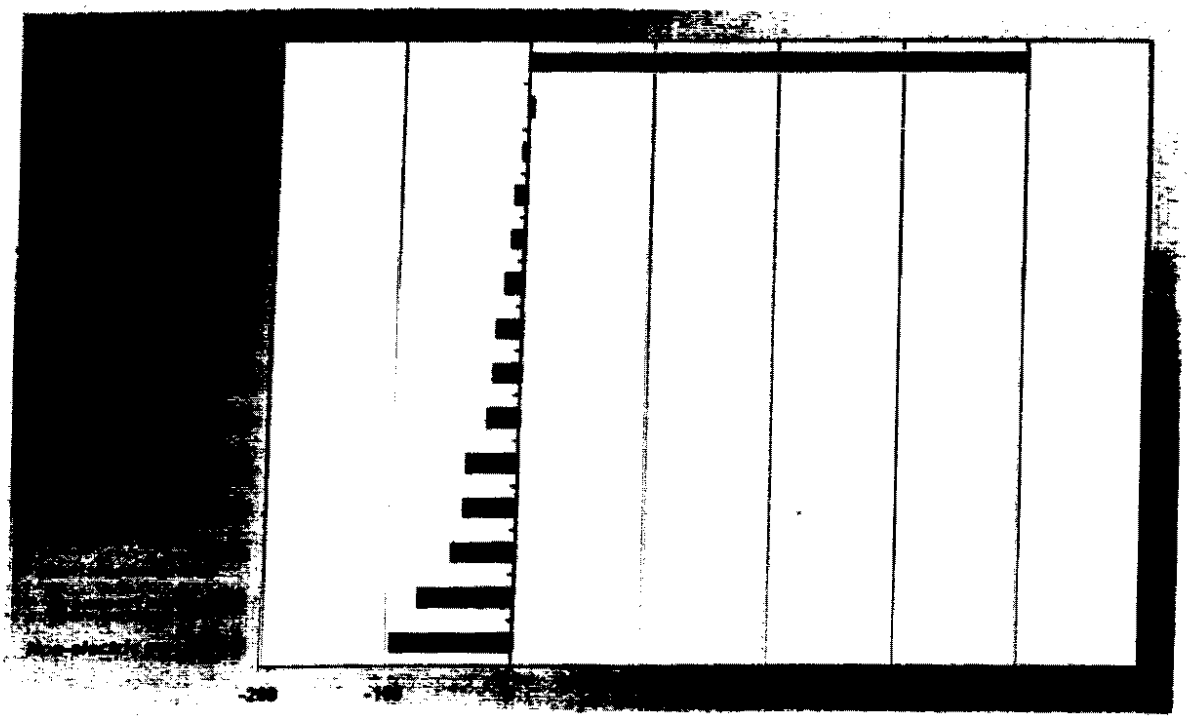
Three remarks have to be made concerning the table below. First, this indicator adds up to 0. Second, the ranking of industries are calculated for each country. Such an approach differs significantly from the rankings of countries for a given industry, as referred to above. Third, figures in the column "revealed comparative advantage" are specific to each country and should not be compared with other countries.

**Table 4: Ethiopian Revealed comparative advantages (1998)**

| ETHIOPIA | Revealed comparative advantage | Rank |
|---|---|---|
| *Fresh food* | 305 | 1 |
| *Minerals* | 3 | 2 |
| *Leather products* | -2 | 3 |
| *Clothing* | -9 | 4 |
| *Textiles* | -10 | 5 |
| *Wood products* | -13 | 6 |
| *Electronic components* | -19 | 7 |
| *Processed food* | -21 | 8 |
| *Misc. manufacturing* | -25 | 9 |
| *Cons. Electronics* | -40 | 10 |
| *Basic manufacturing* | -42 | 11 |
| *Chemicals* | -59 | 12 |
| *Transport equipment* | -74 | 13 |
| *Non-electric machinery* | -95 | 14 |
| *TOTAL* | 0 | |

The table above and graph below show that Ethiopia has a single comparative advantage on fresh food products.

**Figure 2: Ethiopian Revealed comparative advantages (1998)**



## Appendix-1: the combined ranking: summary

| | Indicators | What does it mean? | How is it calculated? | Ranking | Weight in the ranking |
|---|---|---|---|---|---|
| G1 | Value of exports | Importance of the sector considered | Exports in 1998 | no | . |
| G2 | Trend of exports | Development of exports | Growth of exports over the period 1994-1998 (based on the least-squared method) | yes | 0 |
| G3 | Share in national exports | Importance of the products in national exports | Exports in the group of products divided by total exports | no | . |
| G4 | Share in national imports | Importance of the products in national imports | Imports in the group of products divided by total exports | no | . |
| G5 | Average annual change in per capita exports | Evolution in the outward lookingness of the economy | Percentage change in the ratio of exports to population | no | 0 |
| G6 | Relative unit value | Standard of quality reached by country exports | Unit value (value divided by quantity) of country relative to the world unit value | no | 0 |
| G7 | Average annual change in relative unit value | Change in the quality of country exports | Percent change of relative unit values | no | 0 |
| G8 | Revealed comparative advantage (Not displayed) | Specialisation of county under the assumption of balanced trade | Contribution to the trade balance defined as the difference between observed and theoretical relative trade surplus. | no | . |
| P1 | Value of net exports | Importance of the trade balance in the sector considered | Exports less imports in 1998 | yes | 1 |
| P2 | Per capita exports | Extent to which the labour force produces for the world market | Exports divided by population | yes | 1 |
| P3 | Share in world market | Success on the world market | Percentage share of world imports | yes | 1 |
| | Product diversification, reflecting: | Number and weight of exported products | See cells below | | (1) |
| P4-a | Equivalent number | Number of export products of equal size that would lead to the observed concentration of exports | Inverse of the Herfindhal index | yes | 0.5 |
| P4-b | Product spread | Concentration of export markets by value | Weighted standard error | yes | 0.5 |
| | Market diversification, reflecting: | Number and weight of partner countries | See cells below | yes | (1) |
| P5-a | Equivalent number | Number of markets of equal size that would lead to the observed concentration of exports | Inverse of the Herfindhal index | yes | 0.5 |
| P5-b | Market spread | Concentration of expon markets by value | Weighted standard error | yes | 0.5 |
| C1 | Percentage annual change in world market share reflecting: | Change in global performance | Change in the world market share | no | (1) |
| | Change in competitiveness | Gain in market share due to increased competitiveness | Change in the exporting country's share in destination markets' imports times by the initial share of partner countries' imports in world trade (weighted average of the variation in the country's position on elementary markets*) | yes | 0.25 |
| | Initial geographic specialisation | Benefits associated with the initial specialisation of domestic exporters on dynamic markets | Initial market share of the exporting country in partner countries times by the change in the share of partner countries in world trade (weighted average of variations in the relative importance of export markets) | yes | 0.25 |
| | Initial product specialisation | Benefits associated with the initial sectorial specialisation of domestic supply on products characterised by dynamic demand. | Change in the share of elementary markets in world trade times by the difference between the initial share of the exporting country in elementary markets* and the initial market share of the exporting country in destination markets (initial product orientation weighted average of changes in destination market's share in world imports) | yes | 0.25 |
| | Adaptation to changes in world demand | Ability to adjust export supply to changes in world demand | Change in the share of the elementary markets* in world trade times by the change in the exporting county's market share in these elementary markets* | yes | 0.25 |
| C2 | Trend of import coverage by exports | Development of sectorial surplus or deficit of exports over imports | Growth trend of the coverage ratio (exports divided by imports) over the period 1993-1998 (based on the least-squared method) | yes | 1 |
| C3 | Matching with the dynamics of world demand | Focus of the national export portfolio on the world's most dynamic products | Spearmen's rank correlation between the country's share of export products in national exports and the respective trends in world demand | yes | 1 |
| | Change in product diversification: | Ability to develop new export products | See cells below | yes | (1) |
| C4-a | Change in the equivalent number | Change in the number of export products of equal size that would lead to the observed concentration of exports | Variation in the inverse of the Herfindhal index | yes | 0.5 |
| C4-b | Change in the product spread | Change in the concentration of the export markets by value | Variation in the weighted standard error | yes | 0.5 |
| | Change in the diversification of markets | Ability to penetrate new markets | See cells below | yes | (1) |
| C5-a | Change in the equivalent number | Change in the number of markets of equal size that would lead to the observed concentration of exports | Variation in the inverse of the Herfindhal index | yes | 0.5 |
| C5-b | Change in market spread | Change in the concentration of the distribution of export markets | Variation in the weighted standard error | yes | 0.5 |

Notes: All absolute values refer to 1998; growth rates to the period 1994 - 1998. World trade is calculated on the basis some 80 reporting countries, which cover approximately 90% of actual world trade.

Coverage of non-reporting countries: the trade of non-reporting countries is reconstituted on the basis of partner country statistics (mirror statistics). This approach does not capture trade among non-reporting countries.

* An elementary market refers to one country's export of a specific product to a specific market.

## Appendix-2: the classification of products

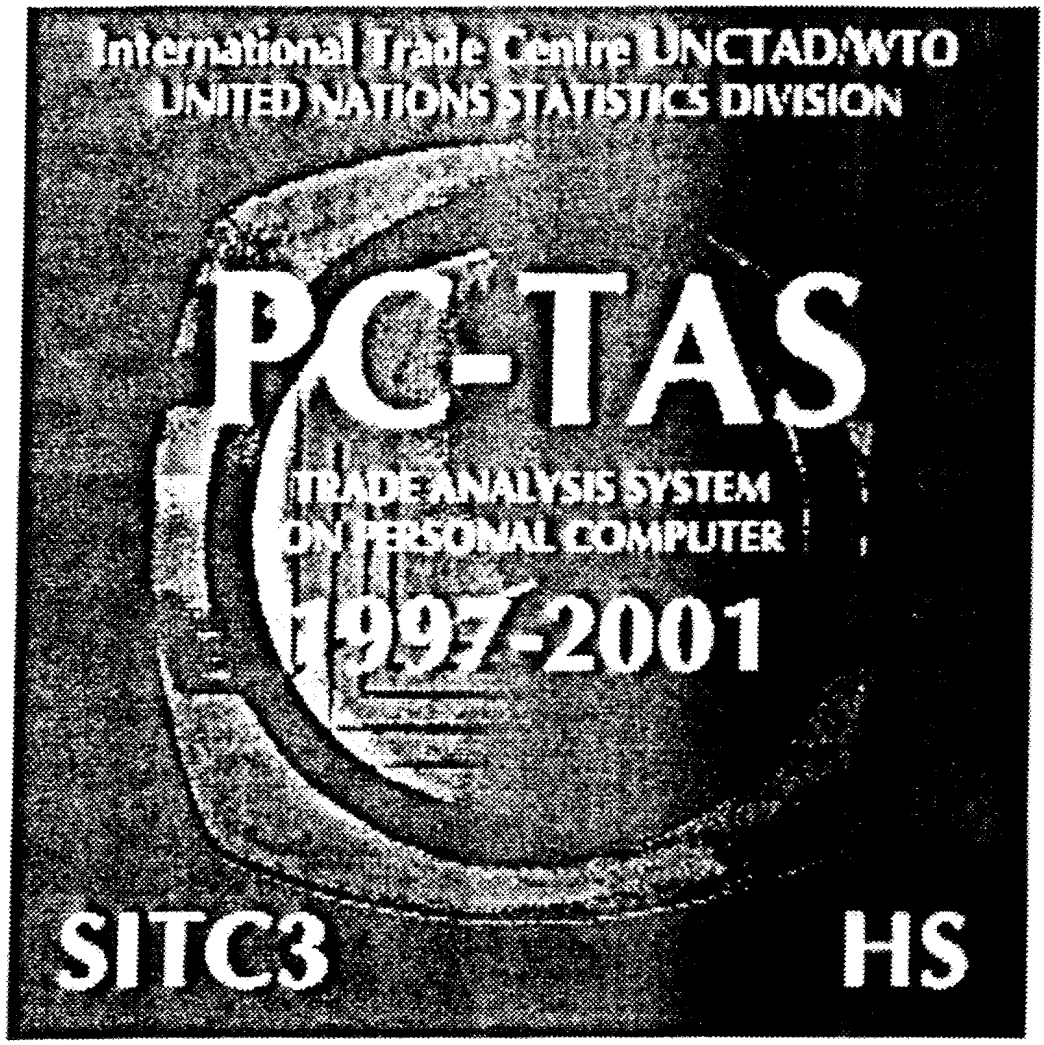
| Sectors | SITC Rev.3 | Products |
|---|---|---|
| 1 Fresh food and agro-based products | 001 | LIVE ANIMALS |
| | 011 | BOVINE MEAT |
| | 012 | OTHER MEAT, MEAT OFFAL |
| | 034 | FISH,FRESH,CHILLED,FROZN |
| | 036 | CRUSTACEANS,MOLLUSCS ETC |
| | 041 | WHEAT, MESLIN, UNMILLED |
| | 0421 | RICE |
| | 043 | BARLEY, UNMILLED |
| | 044 | MAIZE UNMILLED |
| | 045 | OTHER CEREALS, UNMILLED |
| | 054 | VEGETABLES |
| | 057 | FRUIT,NUTS EXCL.OIL NUTS |
| | 071 | COFFEE,COFFEE SUBSTITUTE |
| | 072 | COCOA |
| | 074 | TEA AND MATE |
| | 075 | SPICES |
| | 121 | TOBACCO, UNMANUFACTURED |
| | 211 | HIDES,SKINS(EX.FURS),RAW |
| | 212 | FURSKINS, RAW |
| | 222 | OILSEEDS(FT.FIX VEG.OIL) |
| | 223 | OILSEED(OTH.FIX.VEG.OIL) |
| | 231 | NATURAL RUBBER, ETC. |
| | 261 | SILK |
| | 263 | COTTON |
| | 264 | JUTE,OTH.TEXTL.BAST FIBR |
| | 265 | VEGETABLE TEXTILE FIBRES |
| | 268 | WOOL, OTHER ANIMAL HAIR |
| | 291 | CRUDE ANIMAL MATERLS.NES |
| | 292 | CRUDE VEG.MATERIALS, NES |
| 2 Processed food and agro-based products | 016 | MEAT,ED.OFFL,DRY,SLT,SMK |
| | 017 | MEAT,OFFL,PRPD,PRSVD,NES |
| | 022 | MILK AND CREAM |
| | 023 | BUTTER,OTHER FAT OF MILK |
| | 024 | CHEESE AND CURD |
| | 025 | EGGS,BIRDS,YOLKS,ALBUMIN |
| | 035 | FISH,DRIED,SALTED,SMOKED |
| | 037 | FISH ETC.PREPD,PRSVD,NES |
| | 0422 | RICE |
| | 0423 | RICE |
| | 046 | MEAL,FLOUR OF WHEAT,MSLN |
| | 047 | OTHER CEREAL MEAL,FLOURS |
| | 048 | CEREAL PREPARATIONS |
| | 056 | VEGTABLES,PRPD,PRSVD,NES |
| | 058 | FRUIT,PRESERVED,PREPARED |
| | 059 | FRUIT, VEGETABLE JUICES |
| | 061 | SUGARS,MOLASSES,HONEY |
| | 062 | SUGAR CONFECTIONERY |
| | 073 | CHOCOLATE,OTH.COCOA PREP |
| | 081 | ANIMAL FEED STUFF |
| | 091 | MARGARINE AND SHORTENING |
| | 098 | EDIBLE PROD.PREPRTNS,NES |
| | 111 | NON-ALCOHOL.BEVERAGE,NES |
| | 112 | ALCOHOLIC BEVERAGES |
| | 122 | TOBACCO, MANUFACTURED |
| | 411 | ANIMAL OILS AND FATS |

| | | |
|---|---|---|
| | 421 | FIXED VEG.FAT,OILS. SOFT |
| | 422 | FIXED VEG.FAT,OILS.OTHER |
| | 431 | ANIMAL,VEG.FATS.OILS.NES |
| | 551 | ESSNTL.OIL,PERFUME,FLAVR |
| **3 Wood, wood products and paper** | 244 | CORK.NATURAL,RAW:WASTE |
| | 245 | FUEL WOOD, WOOD CHARCOAL |
| | 246 | WOOD IN CHIPS, PARTICLES |
| | 247 | WOOD ROUGH,ROUGH SQUARED |
| | 248 | WOOD, SIMPLY WORKED |
| | 251 | PULP AND WASTE PAPER |
| | 633 | CORK MANUFACTURES |
| | 634 | VENEERS, PLYWOOD, ETC. |
| | 635 | WOOD MANUFACTURES, NES |
| | 641 | PAPER AND PAPERBOARD |
| | 642 | PAPER,PAPERBOARD,CUT ETC |
| | 8215 | Wooden furniture |
| **4 Yarn, fabrics and textiles** | 651 | TEXTILE YARN |
| | 652 | COTTON FABRICS, WOVEN |
| | 653 | FABRICS,MAN-MADE FIBRES |
| | 654 | OTH.TEXTILE FABRIC,WOVEN |
| | 655 | KNIT.CROCHET.FABRIC NES |
| | 656 | TULLE,LACE,EMBROIDRY.ETC |
| | 657 | SPECIAL YARN,TXTL.FABRIC |
| | 658 | TEXTILE ARTICLES NES |
| | 659 | FLOOR COVERINGS, ETC. |
| **5 Chemicals** | 232 | SYNTHETIC RUBBER, ETC. |
| | 266 | SYNTHETIC FIBRES |
| | 267 | OTHER MAN-MADE FIBRES |
| | 511 | HYDROCARBONS,NES,DERIVTS |
| | 512 | ALCOHOL,PHENOL,ETC.DERIV |
| | 513 | CARBOXYLIC ACIDS,DERIVTS |
| | 514 | NITROGEN-FUNCT.COMPOUNDS |
| | 515 | ORGANO-INORGANIC COMPNDS |
| | 516 | OTHER ORGANIC CHEMICALS |
| | 522 | INORGANIC CHEM.ELEMENTS |
| | 523 | METAL.SALTS,INORGAN.ACID |
| | 524 | OTHER CHEMICAL COMPOUNDS |
| | 525 | RADIO-ACTIVE MATERIALS |
| | 531 | SYNTH.COLOURS,LAKES,ETC. |
| | 532 | DYEING,TANNING MATERIALS |
| | 533 | PIGMENTS, PAINTS, ETC. |
| | 541 | MEDICINES,ETC,EXC.GRP542 |
| | 542 | MEDICAMENTS |
| | 553 | PERFUMERY,COSMETICS,ETC. |
| | 554 | SOAP,CLEANERS,POLISH,ETC |
| | 562 | FERTILIZER,EXCEPT GRP272 |
| | 571 | POLYMERS OF ETHYLENE |
| | 572 | POLYMERS OF STYRENE |
| | 573 | POLYMERS,VINYL CHLORIDE |
| | 574 | POLYACETAL,POLYCARBONATE |
| | 575 | OTH.PLASTIC,PRIMARY FORM |
| | 579 | PLASTIC WASTE, SCRAP ETC |
| | 581 | PLASTIC TUBE,PIPE,HOSE |
| | 582 | PLASTIC PLATE,SHEETS,ETC |
| | 583 | MONOFILAMENT OF PLASTICS |
| | 591 | INSECTICIDES, ETC. |
| | 592 | STARCHES,INULIN,ETC. |
| | 593 | EXPLOSIVES,PYROTECHNICS |
| | 597 | PREPRD ADDITIVES,LIQUIDS |

| | | |
|---|---|---|
| | 598 | MISC.CHEMICAL PRODTS.NES |
| | 621 | MATERIALS OF RUBBER |
| | 625 | RUBBER TYRES,TUBES,ETC. |
| | 629 | ARTICLES OF RUBBER, NES |
| **6 Leather and leather products** | 611 | LEATHER |
| | 612 | MANUFACT.LEATHER ETC.NES |
| | 613 | FURSKINS,TANNED,DRESSED |
| | 831 | TRUNK,SUIT-CASES,BAG,ETC |
| | 851 | FOOTWEAR |
| **7 Metal and other basic manufacturing** | 661 | LIME,CEMENT,CONSTR.MATRL |
| | 662 | CLAY,REFRCT.CONSTR.MATRL |
| | 663 | MINERAL MANUFACTURES,NES |
| | 664 | GLASS |
| | 665 | GLASSWARE |
| | 666 | POTTERY |
| | 670 | REST OF 67 NOT DEFINED |
| | 671 | PIG IRON,SPIEGELEISN,ETC |
| | 672 | INGOTS ETC.IRON OR STEEL |
| | 673 | FLAT-ROLLED IRON ETC. |
| | 674 | FLAT-ROLLED PLATED IRON |
| | 675 | FLAT-ROLLED, ALLOY STEEL |
| | 676 | IRON,STL.BAR,SHAPES ETC. |
| | 677 | RAILWAY TRACK IRON,STEEL |
| | 678 | WIRE OF IRON OR STEEL |
| | 679 | TUBES,PIPES,ETC.IRON,STL |
| | 681 | SILVER,PLATINUM,ETC. |
| | 682 | COPPER |
| | 683 | NICKEL |
| | 684 | ALUMINIUM |
| | 685 | LEAD |
| | 686 | ZINC |
| | 687 | TIN |
| | 689 | MISC.NON-FERR.BASE METAL |
| | 691 | METALLIC STRUCTURES NES |
| | 692 | CONTAINERS,STORAGE,TRNSP |
| | 693 | WIRE PRODUCTS EXCL.ELECT |
| | 694 | NAILS,SCREWS,NUTS,ETC. |
| | 695 | TOOLS |
| | 696 | CUTLERY |
| | 697 | HOUSEHOLD EQUIPMENT,NES |
| | 699 | MANUFACTS.BASE METAL,NES |
| **8 Non-electric machinery** | 711 | STEAM GENER.BOILERS,ETC. |
| | 712 | STEAM TURBINES |
| | 713 | INTRNL COMBUS PSTN ENGIN |
| | 714 | ENGINES,MOTORS NON-ELECT |
| | 716 | ROTATING ELECTRIC PLANT |
| | 718 | OTH.POWR.GENRTNG.MACHNRY |
| | 721 | AGRIC.MACHINES,EX.TRACTR |
| | 722 | TRACTORS |
| | 723 | CIVIL ENGINEERING EQUIPT |
| | 724 | TEXTILE,LEATHER MACHINES |
| | 725 | PAPER,PULP MILL MACHINES |
| | 726 | PRINTNG,BOOKBINDNG MACHS |
| | 727 | FOOD-PROCESS.MCH.NON DOM |
| | 728 | OTH.MACH,PTS,SPCL INDUST |
| | 731 | METAL REMOVAL WORK TOOLS |
| | 733 | MACH-TOOLS,METAL-WORKING |
| | 735 | PARTS,NES,FOR MACH-TOOLS |
| | 737 | METAL WORKING MACHNRY NES |
| | 741 | HEATNG,COOLNG EQUIP,PART |

| | | |
|---|---|---|
| | 742 | PUMPS FOR LIQUIDS,PARTS |
| | 743 | PUMPS NES,CENTRIFUGS ETC |
| | 744 | MECHANICAL HANDLNG EQUIP |
| | 745 | OTH.NONELEC MCH.TOOL.NES |
| | 746 | BALL OR ROLLER BEARINGS |
| | 747 | TAPS,COCKS,VALVES,ETC. |
| | 748 | TRANSMISSIONS SHAFTS ETC |
| | 749 | NON-ELECT MACH.PARTS,ETC |
| **9 Computers, telecomm; cons. Electronics** | 751 | OFFICE MACHINES |
| | 752 | AUTOMATC.DATA PROC.EQUIP |
| | 759 | PARTS.FOR OFFICE MACHINS |
| | 761 | TELEVISION RECEIVERS ETC |
| | 762 | RADIO-BROADCAST RECEIVER |
| | 763 | SOUND RECORDER.PHONOGRPH |
| | 764 | TELECOMM.EQUIP.PARTS NES |
| **10 Electronic components** | 771 | ELECT POWER MACHNY.PARTS |
| | 772 | ELEC.SWITCH.RELAY.CIRCUT |
| | 773 | ELECTR DISTRIBT.EQPT NES |
| | 774 | ELECTRO-MEDCL.XRAY EQUIP |
| | 775 | DOM.ELEC,NON-ELEC.EQUIPT |
| | 776 | TRANSISTORS,VALVES,ETC. |
| | 778 | ELECTRIC.MACH.APPART.NES |
| **11 Transport equipment** | 781 | PASS.MOTOR VEHCLS.EX.BUS |
| | 782 | GOODS,SPCL TRANSPORT VEH |
| | 783 | ROAD MOTOR VEHICLES NES |
| | 784 | PARTS.TRACTORS.MOTOR VEH |
| | 785 | CYCLES,MOTORCYCLES ETC. |
| | 786 | TRAILERS,SEMI-TRAILR,ETC |
| | 791 | RAILWAY VEHICLES.EQUIPNT |
| | 792 | AIRCRAFT,ASSOCTD.EQUIPNT |
| | 793 | SHIP,BOAT,FLOAT.STRUCTRS |
| **12 Clothing** | 841 | MENS,BOYS CLOTHNG,X-KNIT |
| | 842 | WOMEN,GIRL CLOTHNG,XKNIT |
| | 843 | MENS,BOYS CLOTHING,KNIT |
| | 844 | WOMEN,GIRLS CLOTHNG.KNIT |
| | 845 | OTHR.TEXTILE APPAREL,NES |
| | 846 | CLOTHING ACCESSRS,FABRIC |
| | 848 | CLOTHNG,NONTXTL;HEADGEAR |
| **13 Misc. manufacturing** | 811 | PREFABRICATED BUILDINGS |
| | 812 | PLUMBNG,SANITRY,EQPT.ETC |
| | 813 | LIGHTNG FIXTURES ETC.NES |
| | 871 | OPTICAL INSTRUMENTS,NES |
| | 872 | MEDICAL INSTRUMENTS NES |
| | 873 | METERS,COUNTERS,NES |
| | 874 | MEASURE,CONTROL INSTRMNT |
| | 881 | PHOTOGRAPH APPAR.ETC.NES |
| | 882 | PHOTO.CINEMATOGRPH.SUPPL |
| | 883 | CINE.FILM EXPOSD.DEVELPD |
| | 884 | OPTICAL GOODS NES |
| | 885 | WATCHES AND CLOCKS |
| | 891 | ARMS AND AMMUNITION |
| | 892 | PRINTED MATTER |
| | 893 | ARTICLES,NES,OF PLASTICS |
| | 894 | BABY CARRIAGE,TOYS,GAMES |
| | 895 | OFFICE,STATIONERY SUPPLS |
| | 896 | WORKS OF ART,ANTIQUE ETC |
| | 897 | GOLD,SILVERWARE,JEWL NES |
| | 898 | MUSICAL INSTRUMENTS,ETC. |
| | 899 | MISC MANUFCTRD GOODS NES |

| | | |
|---|---|---|
| **14 Minerals- to be excluded** | 272 | FERTILIZERS, CRUDE |
| | 273 | STONE, SAND AND GRAVEL |
| | 274 | SULPHUR,UNRSTD.IRON PYRS |
| | 277 | NATURAL ABRASIVES, NES |
| | 278 | OTHER CRUDE MINERALS |
| | 281 | IRON ORE, CONCENTRATES |
| | 282 | FERROUS WASTE AND SCRAP |
| | 283 | COPPER ORES,CONCENTRATES |
| | 284 | NICKEL ORES,CONCTR,MATTE |
| | 285 | ALUMINIUM ORE,CONCTR.ETC |
| | 286 | URANIUM,THORIUM ORES,ETC |
| | 287 | ORE,CONCENTR.BASE METALS |
| | 288 | NON-FERROUS WASTE,SCRAP |
| | 289 | PREC.METAL ORES,CONCTRTS |
| | 321 | COAL,NOT AGGLOMERATED |
| | 322 | BRIQUETTES,LIGNITE,PEAT |
| | 325 | COKE,SEMI-COKE,RET.CARBN |
| | 333 | PETROLEUM OILS, CRUDE |
| | 334 | PETROLEUM PRODUCTS |
| | 335 | RESIDUAL PETROL.PRODUCTS |
| | 342 | LIQUEFIED PROPANE,BUTANE |
| | 343 | NATURAL GAS |
| | 344 | PETROLEUM GASES, NES |
| | 345 | COAL GAS,WATER GAS, ETC. |
| | 351 | ELECTRIC CURRENT |
| | 667 | PEARLS,PRECIOUS STONES |
| **Excluded** | 269 | WORN CLOTHING,TEXTL.ARTL |
| | 911 | MAIL NOT CLASSED BY KIND |
| | 931 | SPEC.TRANSACT.NOT CLASSD |
| | 961 | COIN NONGOLD NONCURRENT |
| | 971 | GOLD,NONMONTRY EXCL ORES |


International Trade Centre UNCTAD/WTO
UNITED NATIONS STATISTICS DIVISION
PC-TAS
TRADE ANALYSIS SYSTEM
ON PERSONAL COMPUTER
1997-2001
SITC3
HS

# Manual

Welcome to the User's Guide of the Trade Analysis System (*TAS*). The purpose of the guide is to be an effective tool for understanding the working of the System and to explain to users how to go about working with trade statistics, using *TAS*.

The guide has been developed on the assumption that users are familiar with Windows and GUI concepts. It would be a good idea to look up the Windows manual, prior to working with *TAS*.

**Organization**

The information in the guide is spread across the following 10 chapters. A chapter is devoted to each of the functions in *TAS*, while giving step-by-step guidance to the users in using that option.

**Chapter 1** gives an overview of the system and also lists its salient features.

**Chapter 2** provides the basic information required to get working with *TAS* and also includes information on installing the system.

**Chapter 3** gives a lucid explanation on the Screening option in *TAS*.

**Chapter 4** takes you through the Trade Estimation option.

**Chapter 5** guides you through the Product Ranking option.

**Chapter 6** provides details on the ProfilImport/Export option.

**Chapter 7** explains the Country Profile option.

**Chapter 8** details the Define Country Group option.

**Chapter 9** takes you through the Explanatory Notes Criteria option.

**Chapter 10** guides you through generating various reports.

A **Glossary** of terms used in the guide is available at the end of the guide.

## 1.1 About TAS

***Welcome to the Trade Analysis System (TAS) for personal computer. This chapter introduces you to TAS, the business logic on which TAS has been built and its salient features.***

Access to trade information is an important key to the competitiveness in international trade. In particular, there is a great demand for comprehensive and up-to-date global trade statistics. In response to this demand in 1995, the International Trade Centre UNCTAD/WTO (ITC) disseminated the first issue of the Personal Edition of the Trade Analysis System or TAS on CD-ROM.

TAS (Personal Edition) holds data for five years, i.e. the last five years available in the COMTRADE database of the United Nations Statistics Division (UNSD). UNSD receives data from customs and statistical offices worldwide. The data provides an overview of actual import and export values, quantities and trends right down to the level of country of origin or destination for each product.

TAS is comprehensive in that:

- it covers trade data from reporting countries - countries that have provided the most up-to-date export and import data (i.e. most OECD and newly industrialized countries) disaggregated by product and partner countries.

- it provides data on products, ranging from vegetables to umbrellas. Product classification is based on the international standards adopted for grouping products, such as the Standard International Trade Classification (SITC) and the Harmonized System (HS).

The system offers user-friendly data retrieval procedures, with the possibility of browsing, printing and transferring data to standard software such as Excel and Lotus 123.

The TAS (Personal Edition) data is updated annually.

## 1.2 Why use TAS?

Trade statistics are considered among the most important types of business information. Whether you are a coffee grower in Brazil wishing to find out with whom you may have to compete when exporting to North America or a governmental institution doing research on ways to expand your exports to Europe, TAS is an essential tool.

Trade statistics extracted from TAS can be useful to trade operators in:

- ❒ pre-selecting new export markets (e.g. before undertaking further market studies)
- ❒ analyzing the export performance of competing countries
- ❒ identifying new sources of supply (by country)

For users from government and research institutions, the trade statistics can be applied in:

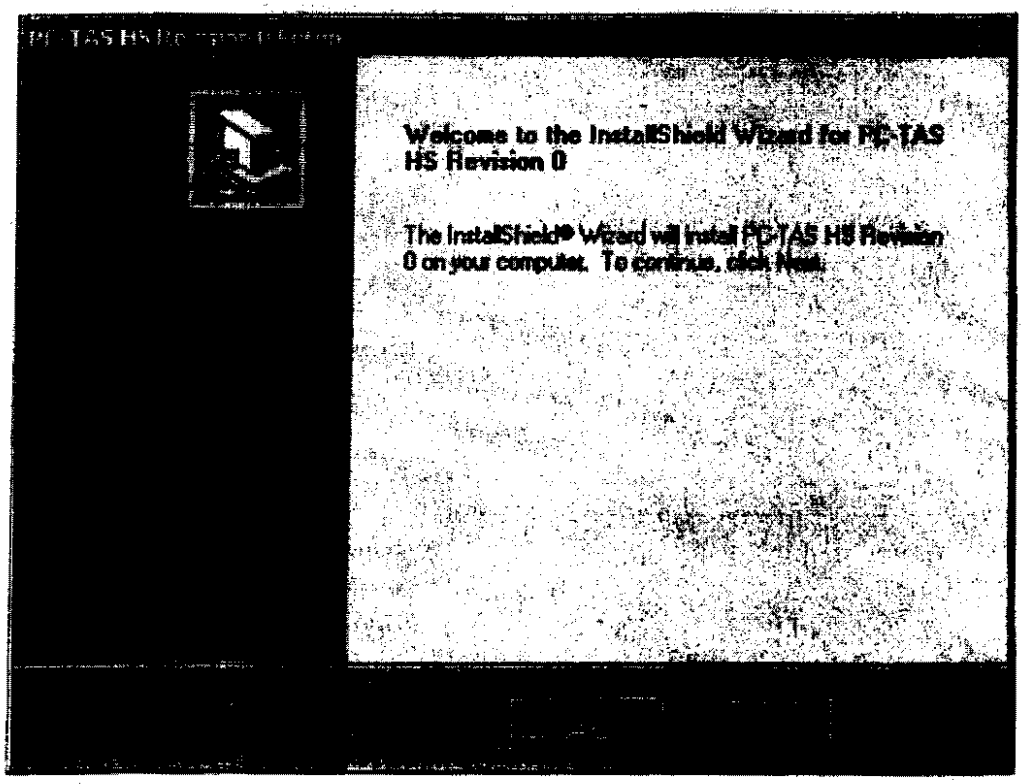
- ❒ developing national trade strategies and programmes
- ❒ monitoring national trade performance on major world markets

## 2.1 Getting familiar with TAS

***Being equipped with basic information required to understand the working of TAS is very helpful in working smoothly with it. Here's a quick tour.***

This chapter introduces you to the common functionality in *TAS*. It also gives the preliminary information that you require to work smoothly with *TAS*. The information provided here is a useful guide to all the functions that you are likely to use while working with the system.

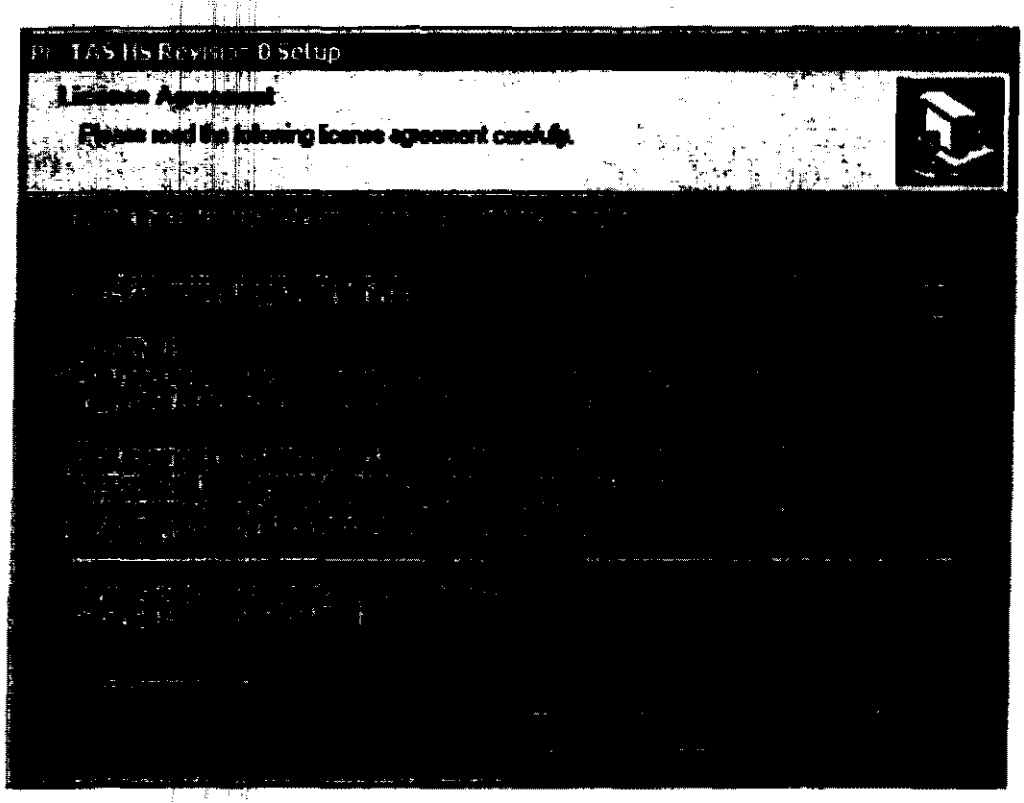
To install PC-TAS (TAS Personal edition) from the CD-ROM drive, run ***Setup.exe*** and follow the instructions below:

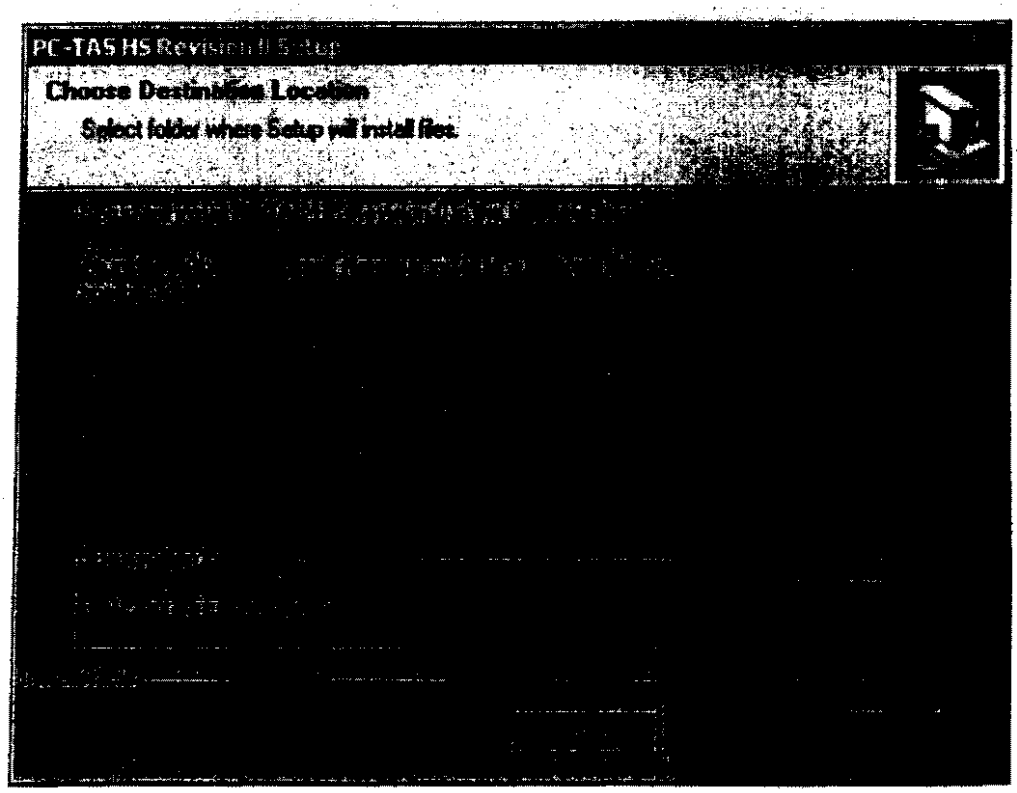


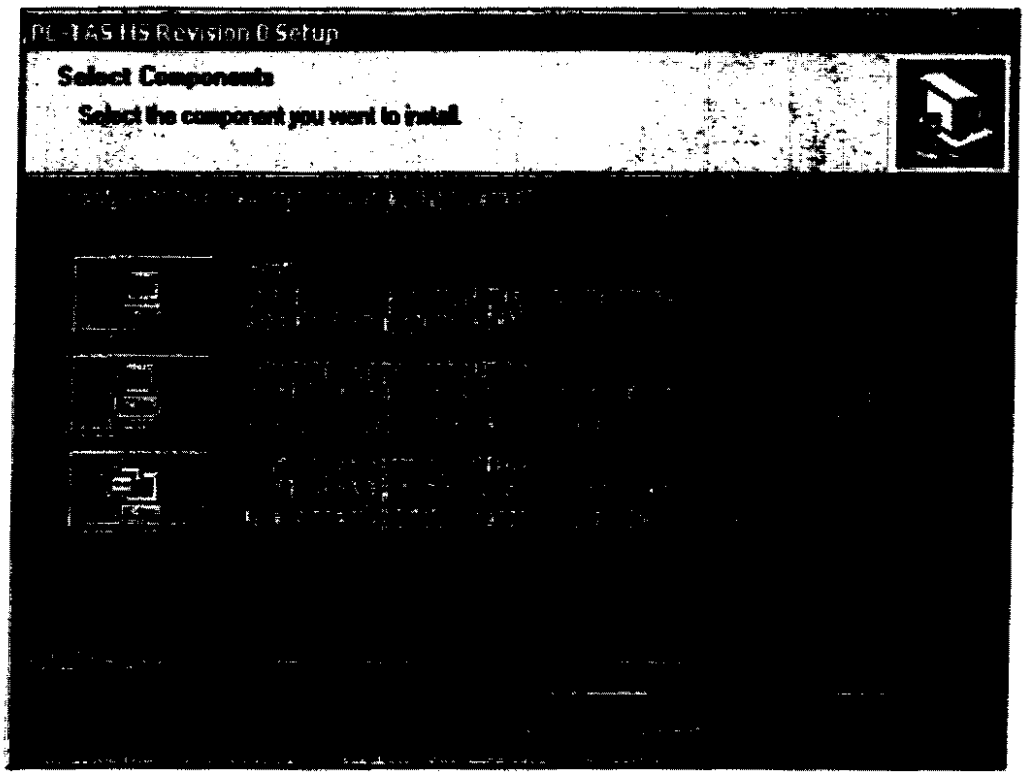

**NOTE:**

If you have already installed a previous version of PC-TAS in SITC or HS, you need to remove it first and then re-install the new version. You just insert the new CD-ROM before running PC-TAS. If you have already downloaded the PC-TAS database on your hard disk, it is not possible to download the other version on the same disk drive. If you want to keep the first database on your hard disk, it is possible to work with the new one on CD-ROM or on a different disk drive, but in order to do so, you will have to modify the following file: c:\program files\pctas-hs\tasper.ini. In the file, instead of 'DataDrive=C' if you have downloaded the database on the C drive you have to write 'DataDrive=E' if E represents the CD-ROM drive.

Click '**Next>**' to proceed with the PC-TAS Setup, or click '**Cancel**' to cancel the installation.


TAS IIs Revision 0 Setup
License Agreement
Please read the following license agreement carefully.


Choose Destination Location
Select folder where Setup will install files.

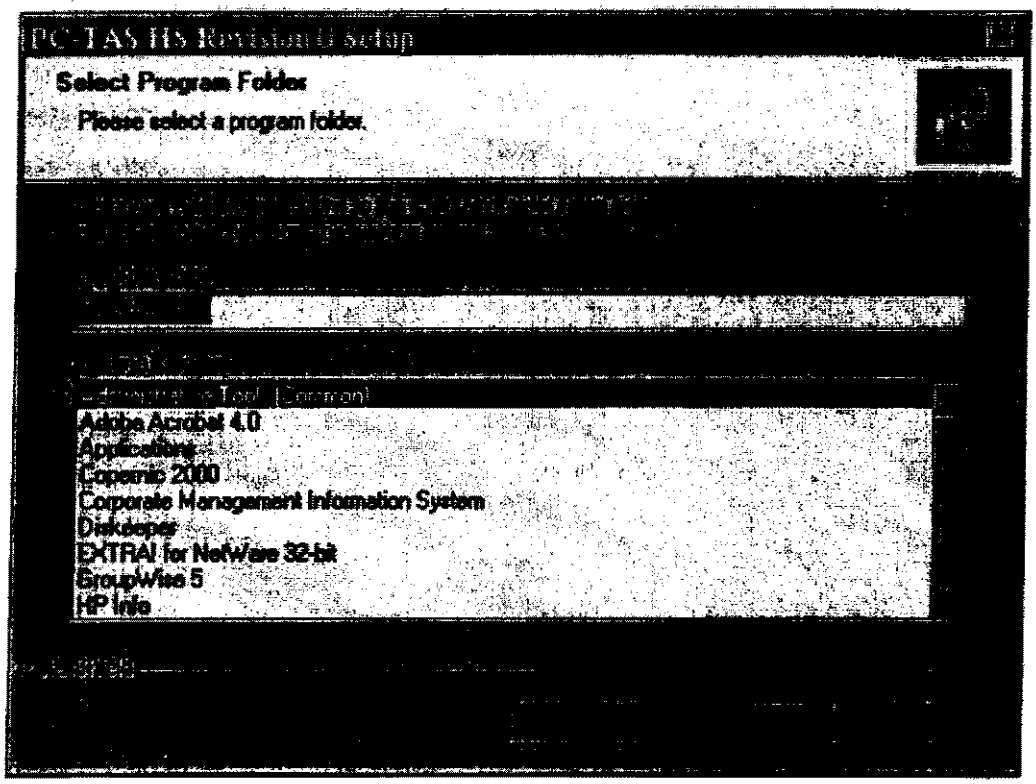



You must select an option for PC-TAS installation.

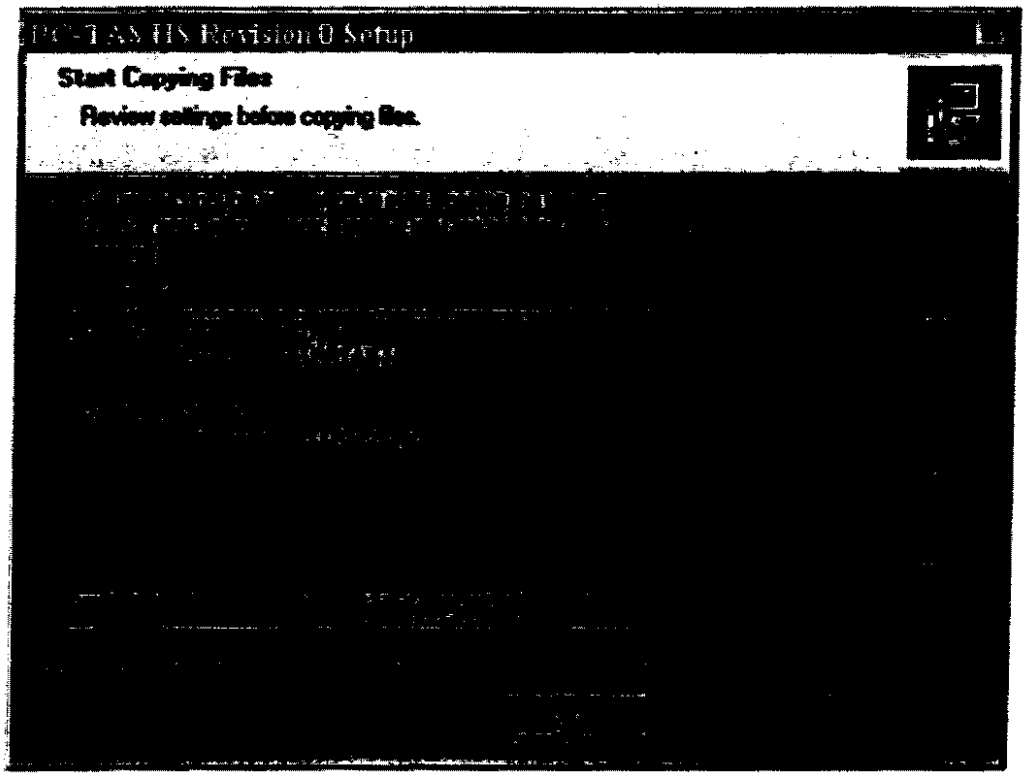
The 'Standard' option is the simplest way to install PC-TAS. This option will also authorize you to work on old version of PCTAS, PC-TAS 1994-1996 onward, without re-installing the software.

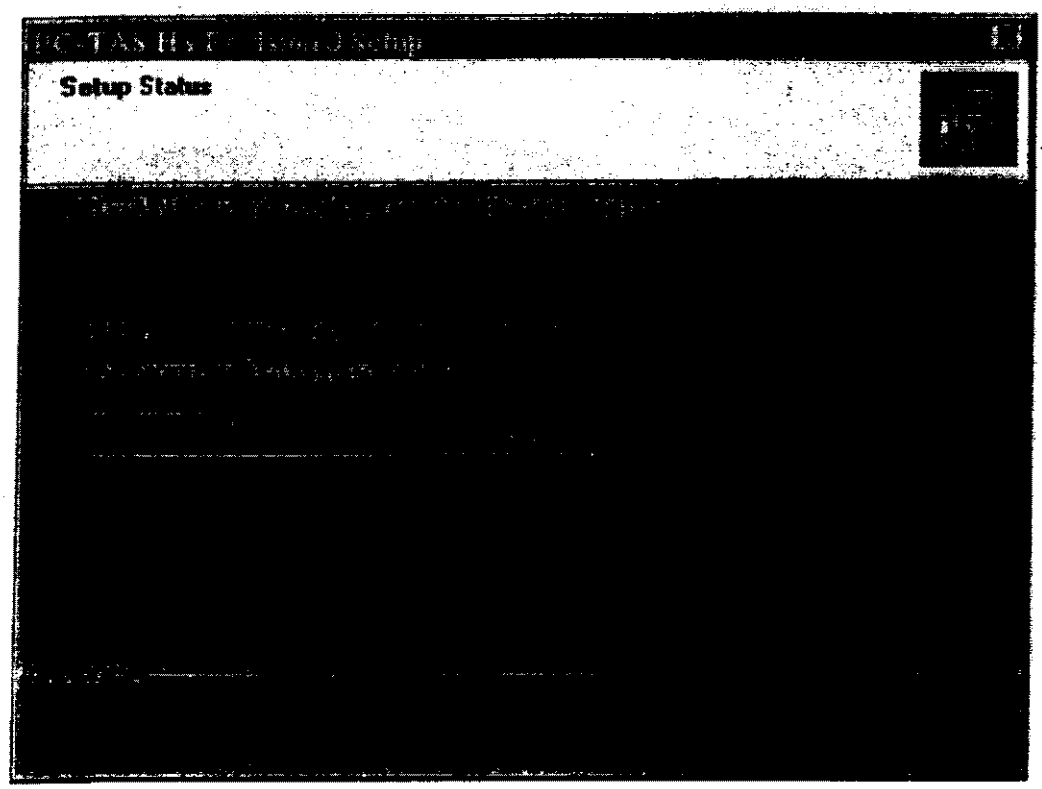
The 'Standard & Compressed Database' option will improve the processing time of your requests by copying the PCTAS database from the CD-ROM to your hard disk. To select this option, around 500 MB should be available on your hard disk.

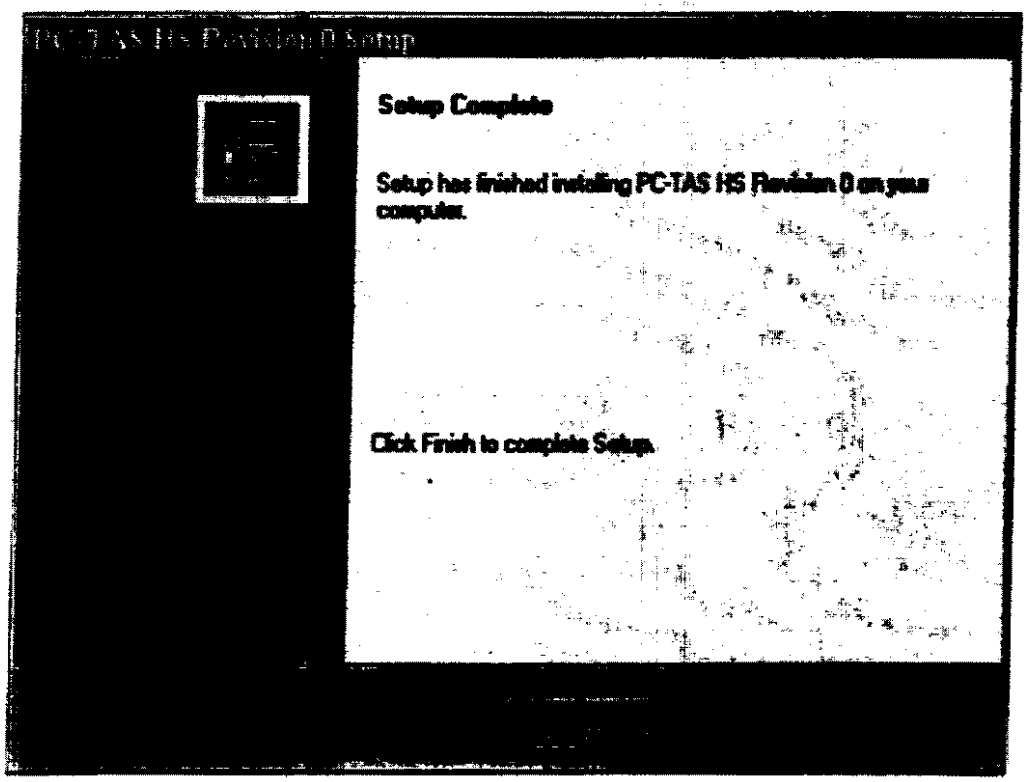
The 'Standard & Uncompressed Database' option is only available for Windows NT, 2000 and XP. This option will optimize the processing time of your requests by uncompressing the PCTAS database on your hard disk. The installation of PCTAS on your computer will take around 20 minutes and around 1500 MB. If you select this option, you will see a new screen before uncompressing the database and at this stage if you choose 'Cancel' only the standard option will be installed, however, if you click on 'Next>' please do not try to stop the installation before it finishes.




Before starting to copy the files, you will be prompted to review the settings. Click on '**Next>**' to proceed with the PC-TAS Setup, or click on '**<Back**' to go to the previous screen to change any settings or else click '**Cancel**' to cancel the installation.

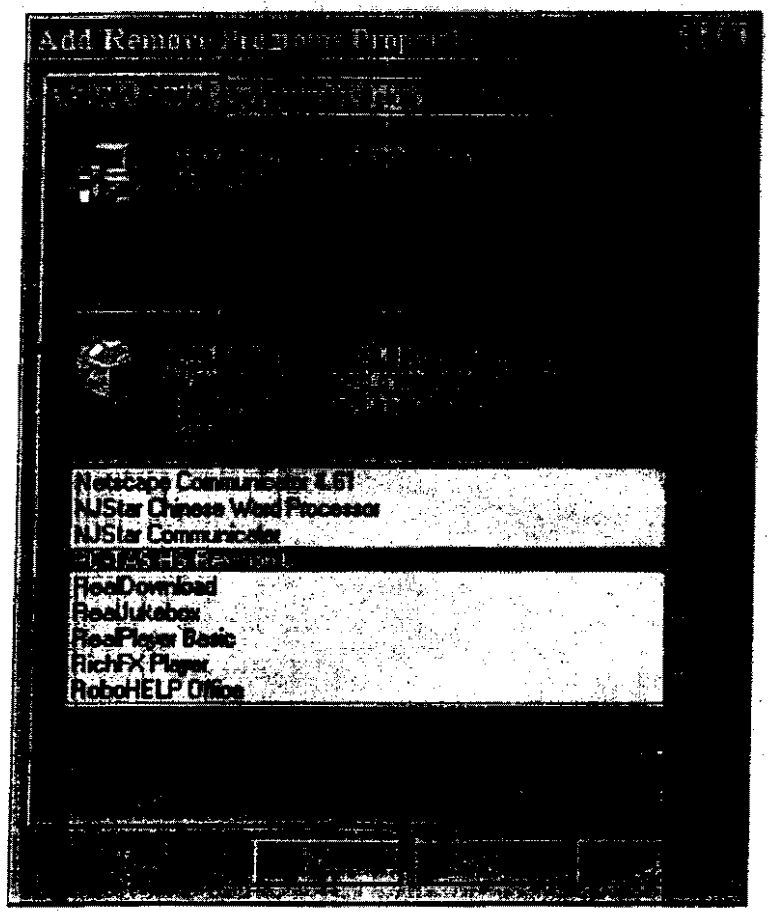

Start Copying Files
Review settings before copying files.


Setup Status

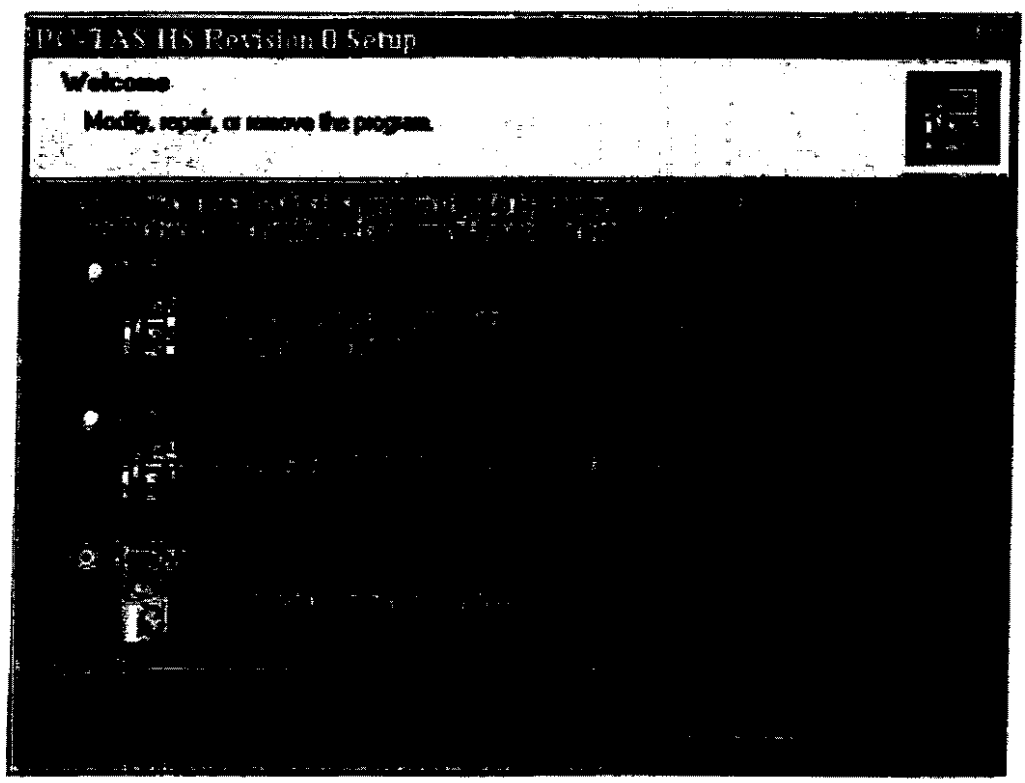



**Steps for uninstallation of the application:**

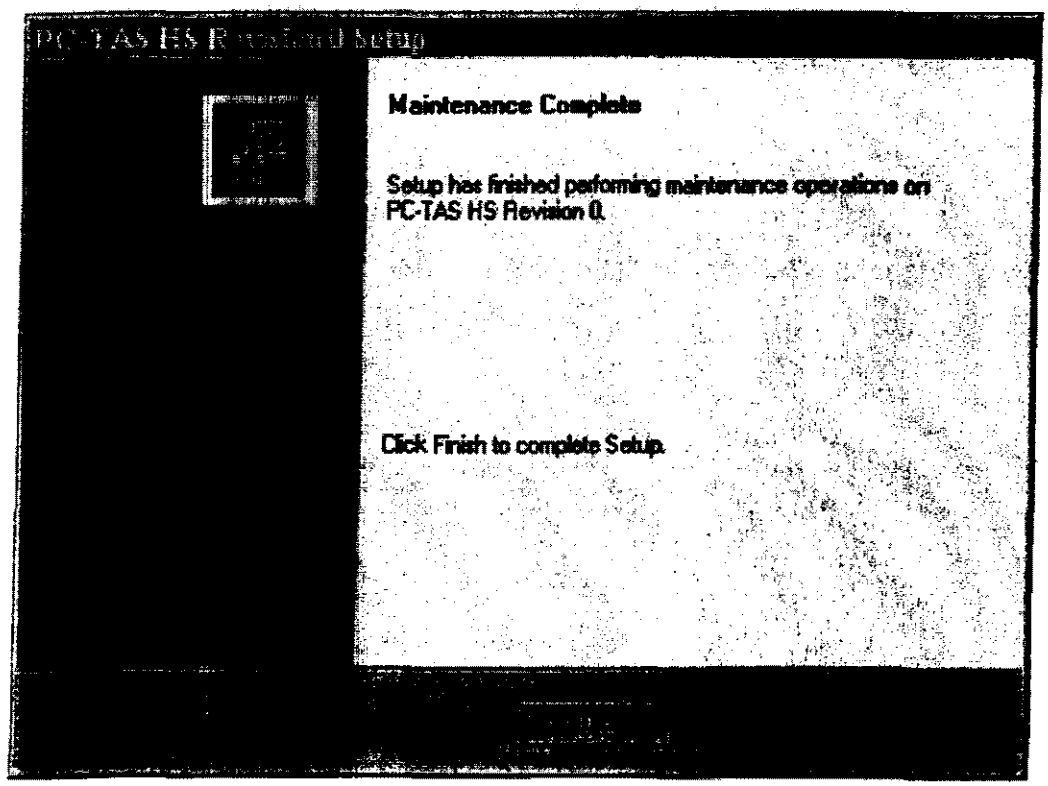
**If you want to modify, repair or remove the PC-TAS program, either Run the Setup again (see Screen 'Modify, repair or remove the program' ) or select on your desktop Start - Settings - Control Panel - Add/Remove Programs. Upon selecting Add/Remove Programs, you will find a tab *'Install/Uninstall'*. Select PC-TAS from the list and click *'Add/Remove...'* to uninstall the PC-TAS application.**




Upon clicking '***Add/Remove...***' you will be prompted for confirmation. Select Remove all installed components. Click on '**Next>**' to proceed with uninstallation or click '***Cancel***' to stop uninstall.




Upon clicking *'OK'* you will be prompted with a message **'Maintenance Complete'.**




Click **'Finish'** to complete with uninstallation.

The *TAS* main menu bar consists of the following menus:

**File:** Clicking here displays the Exit option, through which you can quit the system.

**View:** Clicking here displays the following options, through which you can access the particular Criteria screen:

- Screening
- Trade Estimation
- Product Ranking
- Profil/Import/Export
- Country Profile

**Utility:** Clicking here displays the Define Country Group option and the Explanatory Notes option.

**System Information:** Clicking here displays the System Global option through which you can view details on the data that has been uploaded into the system, such as the product classification, the threshold value and the years for which the data has been uploaded.

**Help:** Clicking here displays the topics on which on-line help, link to PCTAS Web site, and About PC-TAS is available. This option can also be accessed by pressing the F1 key.

Each option of the **View** menu has three main types of screens.

**Criteria Screen:** The Criteria screen displays information depending on your pre-selections.

**Selection Screen:** The Select screen helps you make a selection from the given list. It is called from the Criteria Screen by clicking on the 'Select Reporters', ' Select Partners' or 'Select Products' menu items. The Selection screen copies the selection to the Criteria screen when you click on the 'Done' button. If the 'Cancel' button is clicked, the control is returned to the Criteria screen without the selection being passed.

The screen contains the following lists:

Select List - This list displays all the values from a given master table (viz. Country/Product)

Selected List - This list displays all the selected values

**Report Screen:** The Report screen displays the report based on the criteria selected in the Criteria screen. This screen can be invoked by clicking on the Run/View Report menu option.

## 2.6 Command buttons

These are buttons used to perform functions such as 'Done', 'Cancel', 'Find', 'List ', 'Copy >', 'Copy all >>', 'Delete', 'Delete all' and 'Group'.

**The Copy Button**

You can copy single or multiple records from the select list to the selected list. The selected value from the list is automatically displayed in the selected list. Highlight the values you want to select by using the SHIFT + mouse click or SHIFT + arrow up/down key for selecting a block of records or CTRL + mouse click.

**The Copy All Button**

Clicking on this button copies all the values from the select list to the selected list.

**The Delete Button**

Clicking on this button allows you to delete the value highlighted in the selected list. Highlight the values you want to select by using the SHIFT + mouse click for selecting a block of records or CTRL + mouse click. Click on the 'Delete' button to delete all the highlighted records from the selected list.

**The Delete All Button**

Clicking on this button allows you to delete all the values from the selected list.

**The List Button**

In the Select Products screen, the 'List' option allows you to filter down the values displayed in the select list before actually doing a selection. You can select the digits of the code(s) and the group(s) for which you want the products to be listed and click on the 'List' button. The products that match the digit selection are displayed in the select list.

**The Group Button**

Upon clicking this button, the list of Product Groups is displayed. When you select a group from this list, all the products belonging to this group are displayed for selection in the Select Products screen.

**The Find Button**

Upon clicking this button, the Find Dialog Box appears displaying the columns of the active list. Type in the value to be searched in the list and click on the 'Find' button. If the value is found, the focus shifts to the found record.

**Done**

When you click on this in the Selection screen, the selected values are sent to the Criteria screen.

[redacted] **Cancel**

When you click here, the control shifts back to the Criteria screen without the values being transferred.

## 2.8 Tool buttons of the criteria screen

### Selecting Products

Upon clicking this option, the Select Products screen is displayed. Products for all digits or any combination of digits and/or groups can be listed in the select list by clicking on the appropriate check box and clicking on the 'List' button.

Note: A warning is given if the user selects more than 30 products. A higher selection of products leads to degradation in performance.

### Selecting Reporters

Upon clicking this option, the Select Reporters screen is opened. Depending on the requirement, only countries or only groups or countries and groups are listed. You can select from the select list using either the 'Copy >' or 'Copy all >>' buttons.

### Selecting Partners

Upon clicking this option, the Select Partners screen is displayed. Depending on the requirement, only countries or only groups or countries and groups are listed. You can select from the select list using either the 'Copy >' or 'Copy all >>' buttons.

In the Profilimport/Export screen, the Select Partners menu item is split into ' Select Partner 1' and 'Select Partner 2' menu options. Both these options invoke the Select Partners screen, but allow selection of only one Partner (individual or group).

### The Run Button

Upon clicking this option, the Report screen is opened displaying data for the selected criteria.

### The Find Button

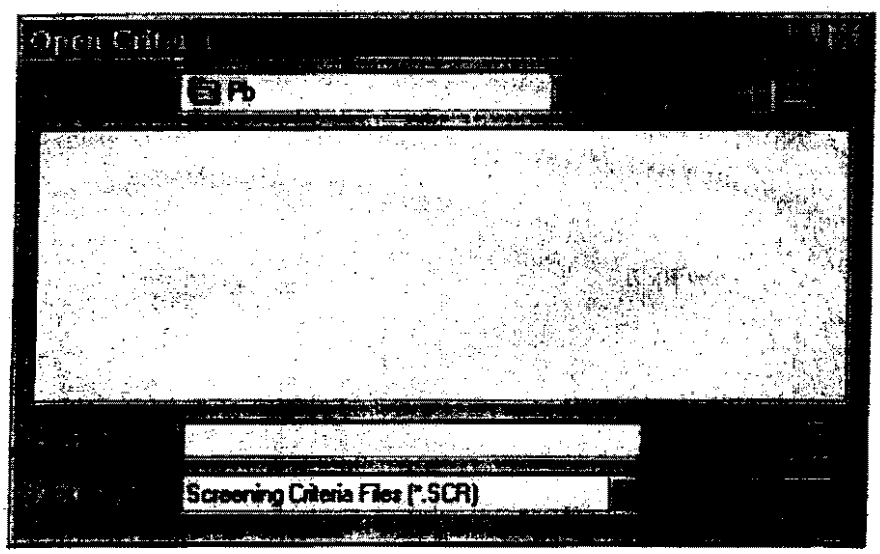
Upon clicking this option, the Find Dialog Box appears displaying the columns of the active list.

### The Availability of Trade Data Screen

Upon clicking this option, the Data Availability report is displayed. This option is available only from the 'Screening' criteria screen.

**Open Criteria Button**

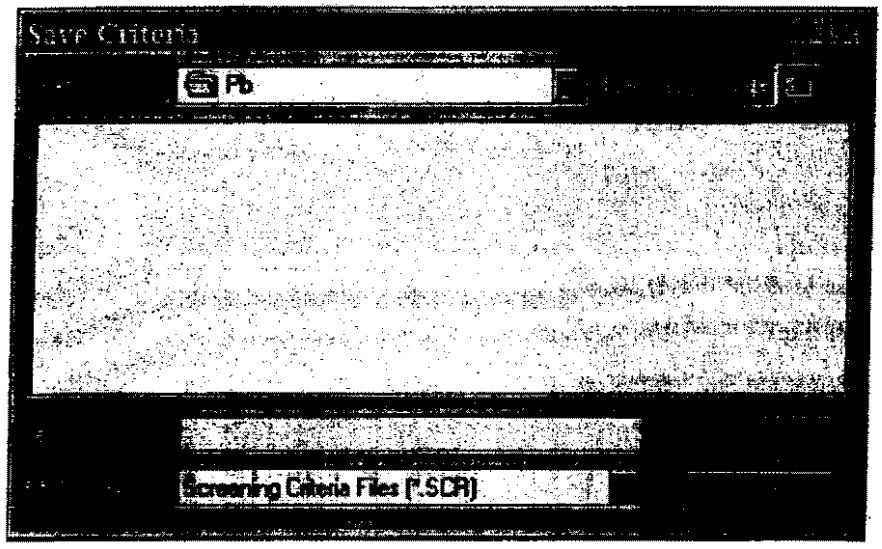
**Upon clicking this option, the Open File dialog box is opened.**




**You are allowed to select a file, the contents of which will then be displayed in the criteria screen after proper validation checks.**

**Save Criteria**

**Upon clicking this option, the Save File dialog box is opened.**




**You are allowed to type in the name of the file in which you want to save the criteria.**

**Default Criteria**

Upon clicking this option, the Default Criteria for the displayed screen is set for you.

**2.7 Tool buttons of the report screen**

**The Print Button**

Upon clicking this option, the Print dialog box appears.

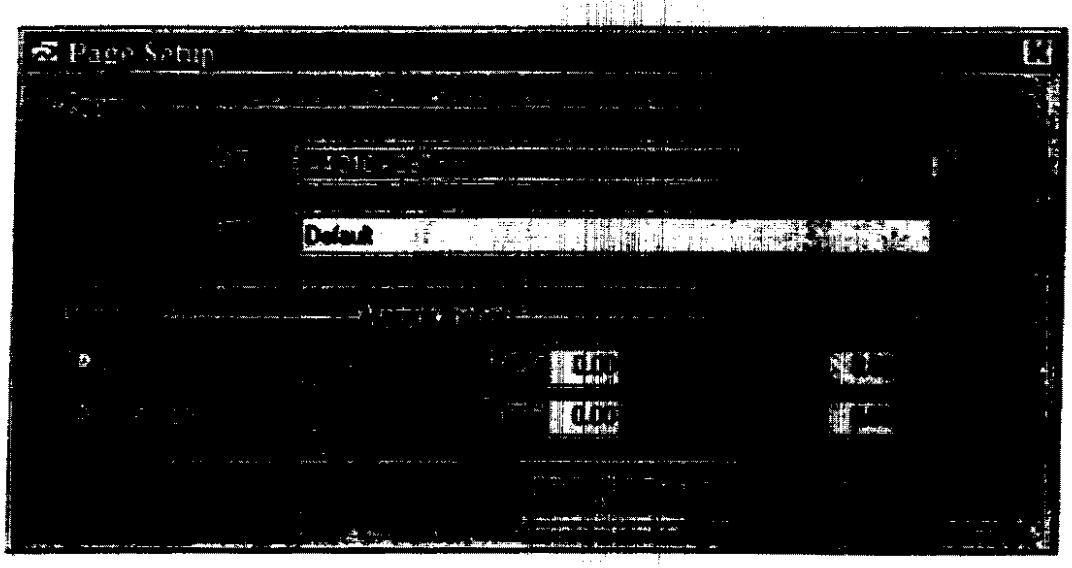

You can change the settings, if required before sending the report to the printer.

**Print Preview**

Upon clicking this option, you can preview the report before sending it to the printer.

**Page Setup**

You can change the page settings before printing a report. The Page Setup dialog box appears when you click on **File**, and then on the Page Setup option of the Screening Report, Screening Graph or Availability of Trade Data.




This screen allows you to change the page layout of the report being displayed.

**First Page**

Upon clicking this option, the First Page of the report is displayed.

**Next Page**

Upon clicking this option, the Next Page of the report is displayed.

**Previous Page**

Upon clicking this option, the Previous Page of the report is displayed.

**Last Page**

Upon clicking this option, the Last Page of the report is displayed.

**Next Reporter**

Upon clicking this option, the data for the next reporter, with respect to the current

reporter is displayed in the report.

**Previous Reporter**

Upon clicking this option, the data for the previous reporter, with respect to the current reporter is displayed in the report.

**Next Product**

Upon clicking this option, the data for the next product, with respect to the current product is displayed in the report.

**Previous Product**

Upon clicking this option, the data for the previous product, with respect to the current product is displayed in the report.

To access a menu item, either use the mouse or the keyboard. The standards adopted for navigation are:

### Using the Mouse

To open the menu, point the mouse pointer to the menu on the menu bar and click the left mouse button. To move directly to a menu item drag the selection cursor down with the mouse until the menu item is highlighted and then release the mouse button.

### Using the Keyboard

Every menu item has one of its characters underlined. If the item is one of the main menu items, then on pressing the ALT key and the underlined character, simultaneously, the relevant menu displaying sub menu items is opened, if any, or it directly opens the relevant screen. The underlined characters are unique within the same menu level. Once a main menu item is opened using this procedure, you can navigate to the options in the pull-down menu either by clicking on the option or by pressing the underlined character of the desired option.

## 2.9 Quitting TAS

Click on ***Exit*** in the **File** menu option to quit the ***TAS*** application.

There are two types of messages that you are likely to encounter in *TAS*:

**Information Messages:** These messages give you information on an action that is taking place in the system.

**Error Messages:** These messages are prompted by an adverse effect of an action. They are indicated by a 'Stop' icon.

**My report does not reflect the changes that I have made to the criteria.**

If you change the criteria specification while your report window is still open, the changed criteria will not be reflected in the report. If both Criteria and Report windows are open, click on Run again to reflect the changes made in criteria.

**In Print Preview, the report goes beyond the page.**

Remember to set your page in the Page Setup as per your need. The default setup is A4 (210x 297 mm). Otherwise the report will go beyond the page.

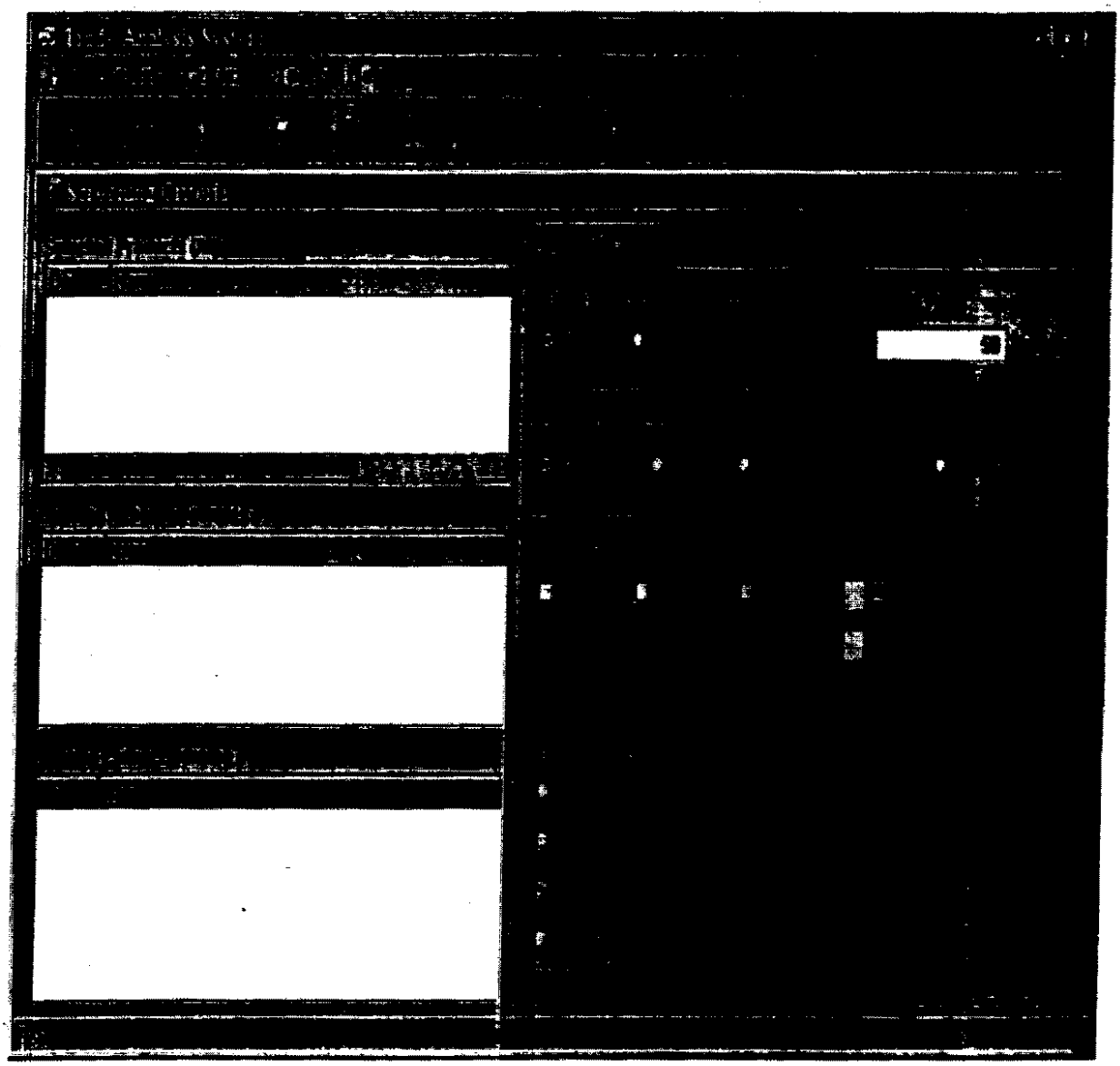
**Some columns in the report show asterisks.**

Asterisks in any of the computed columns denote that the calculation is not possible since some of the parameters have a value of zero.

***Information on trade is usually readily available. But, the ability to process the information from all possible angles, in order to arrive at a complete and comprehensive picture of the trade scenario, is what makes the information powerful***

This chapter describes the Screening option, from which you can get a comprehensive view of the trade flow. You can choose from a number of permutations and combinations to arrive at a holistic view of the total trade value.

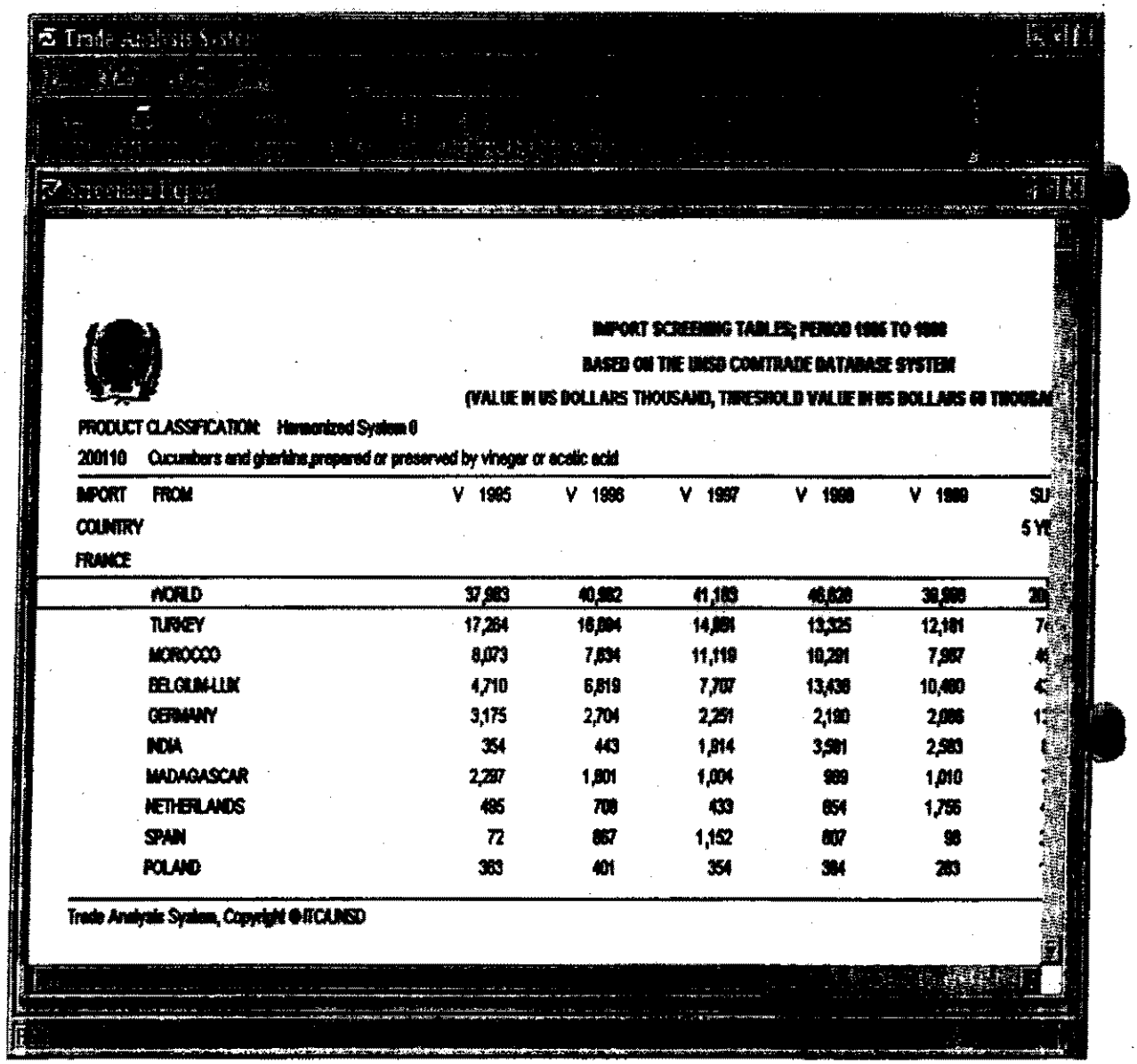
To screen trade data, click on *Screening* in the **View** pull-down menu. The *Screening Criteria* screen appears:



Then, click on **Select**. A pull-down menu with the following options appears:

### Individuals Only

When you click on **Run** after you have selected **Individuals Only** in the Screening Criteria screen, the data is first sorted by product code in the ascending order. Reporters appear in the descending order of their sum of five years with the world, followed by the default ranking order for partners, followed by the sum of five years ' trade value with partner(s) in the descending order and finally partner in ascending order. The report layout is as follows:



IMPORT SCREENING TABLES; PERIOD 1995 TO 1999

BASED ON THE UNSD COMTRADE DATABASE SYSTEM

(VALUE IN US DOLLARS THOUSAND, THRESHOLD VALUE IN US DOLLARS 00 THOUSAN

PRODUCT CLASSIFICATION: Harmonized System 6

200110 Cucumbers and gherkins,prepared or preserved by vinegar or acetic acid

| IMPORT COUNTRY | FROM | V 1995 | V 1996 | V 1997 | V 1998 | V 1999 | SU 5 YE |
|---|---|---|---|---|---|---|---|
| FRANCE | | | | | | | |
| | WORLD | 37,983 | 40,982 | 41,185 | 46,828 | 38,999 | 20 |
| | TURKEY | 17,264 | 16,894 | 14,881 | 13,325 | 12,181 | 7 |
| | MOROCCO | 8,073 | 7,834 | 11,119 | 10,291 | 7,957 | 4 |
| | BELGIUM-LUX | 4,710 | 6,819 | 7,707 | 13,436 | 10,480 | 4 |
| | GERMANY | 3,175 | 2,704 | 2,251 | 2,190 | 2,086 | 1 |
| | INDIA | 354 | 443 | 1,914 | 3,991 | 2,983 | |
| | MADAGASCAR | 2,297 | 1,801 | 1,004 | 999 | 1,010 | |
| | NETHERLANDS | 495 | 709 | 433 | 854 | 1,755 | |
| | SPAIN | 72 | 867 | 1,152 | 807 | 98 | |
| | POLAND | 363 | 401 | 354 | 394 | 283 | |

Trade Analysis System, Copyright ©ITC/UNSD

Upon clicking on "Graph" in the **View** pull-down menu of the Screening Report you can see the graphical representation of the share, trend and value for trade values and trade quantities.

### 3.5.2 The Top 'n'

This option consists of the following two sub-options:

- Top Reporter(s)
- Top Partner(s)

**Top Reporter(s)**

Use the up/down arrows to select the number, or otherwise type in the number of top reporters whose data you would like to view for each of the selected products in terms of trade value (the top reporters are selected based on the sum of 5 years' trade value with the world).

**NOTE**

Once you have specified the number of Top Reporter(s) here, you cannot select Reporters as you would have otherwise, (*Refer to section 3.3*) since you are already specifying the top reporters.

**Top Partner(s)**

Use the up/down arrows to select the number or type in the number of top partners for each of the selected reporters, for each of the selected products (the top partners are selected based on the sum of 5 years' trade value with the reporter).

**NOTE**

This option is enabled only if you have selected **Individuals Only** in **Partners Display**.

Once you have specified the number of Top Partner(s) here, you cannot select Partners as you would have otherwise, (*Refer to section 3.4*) since you are already specifying the top partners.

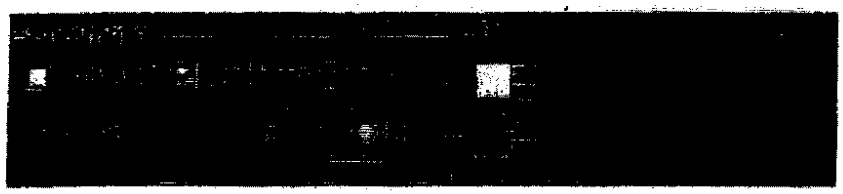
The Threshold value that you specify as additional criteria is applied after the Top 'n' is selected. Thus, the report may display less number of reporters/partners than the top selected.

***Example:***

If the threshold value is USD 1000 Thousand, and you have selected to view the Top 3 Reporters, and there are only two reporters who match the threshold value. Then the report that is subsequently generated will display trade value for only those two reporters.

### 3.5.3 Summation

This option offers you various combinations or records that will be displayed in the report. The following are the options under Summation:



- Products
- Reporters
- Partners

You may have various combinations and permutations of the above options.

**Summation Products**

When you click here, the report displays the total value of all the selected products that a given reporter and a given partner trade in.

**Summation Reporters**

When you click here, the report displays the total value of all reporters for a given product for each of their partners.

**Sum Same Period**

*[This option is enabled only if you have selected* ***Reporters*** *under* **Summation.***]*

- Clicking on **No** here implies that you would like to view all the selected reporters irrespective of the availability of five years trade data with the world.

- Clicking on **Yes** here implies that you wish to view only those of the selected reporters which have five years trade data with the world.

**Summation Partners**

When you click here, the report displays the total value of all partners, for a given product, for a given reporter.

| **Note** |
| --- |
| If you have selected either **Aggregates and Individuals** or **Aggregates Only** in Partners Display, you are not allowed to select the **Summation Partners** option; it is disabled. |

**Summation Reporters and Summation Partners**

If you select this combination, the report displays the summation of all selected reporters and all selected partners for each selected product.

**Summation Products and Summation Partners**

If you select this combination, the report displays the summation of all selected products and all selected partners for each of the selected reporters.

**Summation Products and Summation Reporters**

If you select this combination, the report displays the summation of all selected products and all selected reporters for each selected partner.

**Summation Products, Summation Reporters and Summation Partners**

If you select this combination, the report displays a comprehensive picture between selected reporters and selected partners for selected products.

**Note**

1. As a partner, the World (although not displayed for selection) is always on the top for each selected reporter, followed by Sum Partners, if selected (*Refer to section 3.4*).
2. Sum Partners is treated as a separate partner, Sum Reporters is treated as a separate reporter and Sum Products is treated as a separate product in the report.

☐ Click on [redacted] to view the report.

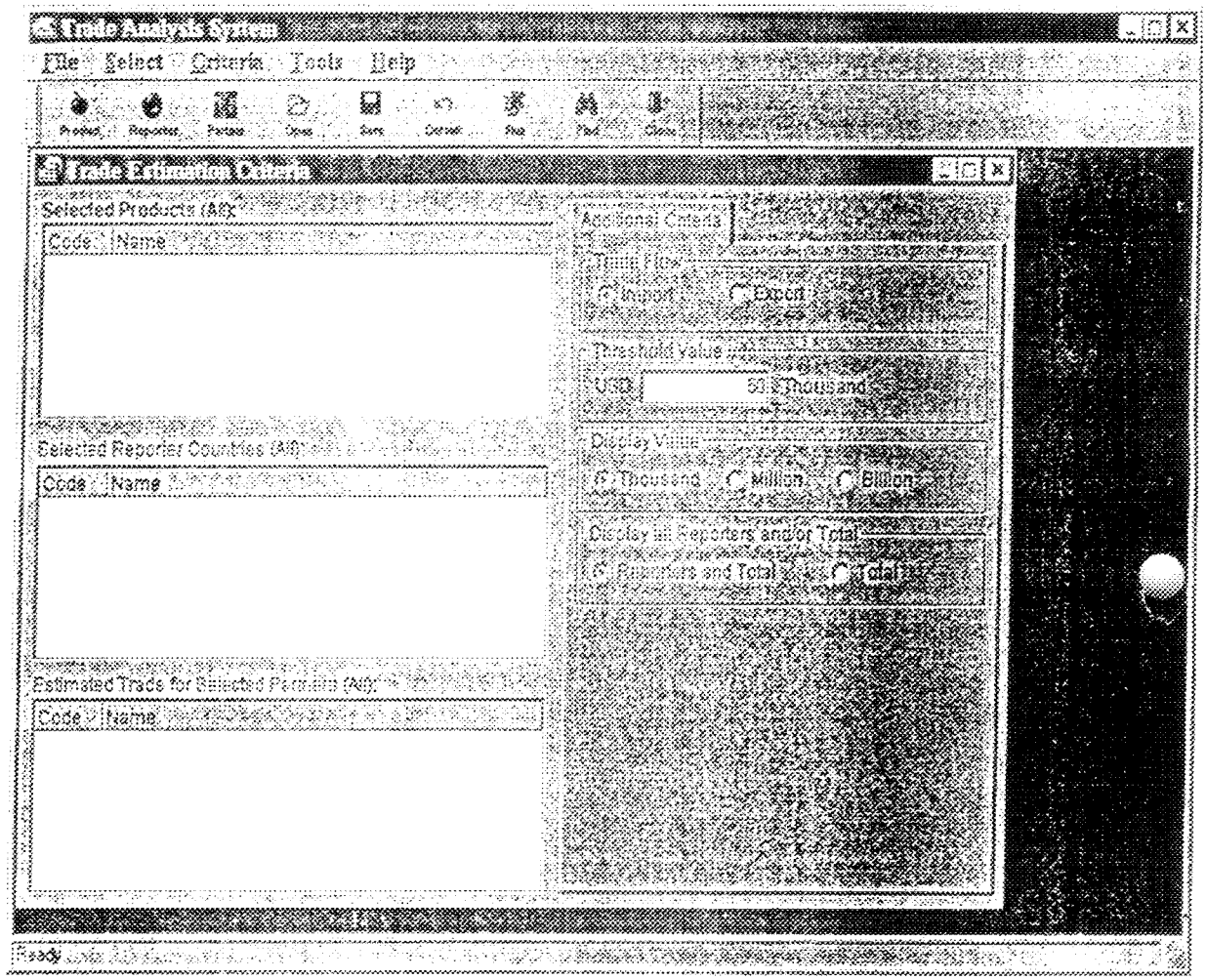
***Data on trade is available in various aspects. One aspect is to estimate the reporter's trade with the partner. In cases where the reporter has not been providing regular data, one can always obtain the partner's trade value with the reporter.***

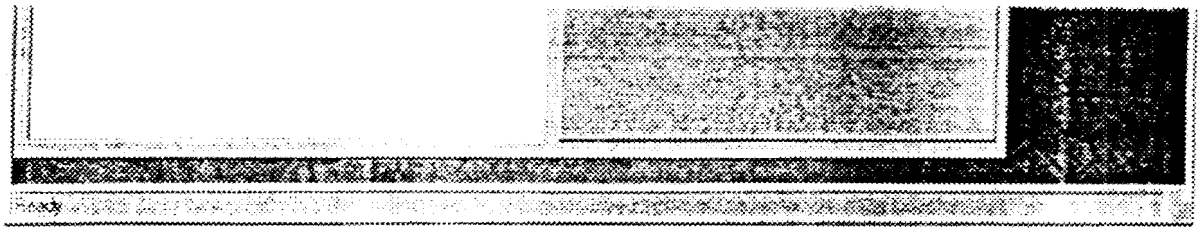
This chapter describes the Trade Estimation option, by which you can make an estimation of the partner's trade value with the reporter, for a product. Before you begin making an estimation, it would be advisable to understand how TAS carries out the estimation for you.

You can make an estimation only on the Import and Export trade flows. Remember, trade flow is always with respect to the reporter country.

While you are actually seeking an estimation of the partner's trade value with the reporter, internally there is a role reversal. For example, if you want to estimate Benin's exports to France, you will get France's imports from Benin. This role reversal is used in cases where the partner has not been providing up-to-date information on its trade flow. It can also help as a means to double-check the reporter's information.

To make an estimation, click on '*Trade Estimation*' in the **View** pull-down menu. The *Trade Estimation Criteria* screen appears:

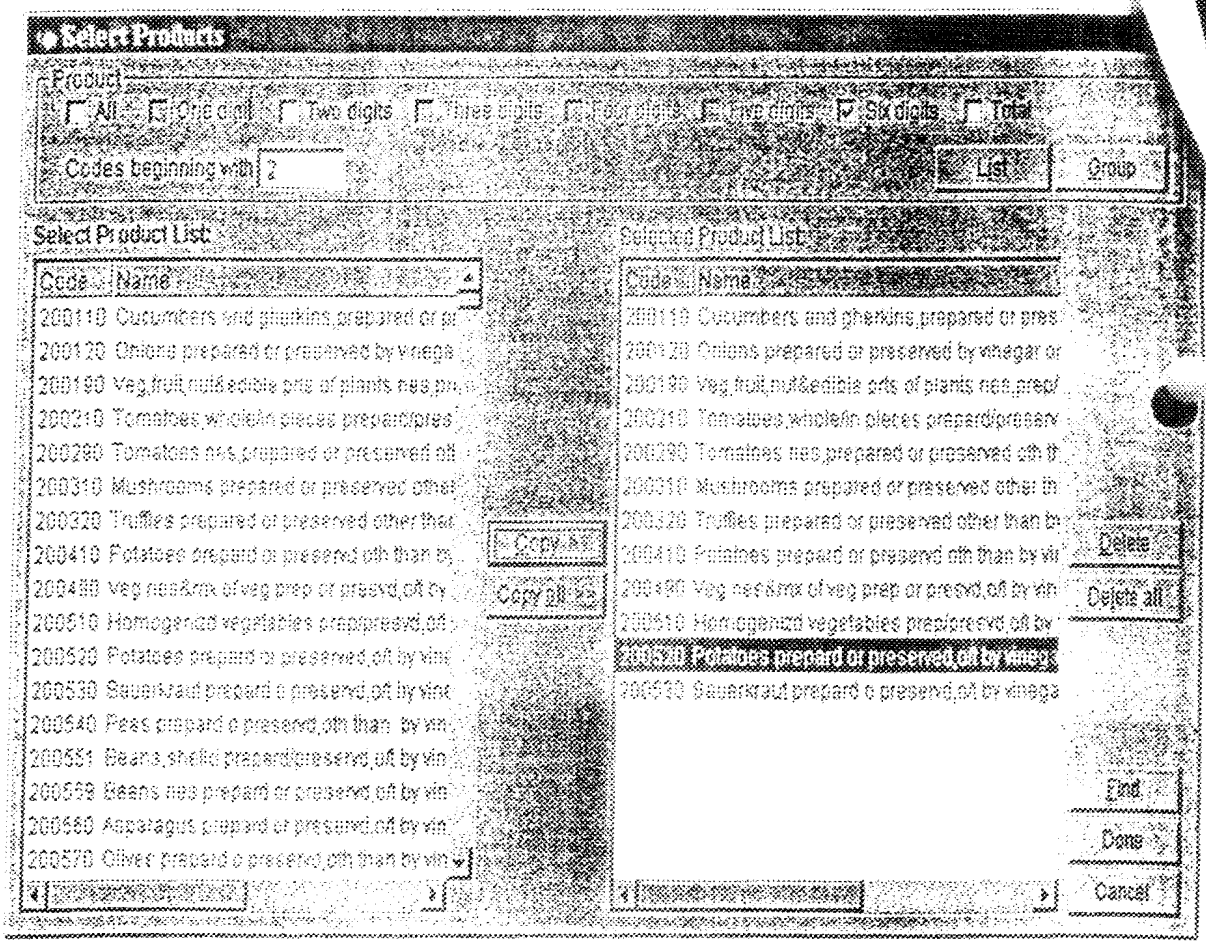

Trade Analysis System
File Select Criteria Tools Help
Selected Products (All)
Code Name
Selected Reporter Countries (All)
Code Name
Estimated Trade for Selected Countries (All)
Code Name
Additional Criteria
Trade Flow
Import
Export
Threshold Value
US$
50 Thousand
Display Value
Thousand
Million
Billion
Display all Reporters and/or Total
Reporters and Total
Total
Ready



Here, click on **Select**. A pull-down menu with the following options appears:

- Select Products
- Select Reporters
- Select Partners

Click on *Select Products* in the Select pull-down menu. The *Select Products* screen appears:



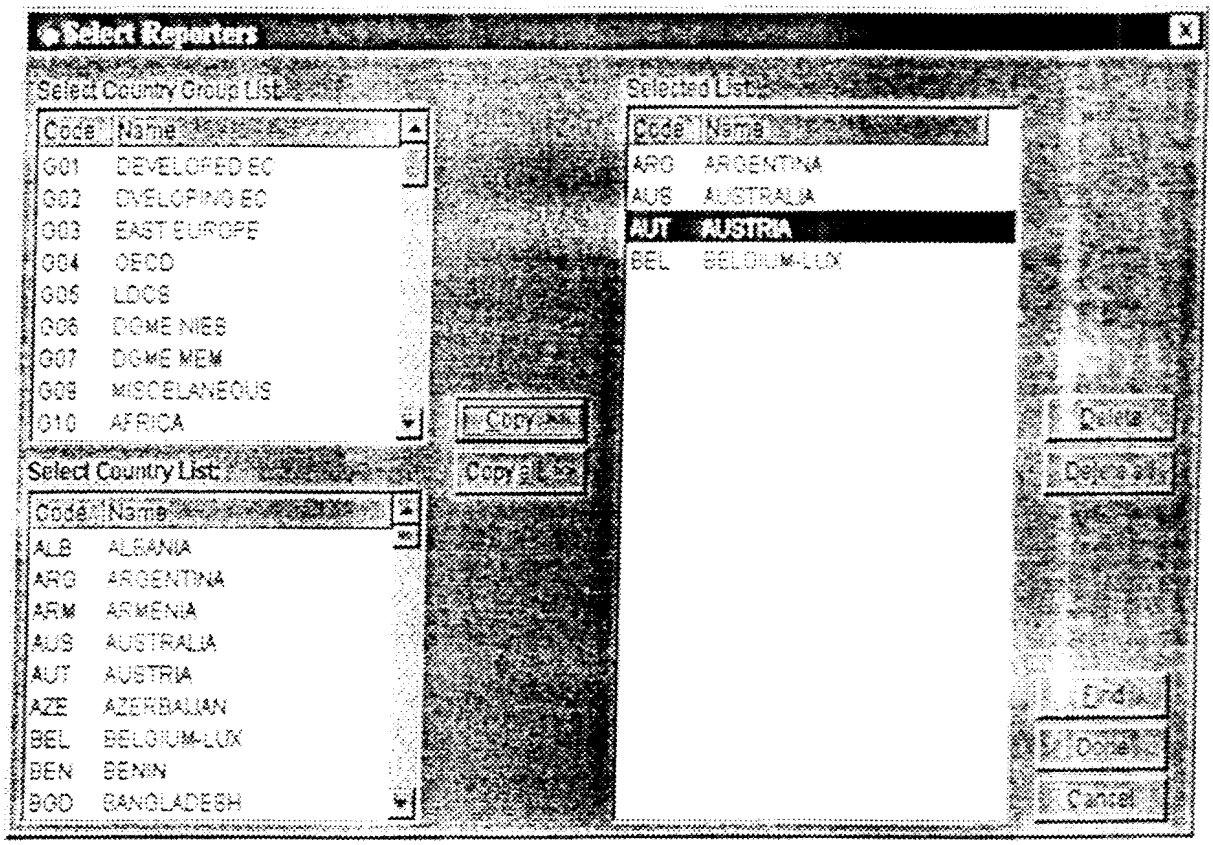

The checkboxes along the top of the screen help you retrieve a list of products based on the specified criteria. For instance, clicking on the **All** checkbox and subsequently on **List** will display to you a list of all products. By clicking on any one or more of the digit checkboxes, you can retrieve a list of products whose codes contain the selected number of digits.

Alternately, you could narrow down your selection by typing in digits in the '**Codes beginning with**' field.

On specifying the filter criteria, a list of products that match the selection is displayed in the Select Product List window. Here, you can select the desired product(s) and copy the same to the Selected List window.

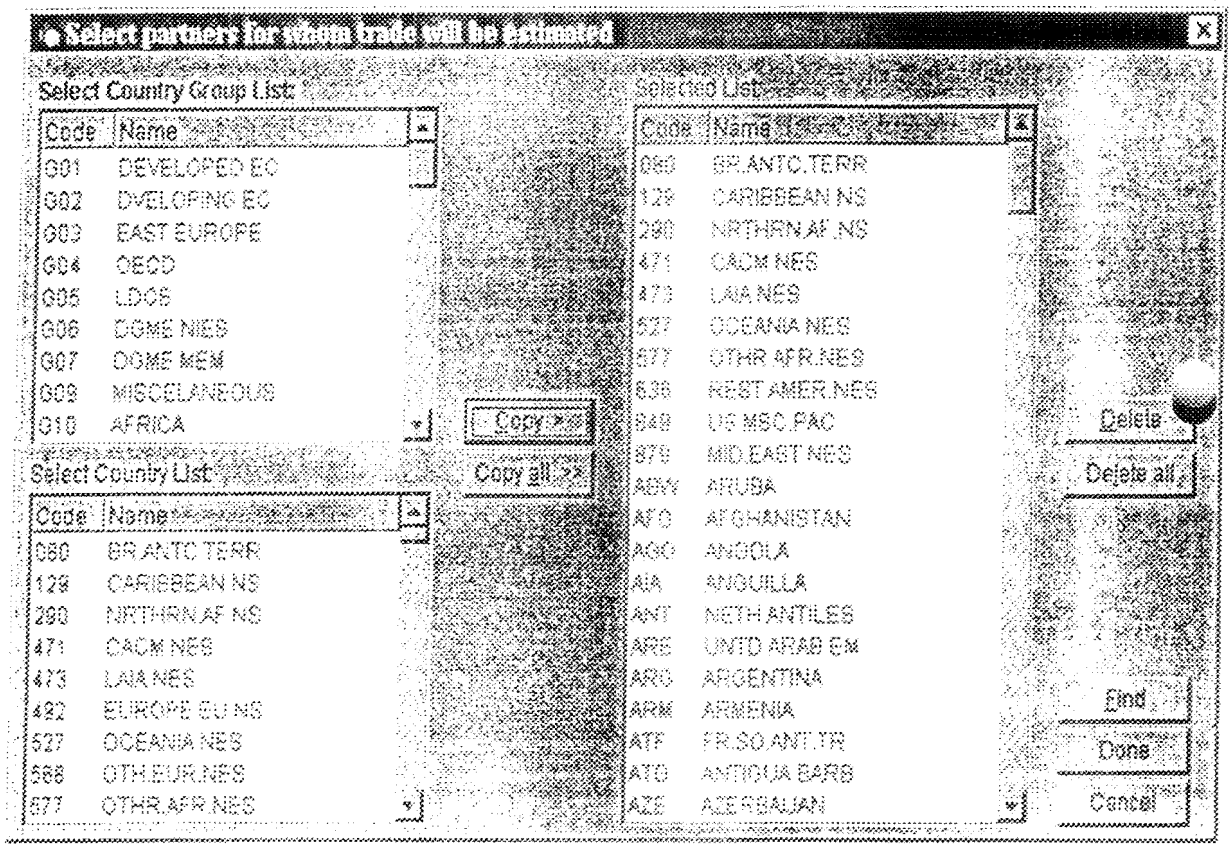
Click on '**Done**'. The selected products are displayed in the Trade Estimation Criteria screen.

Click on ***Select Reporters*** in the Select pull-down menu. The *Select Countries and Groups* that have reported trade data appears:




The process here is the same as that in Selecting Products. Here, if you select a group (e.g. NAFTA, SAARC, EEC, etc.), the countries that belong to that group are displayed in the selected list.

Click on **Select Partners** in the Select pull-down menu. The Select Partners for whom trade will be estimated screen appears:




The process here is the same as that in Selecting Products and Selecting Reporters.

**Note**

1. The partner can either be one or more single countries, or a group (region,...). If a group is selected, the individual countries within the group are selected.
2. The world cannot be selected as a partner.

4.6 Additional criteria for Trade estimation

Using the options provided under additional criteria, you can give a focus to the kind of information you wish to retrieve

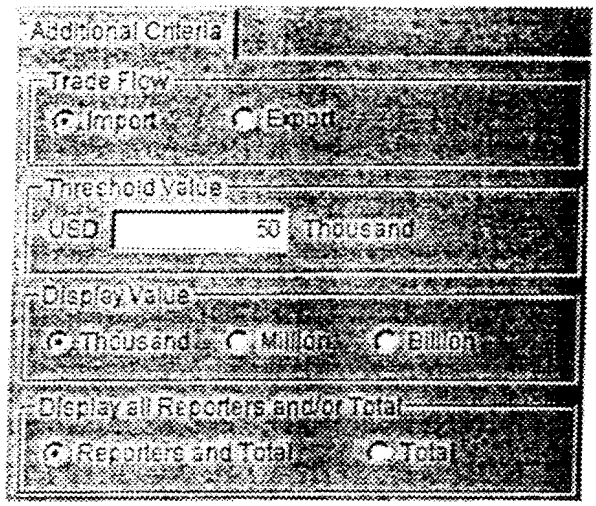
- Specify the type of trade flow you wish to view - Import or Export.

- Specify the threshold value in US Dollars. A default value is displayed which is the system threshold that was used when the data was uploaded. This is the minimum value for the threshold.

- This implies that at least one of the five years should have a trade value that is greater than or equal to the value specified here.

- Select the display value in terms of Thousand, Million or Billion.

- Specify whether you want to view the report with or without details in the Display all Reporters and/or Total option. If you select 'Reporters & Total', the value of individual reporter countries along with the summation is displayed in the report. If you select 'Total', you can view only the sum of all reporters in the report.

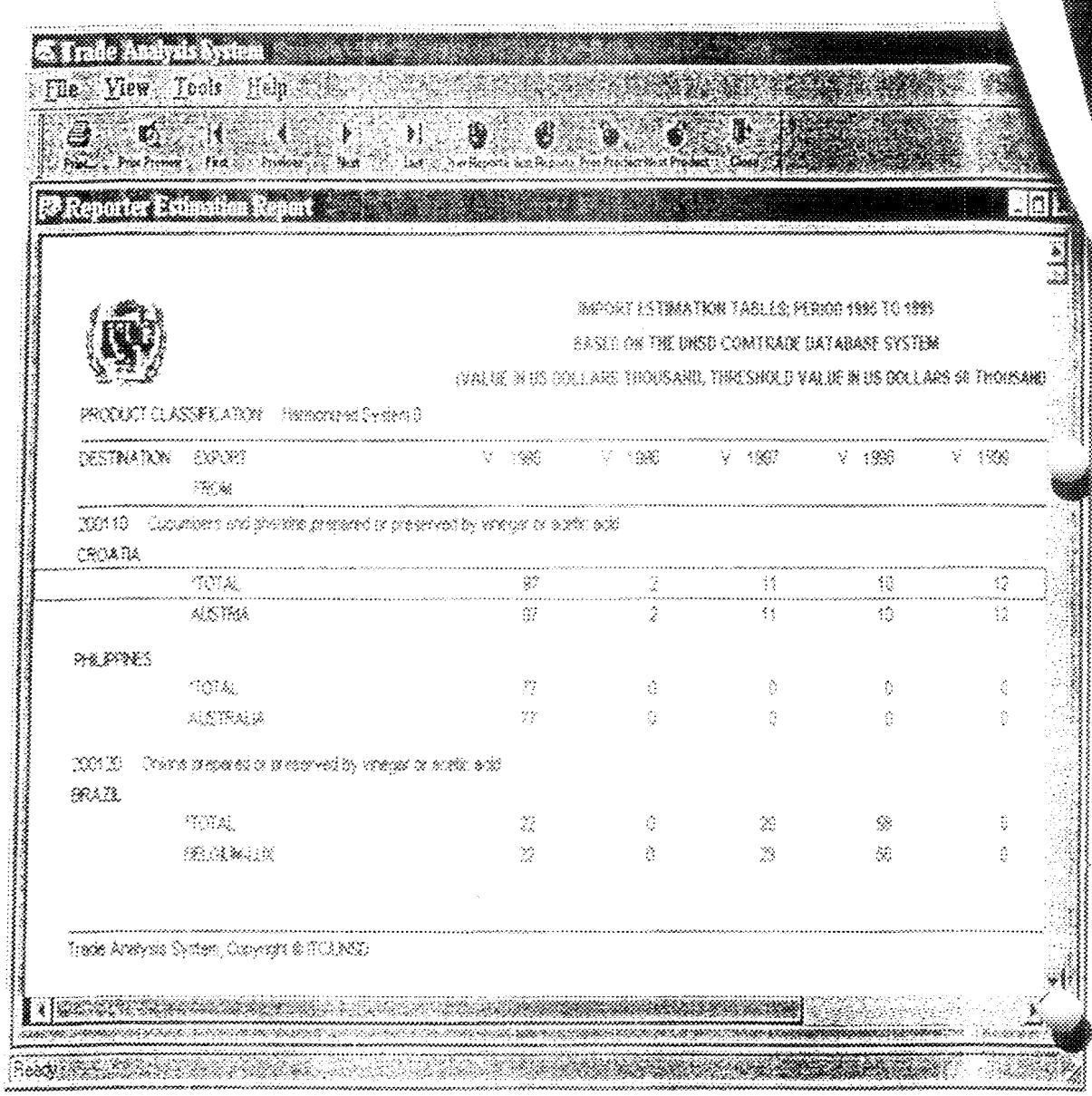



- Click on  to view the report.

***Sorting Order:***

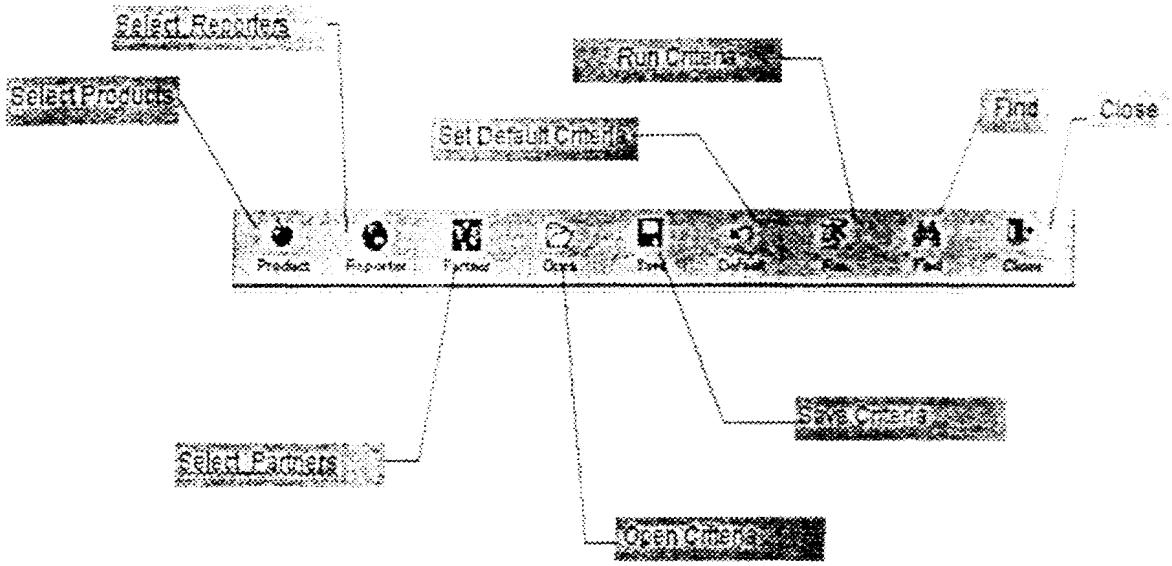
The estimation details will be first sorted by product code in the ascending order, followed by the reporter. This will be further sorted, in the descending order by the sum of five years' value of the partner and the ascending order of the partners.

4.5 Example of a Trade Estimation Report




Upon clicking on "Graph" in the View pull-down menu of the Estimation Report, you can see the graphical representation of the trend and value for trade values.

4.7 Tool tips for Trade Estimation

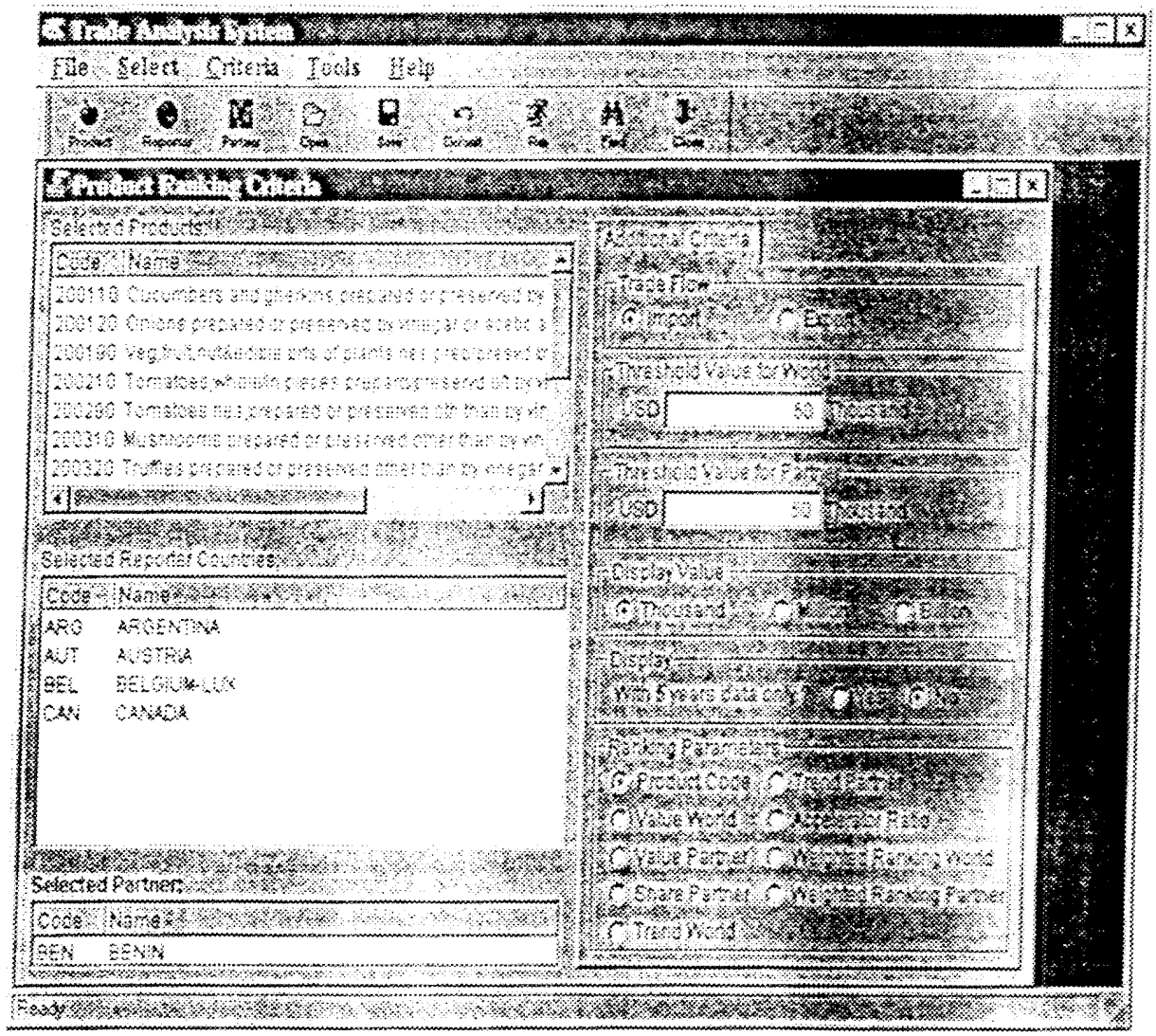


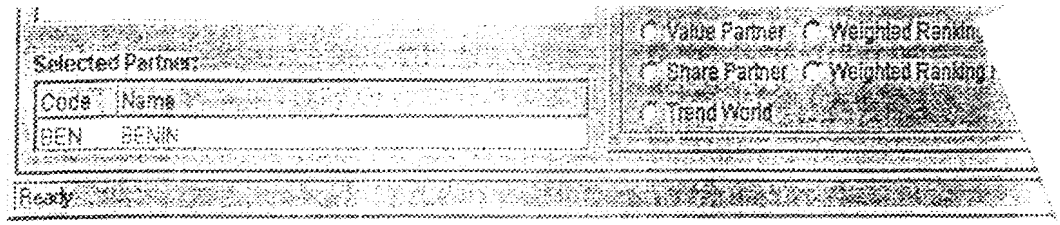
***Analyzing trade between selected reporters, a selected partner and the world for selected products, offers productwise information on the flow of trade. TAS simplifies the task of carrying out productwise trade analysis by offering various parameters, whereby you can make a selection to view trade data. It provides the most recent trade scenario of the selected products between the selected reporters and a partner with reference to the world.***

This chapter describes the Product Ranking option. You can rank or sort selected products for selected reporters or a selected partner based on any one of the following 9 parameters using this option:

- Product Code
- Value World
- Value Partner
- Share Partner
- Trend World
- Trend Partner
- Accelerator Ratio
- Weighted Ranking World
- Weighted Ranking Partner

To rank products, click on *Product Ranking* in the View pull-down menu. The *Product Ranking Criteria* screen appears:

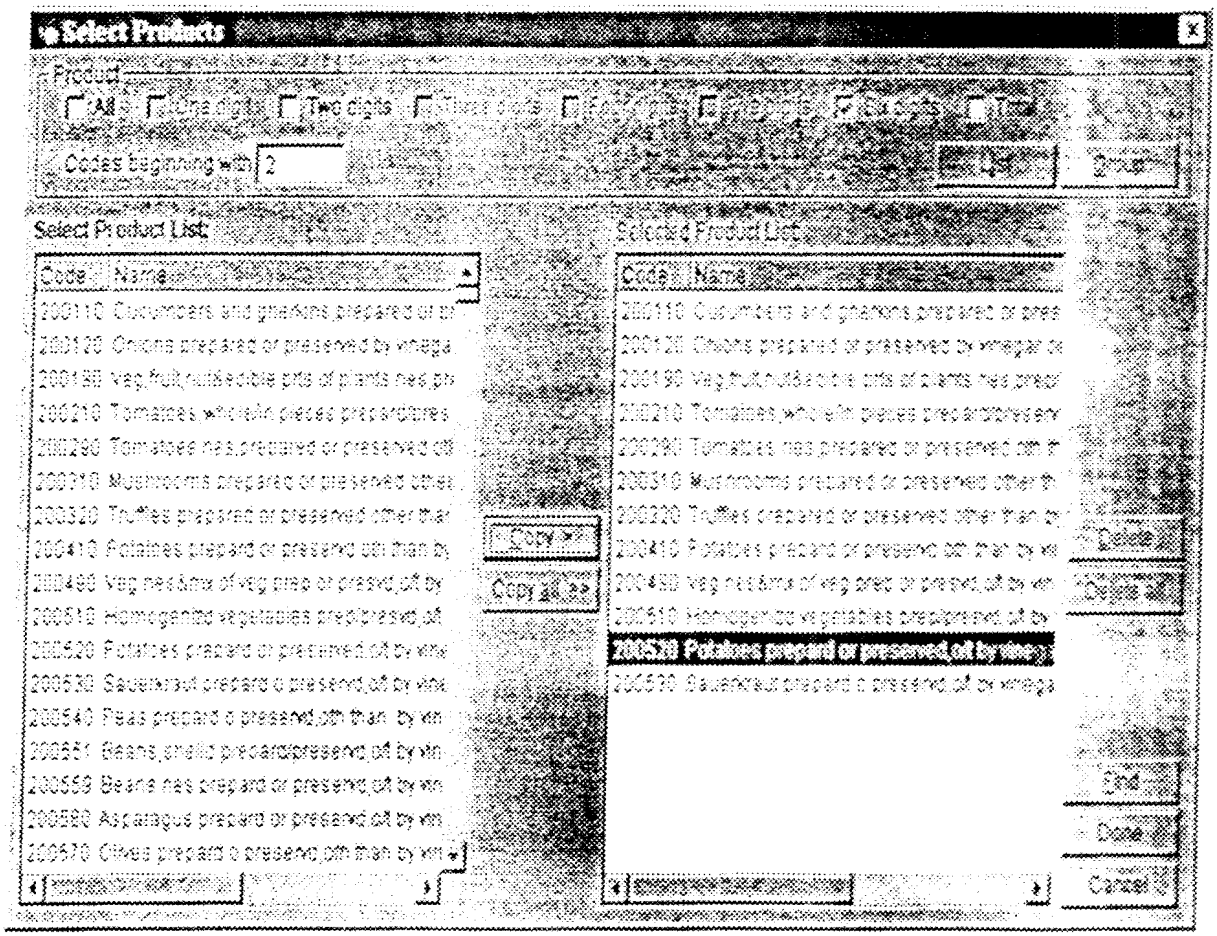

Trade Analysis System
File Select Criteria Tools Help
Product Ranking Criteria
Selected Products
Code Name
200110 Cucumbers and gherkins prepared or preserved by
200120 Onions prepared or preserved by vinegar or acetic a
200190 Veg,fruit,nuts&other parts of plants nes prep.preserved
200210 Tomatoes,whole/in pieces prep.or preserved otherwise
200290 Tomatoes nes prepared or preserved otherwise than by vi
200310 Mushrooms prepared or preserved otherwise than by vi
200320 Truffles prepared or preserved otherwise than by vinegar
Selected Reporter Countries
Code Name
ARG ARGENTINA
AUT AUSTRIA
BEL BELGIUM-LUX
CAN CANADA
Selected Partner
Code Name
BEN BENIN
Additional Criteria
Trade Flow
Import
Export
Threshold Value for World
USD
50
Thousand
Threshold Value for Partner
USD
50
Thousand
Display Value
Thousand
Million
Billion
Display
With 5 years data only
YES
NO
Ranking Parameters
Product Code
Trade Partner
Value World
Value Partner
Share Partner
Trend World
Weighted Ranking World
Weighted Ranking Partner
Ready




Here, click on Select. A pull-down menu with the following options appears:

- Select Products
- Select Reporters
- Select Partner

Click on ***Select Products*** in the **Select** pull-down menu. The *Select Products* screen appears:



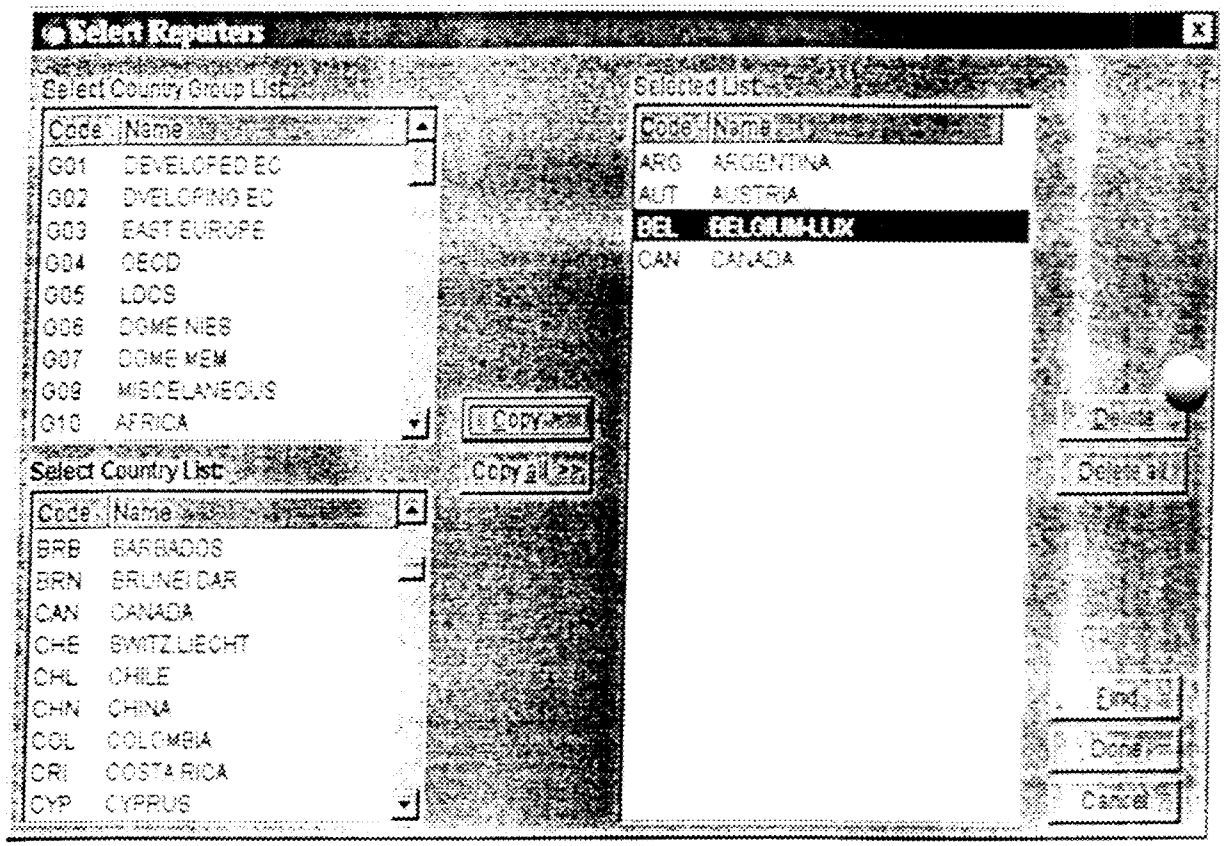

The checkboxes along the top of the screen help you retrieve a list of products based on the specified criteria. For instance, clicking on the **All** checkbox and subsequently on **List** will display to you a list of all products. By clicking on any one or more of the digit checkboxes, you can retrieve a list of products whose codes contain the selected number of digits.

Alternatively, you could narrow down your selection by typing in the first digit(s) in the '**Codes beginning with**' field.

On specifying the filter criteria, a list of products that match the selection is displayed in the Select Product List window. You can select the desired product(s) and copy the same to the Selected Product List window.

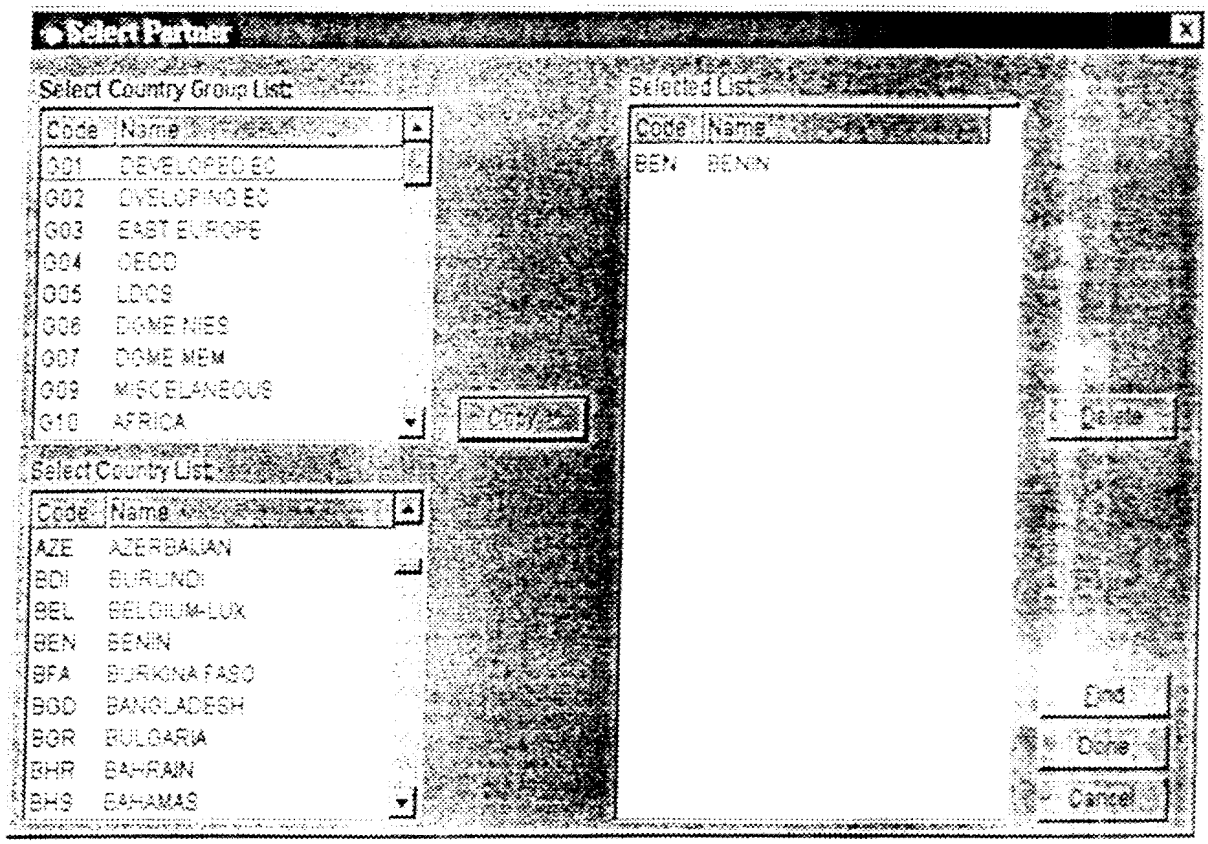
Click on '**Done**'. The selected products are displayed in the *Product Ranking Criteria* screen.

Click on ***Select Reporters*** in the **Select** pull-down menu. The *Select Countries and Groups* that have reported trade data appears:




The process here is the same as that in Selecting Products. Here, if you select a group (e.g. NAFTA, SAARC, EEC, etc.), the countries that belong to that group are displayed in the selected list.

Click on ***Select Partner*** in the **Select** pull-down menu. The *Select Partner* screen appears.




The process here is the same as that in Selecting Products and Selecting Reporters.

### Note

The partner can either be a single country, or a group (region). Although the world cannot be selected here as a partner, the world values are displayed in the report for comparison.

5.5 Additional criteria for Product ranking

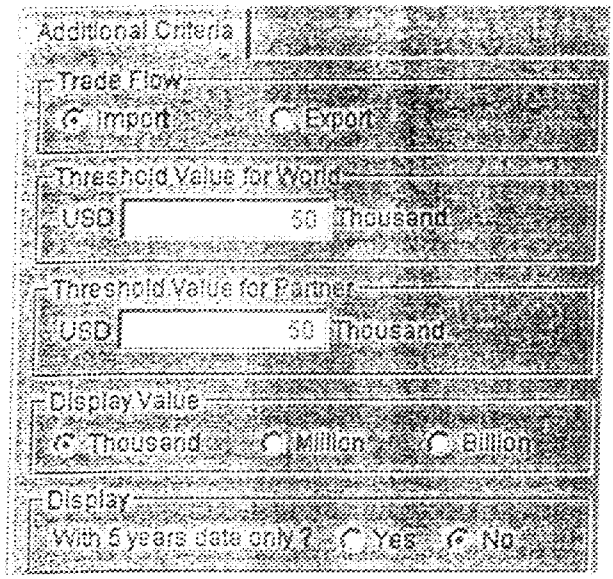
Using the options provided under additional criteria, you can give a focus to the kind of information you wish to retrieve.

- Here, specify the type of trade flow you wish to view - Import or Export.

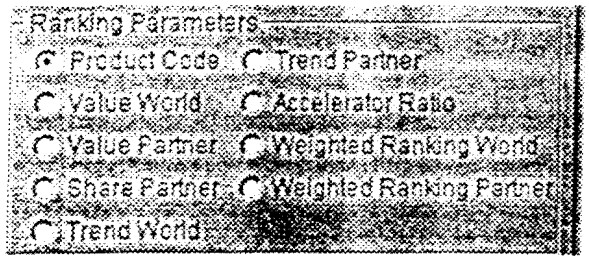
- Specify the threshold value in US Dollars for the Partner. A default value is displayed which is the system threshold that was used when the data was uploaded. This is the minimum value for the threshold. This implies that at least one of the five years should have a trade value that is greater than or equal to the value specified here.

- Select the display value in terms of Thousand, Million or Billion.

- Specify whether or not you want to view only those products for which reporters have five years' data. If you click on **Yes**, only those of the selected reporters that have 5 years' trade value with the world will be displayed in the report. If you click on **No**, all the selected reporters for the selected products will be displayed in the report.




- Finally, select any one of the 9 parameters based on which you would like to sort the information.

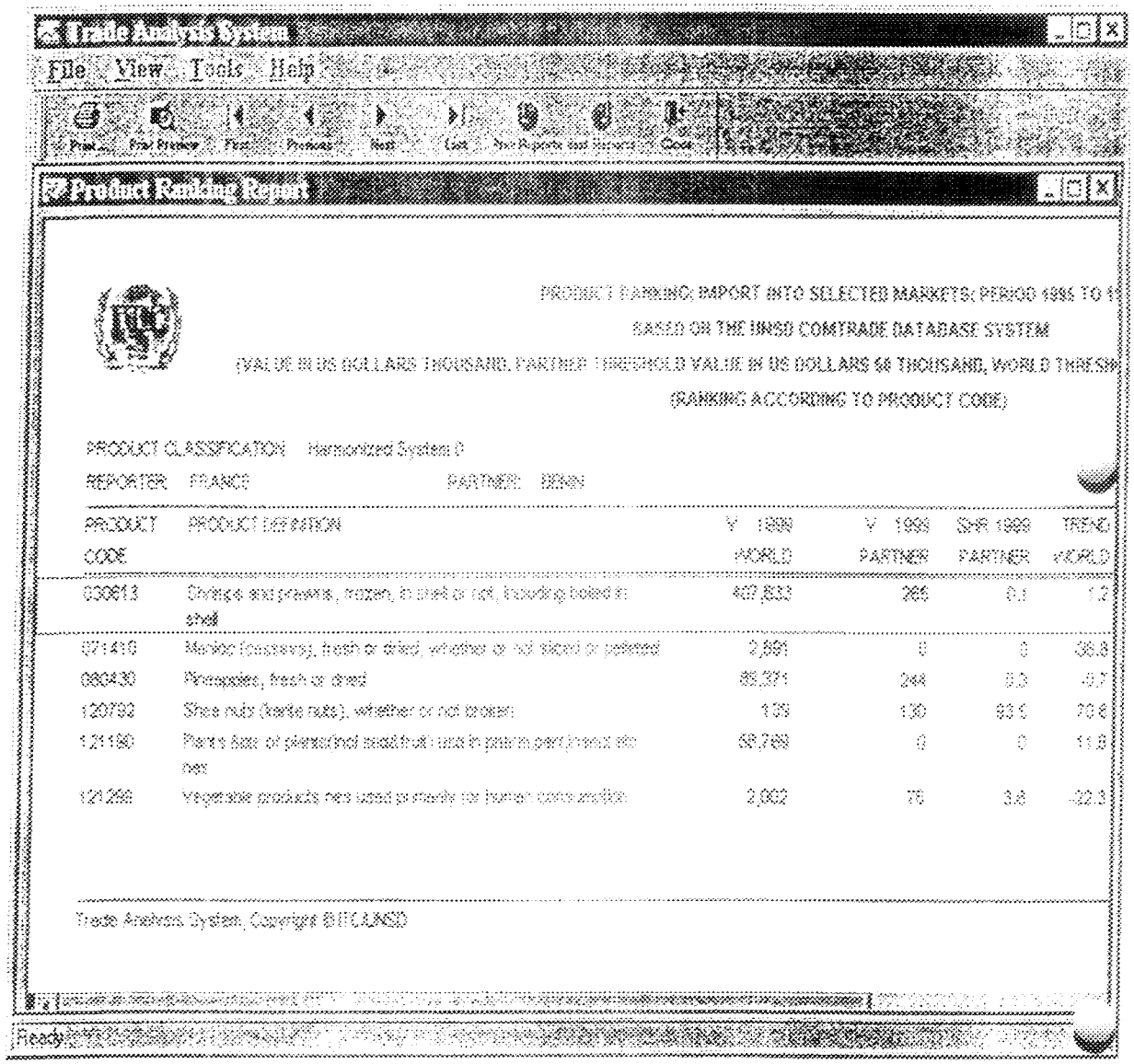



❒ Click on  to view the report.

***Sorting order***

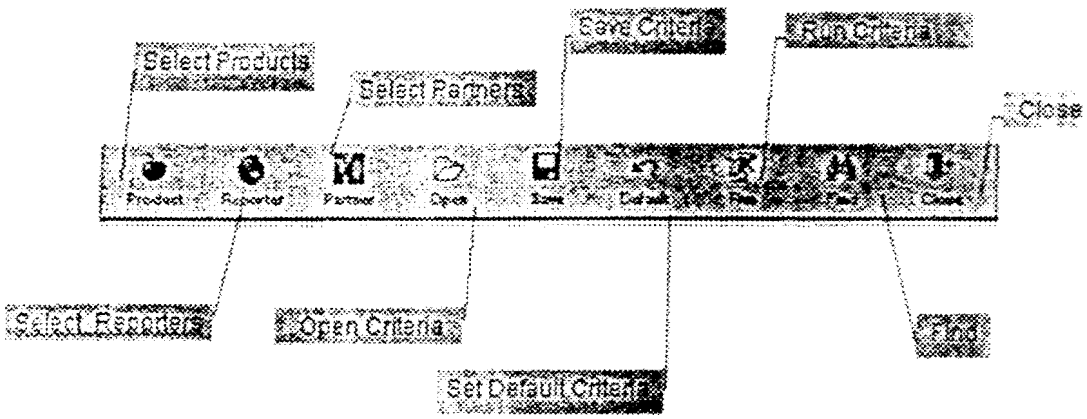
The data will be first sorted by reporter and then by the ranking parameter you have selected.

5.6 Example of a Product Ranking Report




| Note |
| --- |
| Blank spaces in any of the computed columns denote that the calculation is not possible since some of the parameters have a value of zero. |

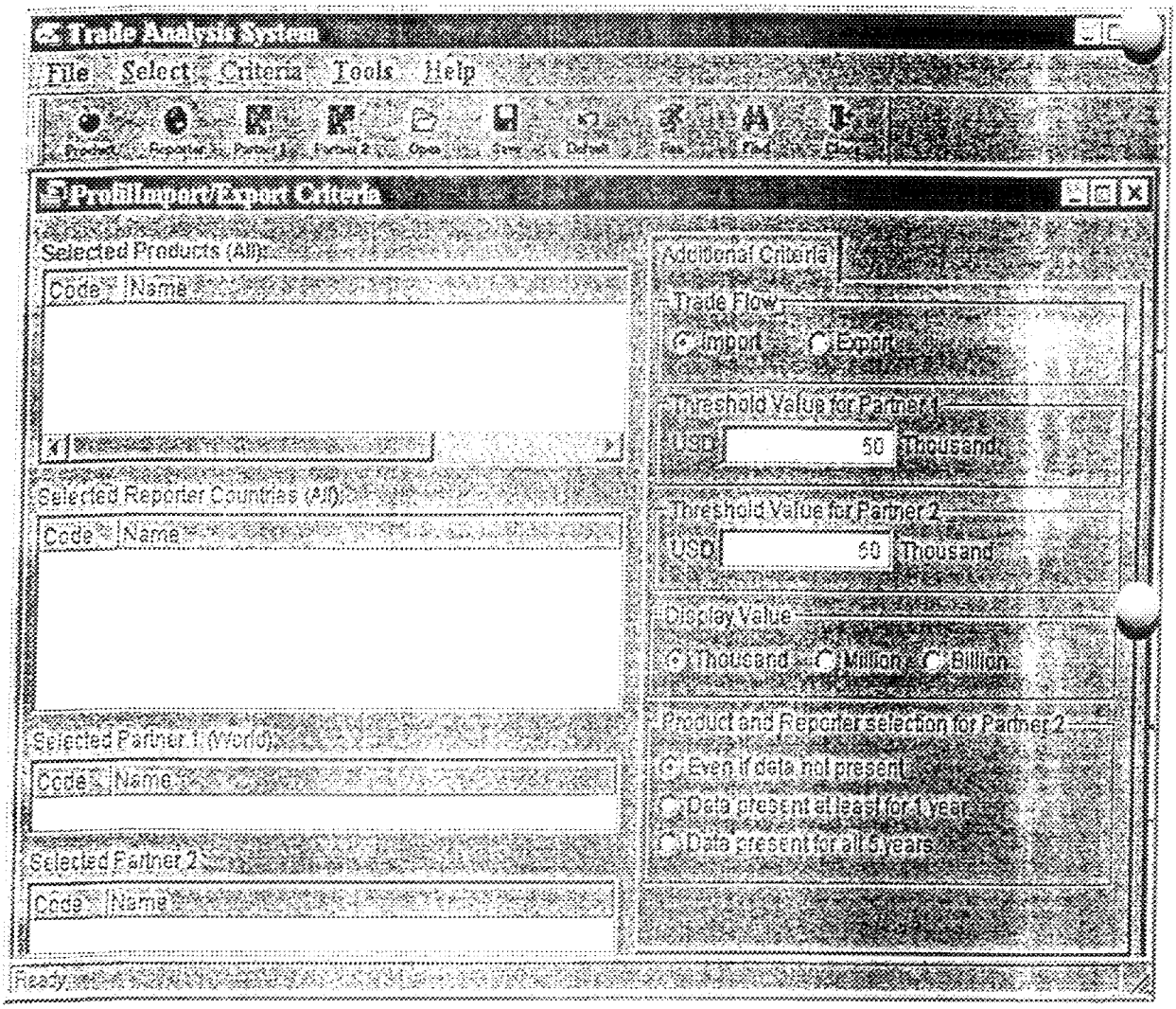
5.7 Tool tips for Product Ranking



***It is incredible what a detailed comparison of the trade values between countries/groups, or a country/group with respect to the world, can shed light on for various products; especially if this information is just a click away***

This chapter describes the ProfilImport/Export option. You can make a comparison of the trade value between two partners of the selected reporters, for the selected products using this option.

To make this comparison, click on *ProfilImport/Export* in the **View** pull-down menu. The *ProfilImport/Export Criteria* screen appears:

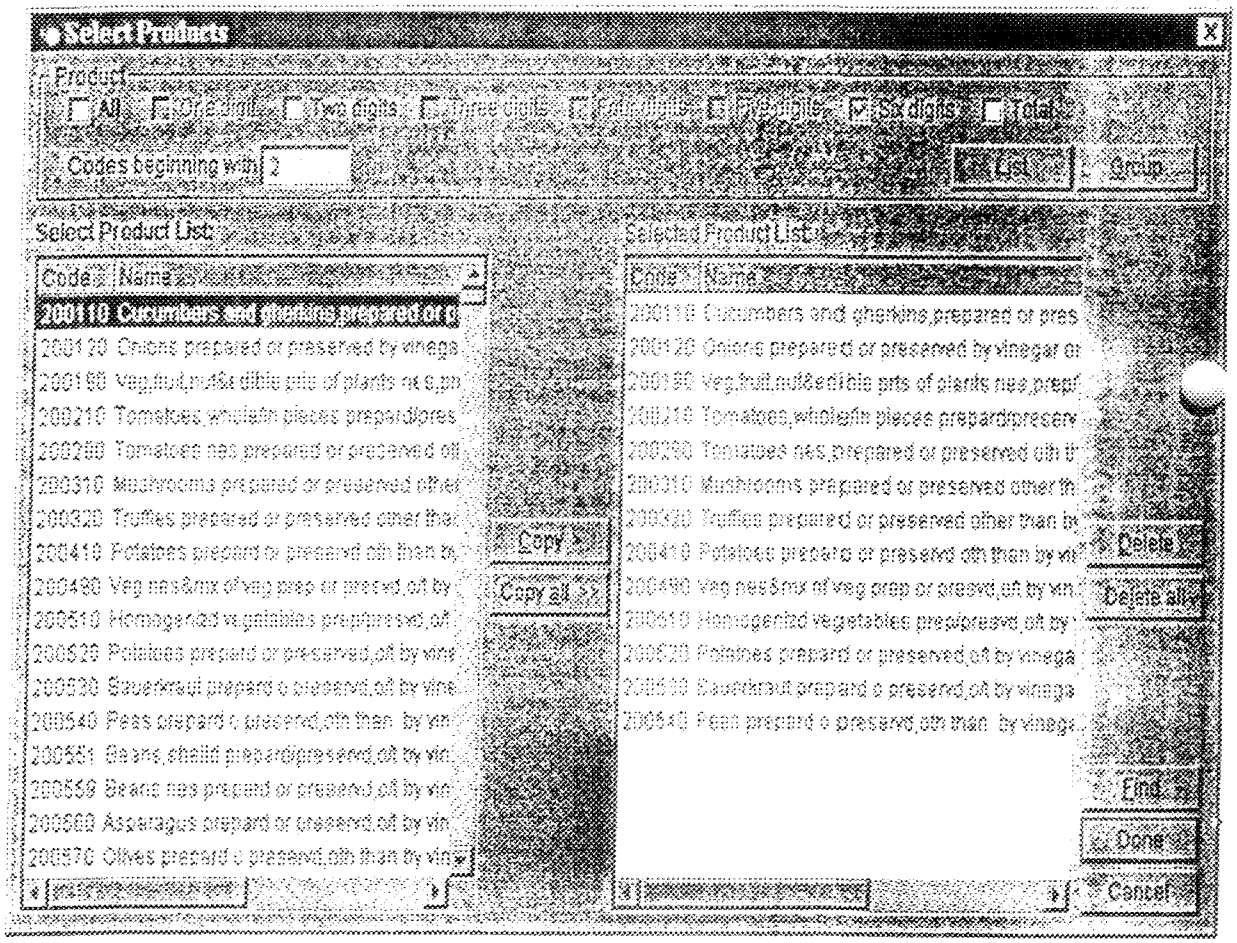



Click on **Select**. A pull-down menu with the following options appears:

- Select Products
- Select Reporters

- ❑ Select Partners

Click on *Select Products* in the Select pull-down menu. The *Select Products* screen appears:



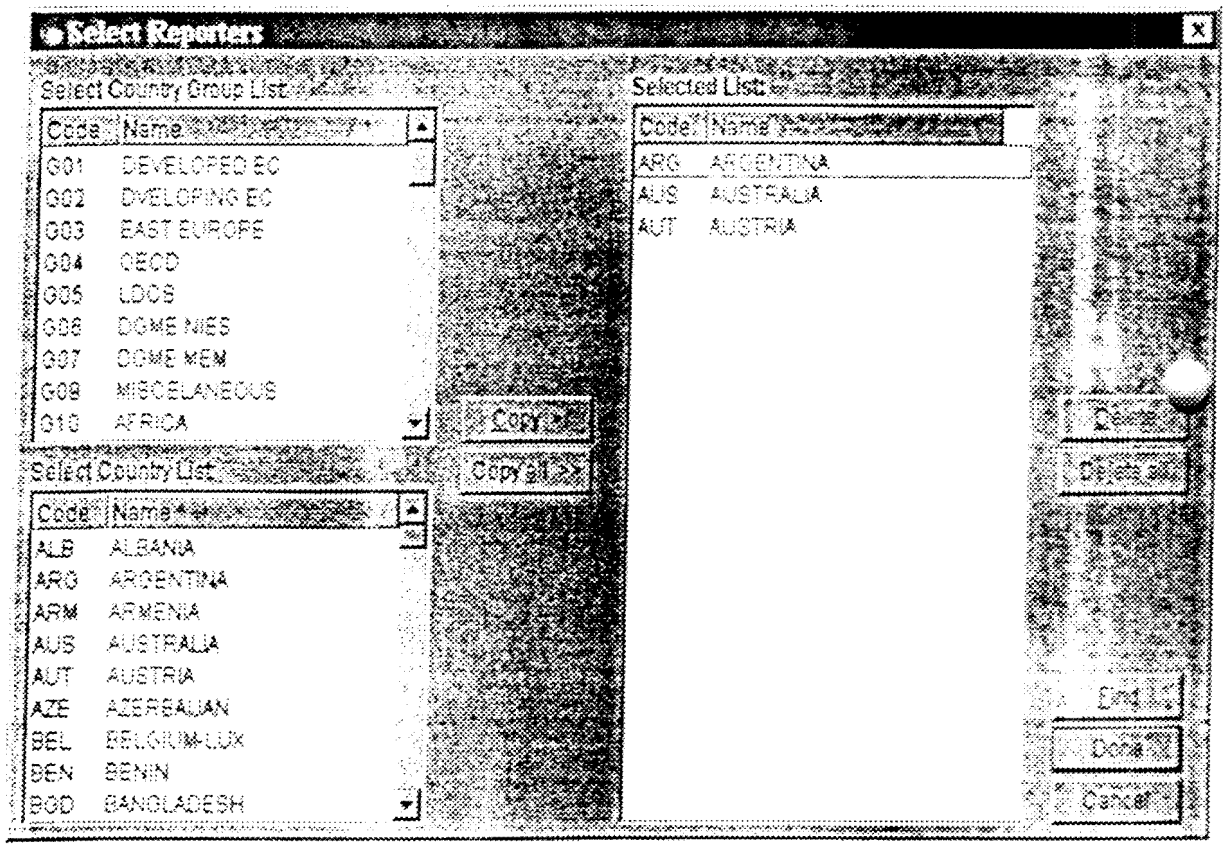

The checkboxes along the top of the screen help you retrieve a list of products based on the specified criteria. For instance, clicking on the **All** checkbox and subsequently on **List** will display to you a list of all products. By clicking on any one or more of the digit checkboxes, you can retrieve a list of products whose codes contain the selected number of digits.

Alternatively, you could narrow down your selection by typing in the first digit(s) in the '**Codes beginning with**' field.

After specifying the filter criteria, a list of products that match the selection is displayed in the Select Product List window. Here, you can select the desired product(s) and copy the same to the Selected List window.

Click on '**Done**'. The selected products are displayed in the *Profilimport/Export Criteria* screen.

Click on ***Select Reporters*** in the **Select** pull-down menu. The *Select Countries and Groups* that have reported trade data appears:



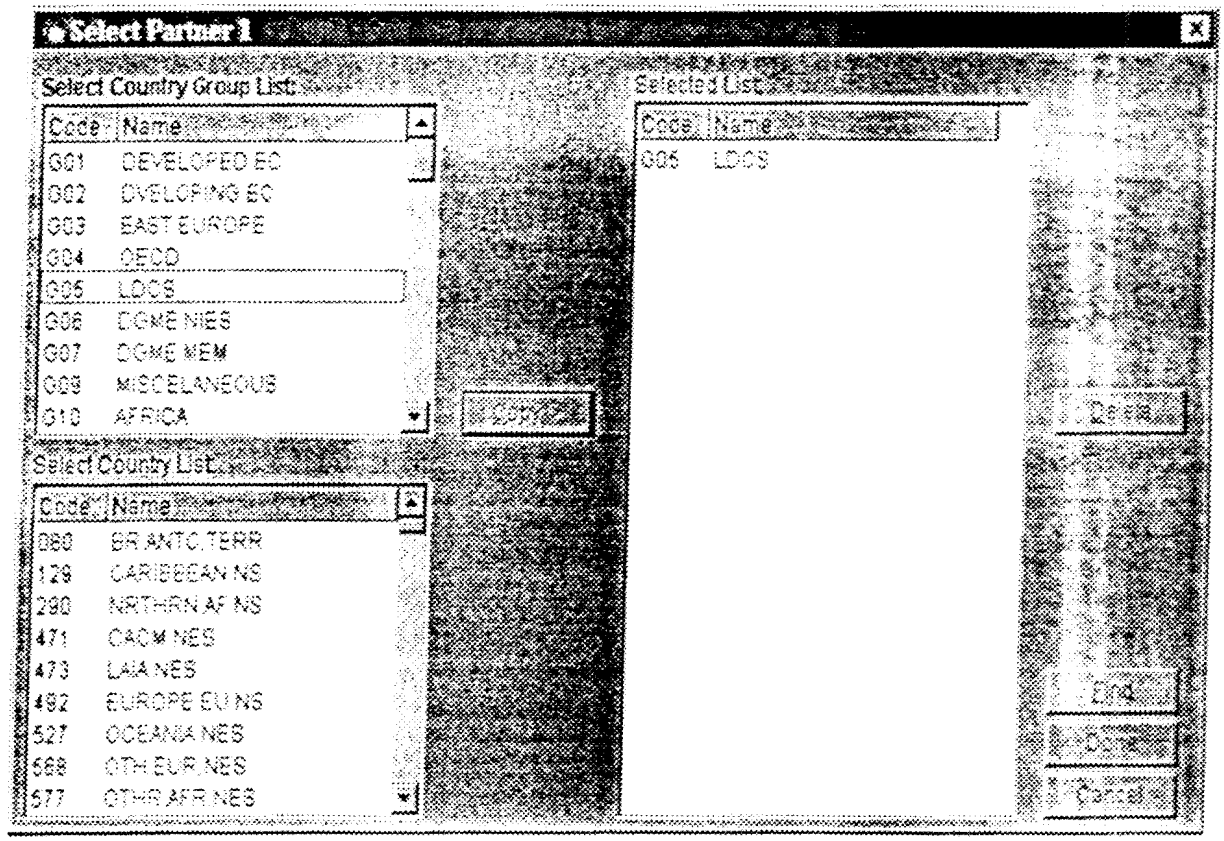

The process here is the same as that in Selecting Products. Here, if you select a group, the countries that belong to that group are displayed. (e.g. NAFTA, SAARC, EEC, etc.)

Since you are making a comparison between two partners, you have to select Partner 1 and Partner 2. The procedure for both is the same. Click on ***Select Partners*** in the **Select** pull-down menu. From the pull-down menu that appears select **Partner 1** or **Partner 2**, as required. The corresponding *Select Partner* screen appears.

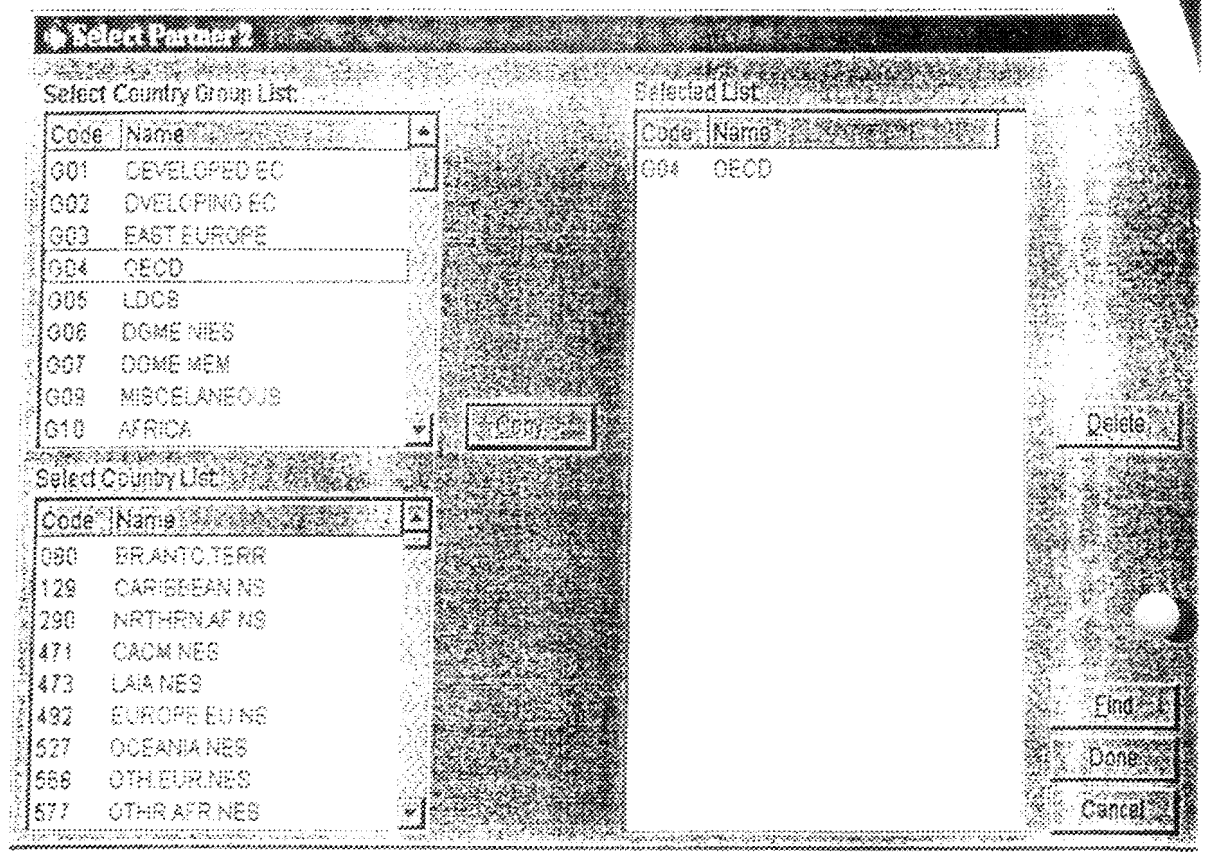
The process here is the same as that in Selecting Products and Selecting Reporters.

| Note |
| --- |
| If the partner (1 or 2) is a group, the report shows the trade value for the entire group, and not for the individual member countries. |

**Partner 1** is the World by default, unless a Group or an Individual country is selected. The World cannot be explicitly selected.




**Partner 2** can be a Group or an Individual country. It cannot be the World.

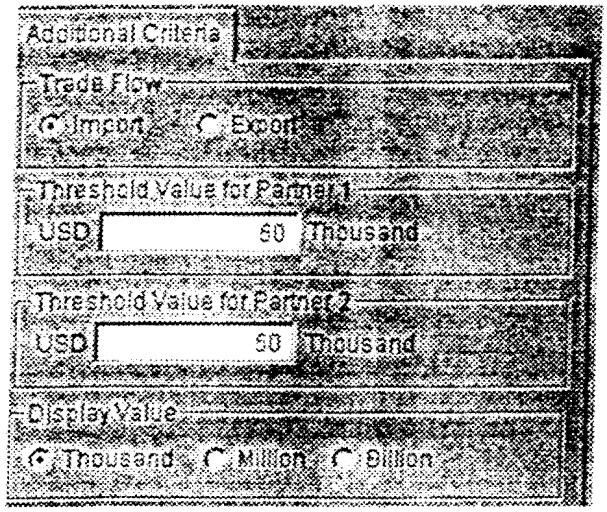

Select Parms 2
Select Country Group List:
Code Name
G01 DEVELOPED EC
G02 DVELOPING EC
G03 EAST EUROPE
G04 OECD
G05 LDCS
G06 DOME NIES
G07 DOME MEM
G09 MISCELANEOUS
G10 AFRICA
Select Country List:
Code Name
090 BRANTC TERR
129 CARIBBEAN NS
290 NRTHRN AF NS
471 CACM NES
473 LAIA NES
492 EUROPE EU NS
527 OCEANIA NES
566 OTH EUR NES
577 OTHR AFR NES
Copy
Selected List:
Code Name
G04 OECD
Delete
End
Done
Cancel

Using the options provided under additional criteria, you can give a focus to the kind of information you wish to retrieve.

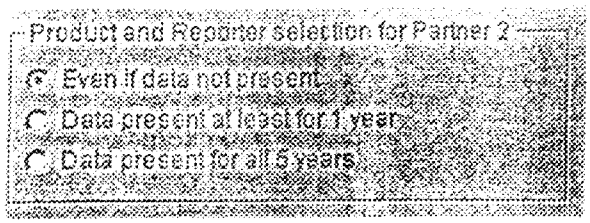
- Specify the type of trade flow you wish to compare – Import or Export.

- Specify the threshold value in US Dollars, for both partners. A default value is displayed, which is the system threshold that was used when the data was uploaded. This is the minimum value for the threshold. The value implies that at least one of the five years should have a trade value that is greater than or equal to the value specified here.

- You can select the display value in terms of Thousand, Million or Billion



6.5.1 The product and reporter selection for Partner 2




**Even if data not present**

Clicking here implies that you would like the selected reporters to be displayed in the report, even if data is not present.

**Data present for at least 1 year**

Clicking here implies that you would like the reporter to be displayed in the report, if data is available for at least one of the five years. If there is no trade between the reporter and partner 2 even for one year, then the reporter will not be displayed although it may have trade with partner 1.

| Note |
| --- |
| Of the reporters selected in the Selected Reporter Countries, the reporters that have trade with partner 1 will be determined first. This option will then be applied on only these reporters. |

Example

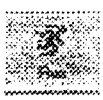
*If 10 reporters are selected, and 6 of them have trade with partner 1, and of these 8, only 6 have trade with partner 2 for at least one year, then only these 6 reporters will be displayed.*

**Data present for all 5 years**

Clicking here implies that you would like the reporter to be displayed in the report, only if data is available for all 5 years. Here too, if there is no trade between the reporter and partner 2 for all five years, then the reporter will not be displayed although it may have trade with partner 1.

Example

*If 10 reporters are selected, and 6 of them have trade with partner 1, and of these 8, only 6 have trade with partner 2 for all five years, then only these 6 reporters will be displayed.*

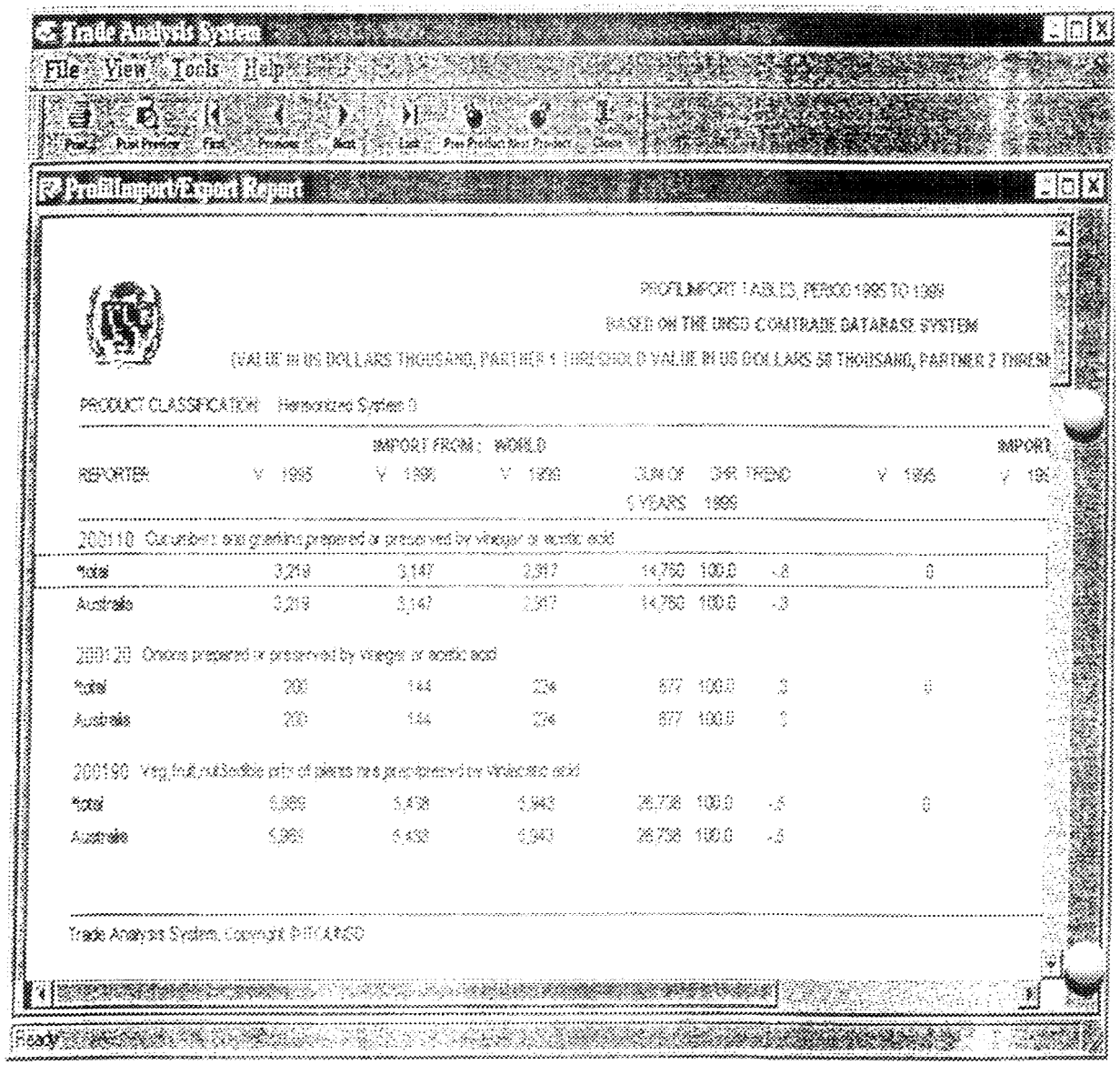


❒ Click on  to view the report.

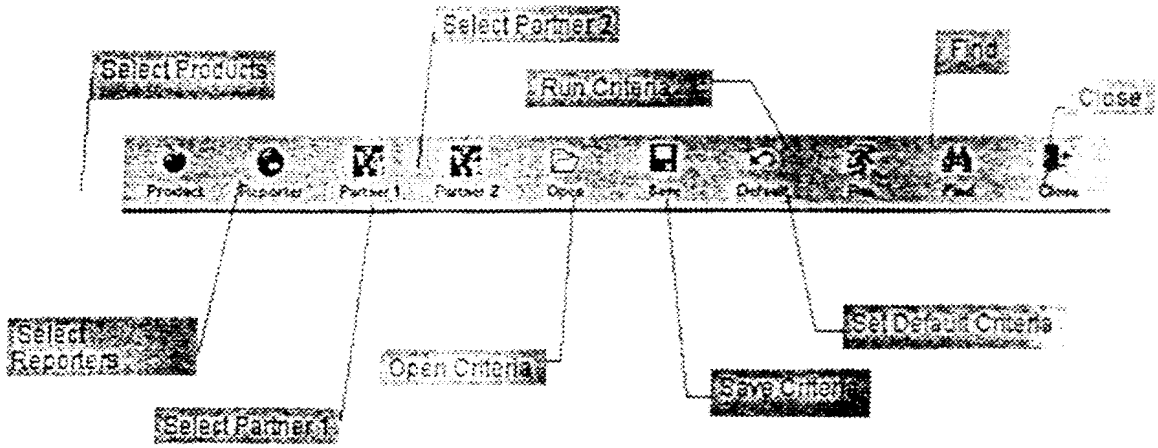
### Sorting Order

*The data is first sorted by product code in the ascending order, followed by the sum of five years for partner 1 in the descending order.*

6.6 Example of a Profilimport/Export Report



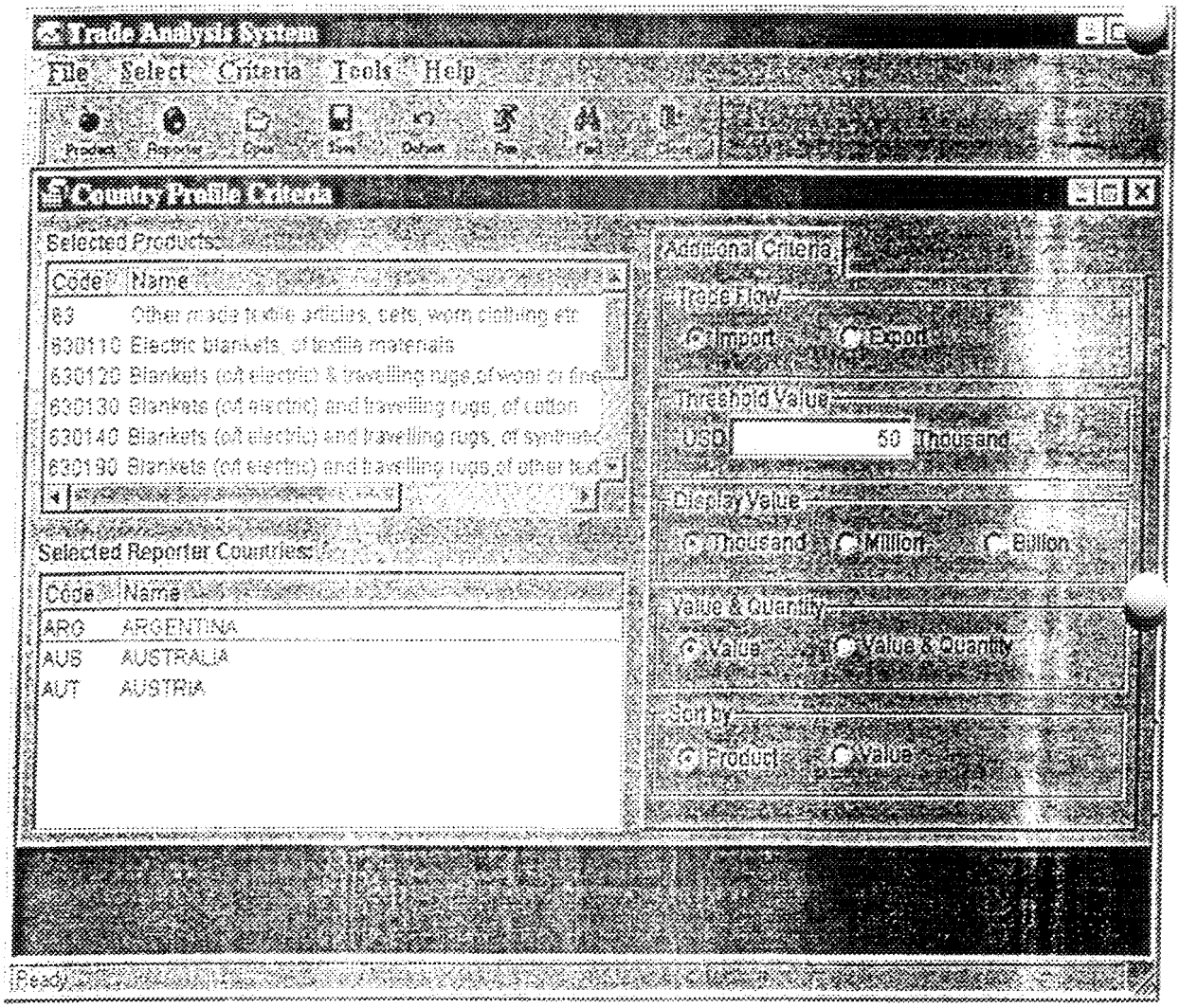
6.7 Tool tips for Profil/Import/Export



*It is extremely critical to have easy access to relevant information for analyzing trade specific to a country. In line with this thought, TAS provides for an option whereby you can easily view trade data for one or more reporter countries, for one or more products, with respect to the world.*

This chapter describes the Country Profile option. You can define various criteria to analyze the trade performance of countries with respect to the world using this option.

To view country profile, select *Country Profile* from the **View** pull-down menu. The *Country Profile Criteria* screen appears:

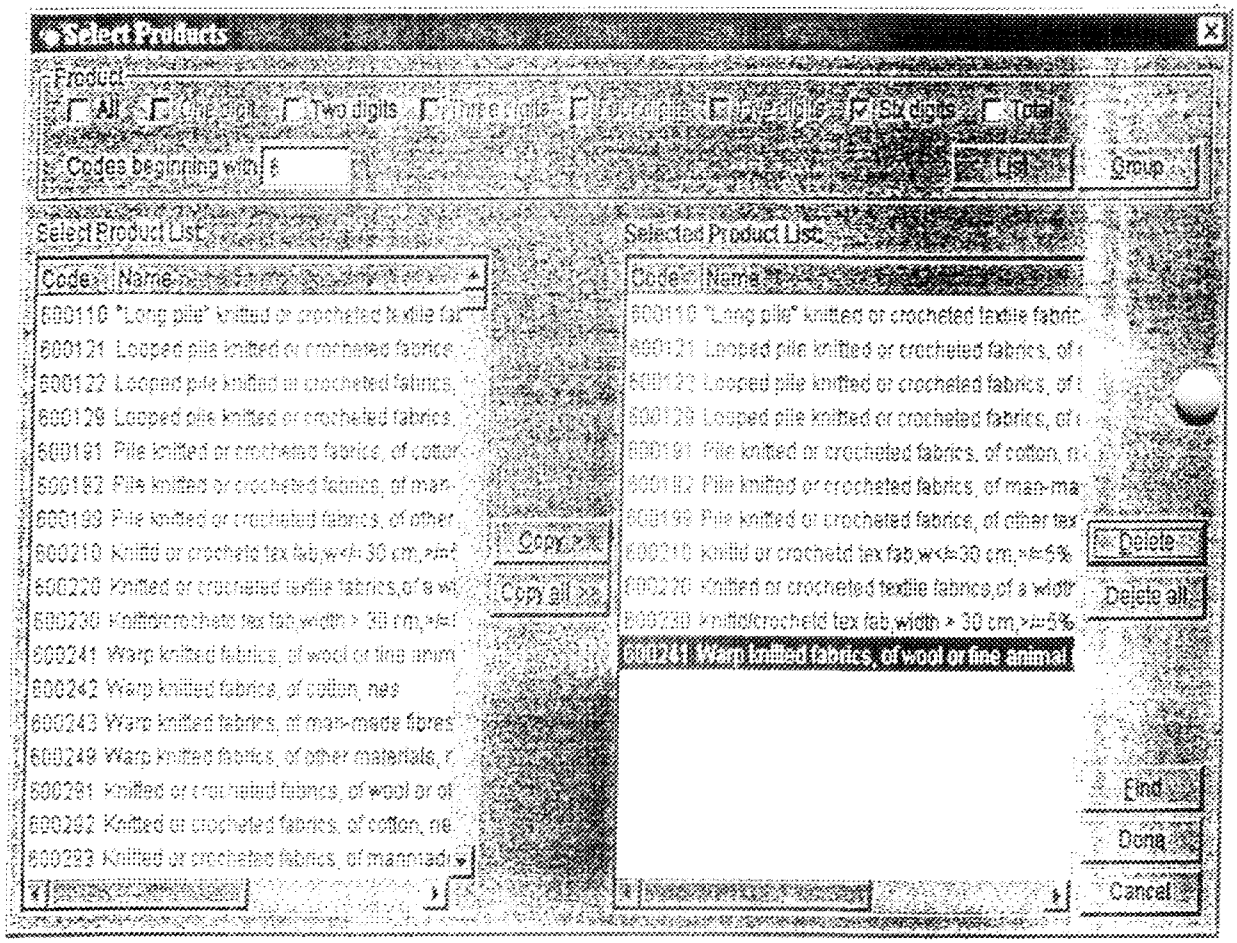



Click on **Select**. A pull-down menu with the following options appears:

- Select Products

- Select Reporters

Click on *Select Products* in the Select pull-down menu. The *Select Products* screen appears as follows:



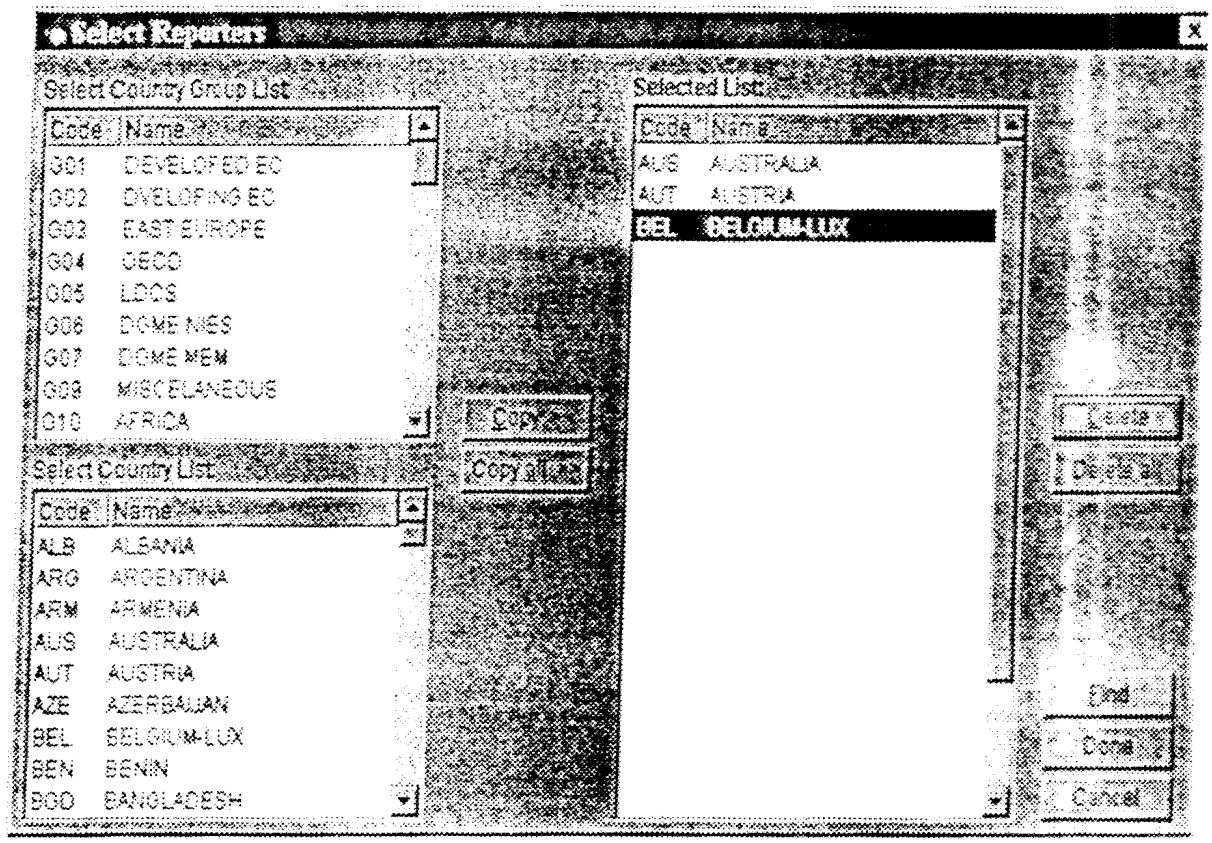

The checkboxes along the top of the screen help you retrieve a list of products based on the specified criteria. For instance, clicking on the **All** checkbox and subsequently on **List** will display to you a list of all products. By clicking on any one or more of the digit checkboxes, you can retrieve a list of products whose codes contain the selected number of digits.

Alternatively, you could narrow down your selection by typing in the first digit(s) in the '**Codes beginning with**' field.

On specifying the filter criteria, a list of products that match the selection is displayed in the Select List window. Here, you can select the desired product(s) and copy the same to the Selected Product List window.

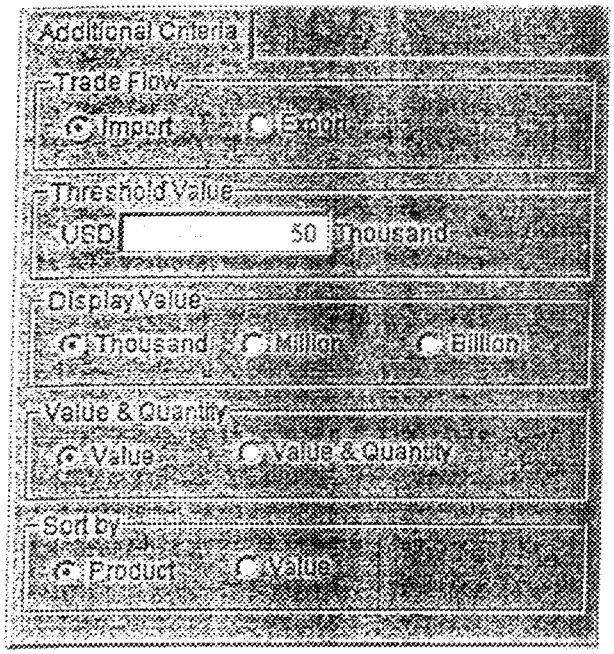
Click on '**Done**'. The selected products are displayed in the *Country Profile Criteria* screen.

Click on ***Select Reporters*** in the **Select** pull-down menu. The *Select Countries and Groups* that have reported trade data appears:




The process here is the same as that in Selecting Products. Here, if you select a group (e.g. NAFTA, SAARC, EEC, etc.), the countries that belong to that group are displayed in the selected list.

Using the options provided under additional criteria, you can give a focus to the kind of information you wish to retrieve.




- Specify the type of trade flow you wish to view – Import or Export.

- Specify the threshold value in US Dollars. A default value is displayed which is the system threshold that was used when the data was uploaded. This is the minimum value for the threshold. This implies that at least one of the five years should have a trade value that is greater than or equal to the value specified here.

- You can select the display value in terms of Thousand, Million or Billion.

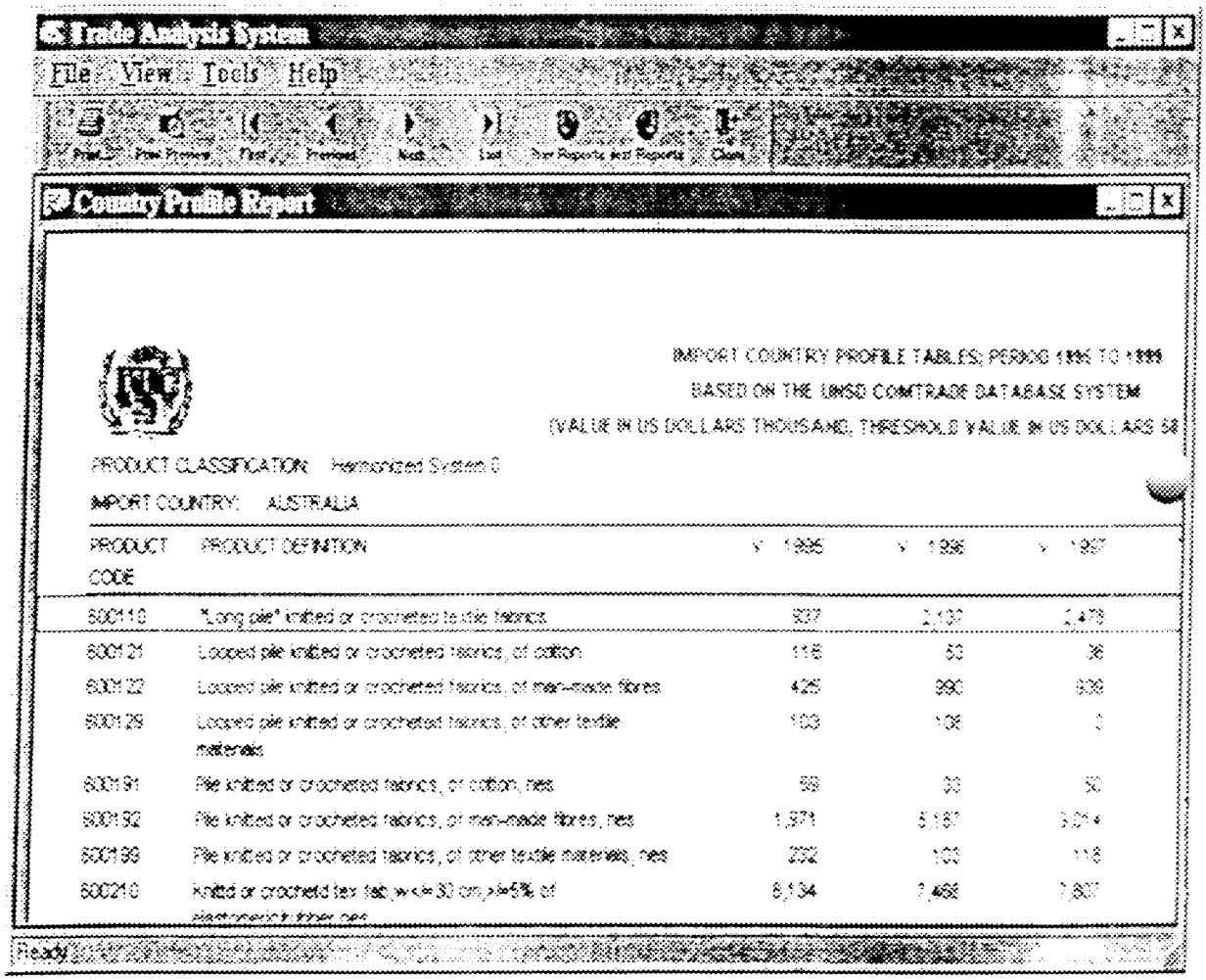
- Specify whether you want to view data pertaining to only trade value or to both value and quantity.
- Finally, specify how you would like to have the data displayed - sorted by product or sorted by value.

Click on  to view the report.

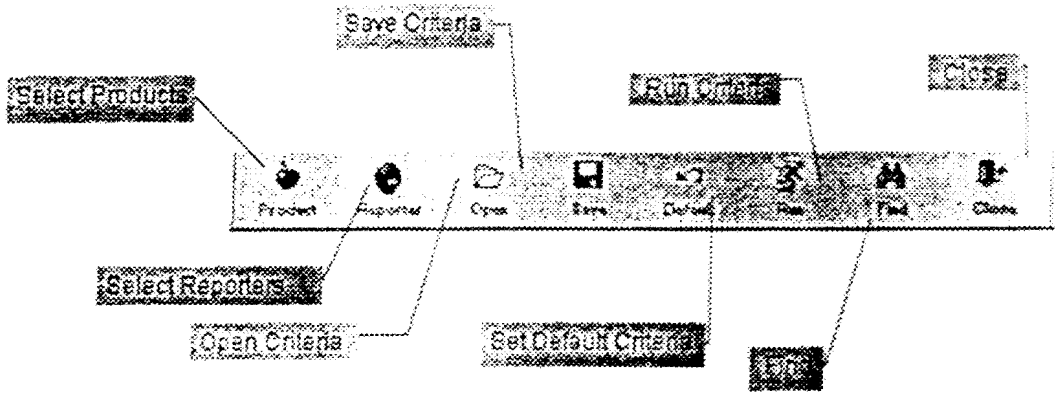
Sorting Order

*The data is first sorted by the reporter in the ascending alphabetical order, followed by the sorting parameter (product/value) you have selected.*

7.5 Example of a Country profile Report

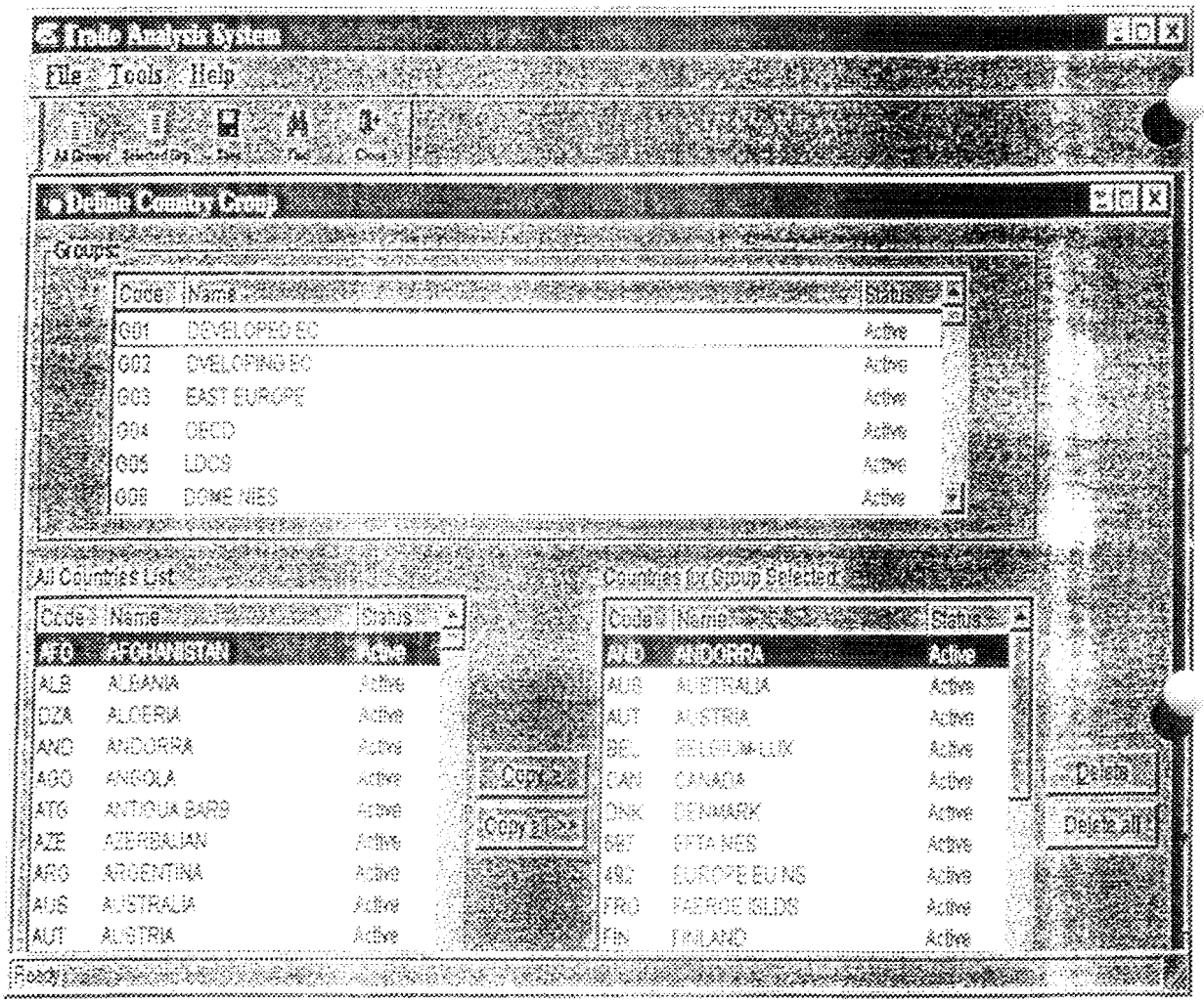


7.6 Tool tips for Country Profile



*A degree of customization is allowed to the user of TAS, wherein existing country groups can be modified. Thus, countries can be added to or deleted from existing country groups. However, the modification is valid ONLY during the current session. It will not be saved in the database for future reference.*

This chapter explains the Define Country Group option. To define country groups, click on *Define Country Group* in the *Utility* pull-down menu. The *Define Country Group* screen appears:




Here, under **Groups**, a list of all the groups that exist in the system is displayed. Under **All Countries List**, a list of all the countries that exist in the system is displayed.

Under **Countries for Group Selected**, a list of all the countries that belong to the group that you select in Groups is displayed.

### 8.2 Adding Countries to a Group

To add countries to an existing group:

- ❒ Select a group from the **Groups** list. The member countries of the selected group are listed in the **Countries for Group Selected**.
- ❒ From the **All Countries List**, select the country(s) that you would like to add to the selected group.
- ❒ Click on **Copy>** or **Copy all>>**, as required. The selected countries are added to the list of countries in the **Countries for Group Selected.**
- ❒ Click on **Save.**

### 9.3 Deleting Countries from a Group

To delete countries from a group:

- ❒ Select a group from the **Groups** list. The member countries of the selected group are listed in the **Countries for Group Selected**.
- ❒ Here, select the country(s) that you would like to delete from the selected group.
- ❒ Click on **Delete** or **Delete all**, as required. The selected countries are deleted from the group.
- ❒ Click on **Save**.

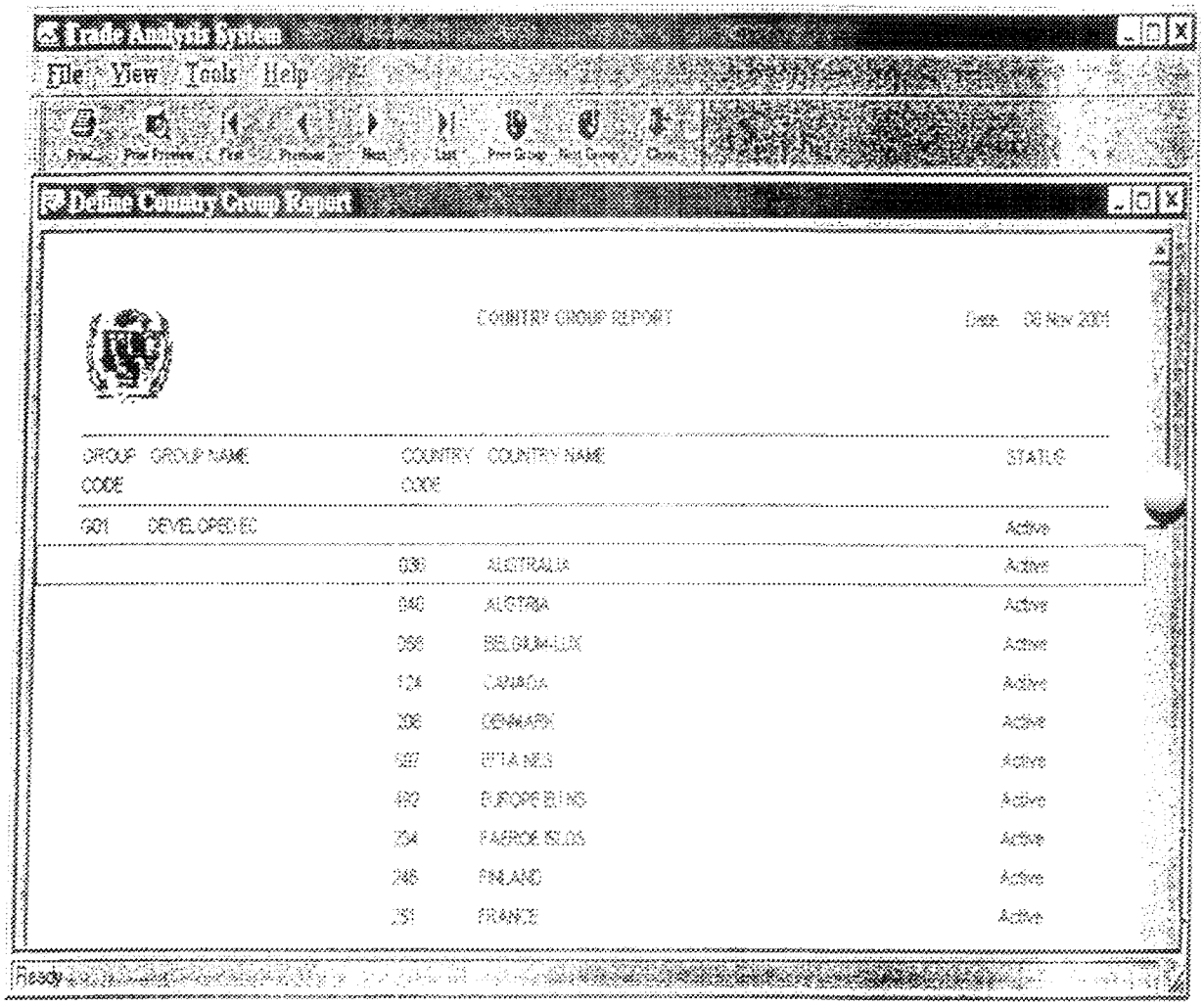
| Note |
| --- |
| A Group should have at least two countries as members, otherwise *TAS* displays an error message. |

To generate reports, click on *View Report* in the **File** pull-down menu and select either of the following, as required:

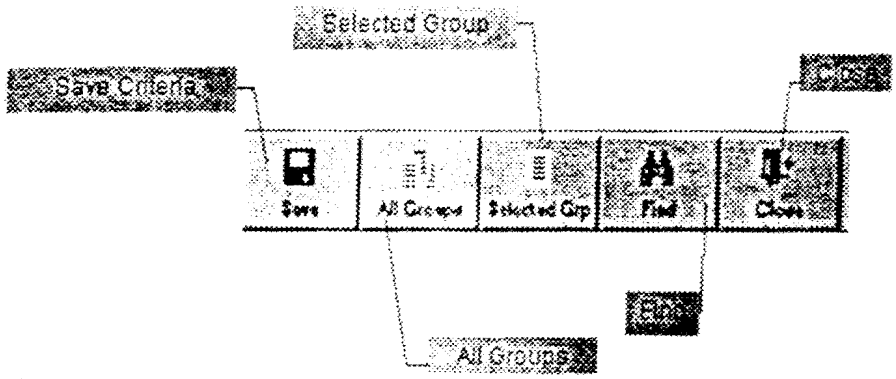
- ❒ All Groups
- ❒ Selected Group

Clicking on **All Groups** displays and prints all groups, while clicking on **Selected Group** displays and prints the selected group.

8.5 Example of a 'Define Country Group Report'



8.8 Tool tips for Define Country Group



## 8.1 About Explanatory Notes

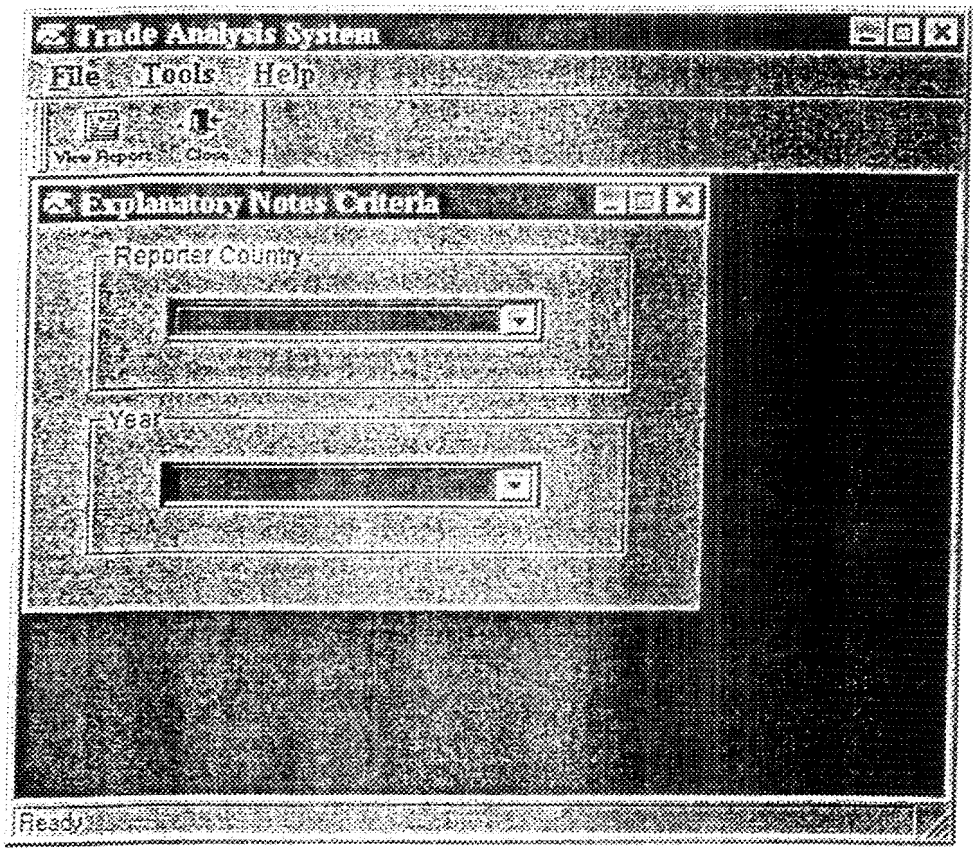
This chapter describes the Explanatory Notes, which give information about trade data available in the database such as source of the data or any other information.

Typically, the Explanatory Notes are available for a trade year of a Reporter Country for each Product Classification.

To look up Explanatory Notes:

- Click on Utility in the *TAS* main menu.
- Click on Explanatory Notes from the pull-down menu that appears.

The following screen is displayed.

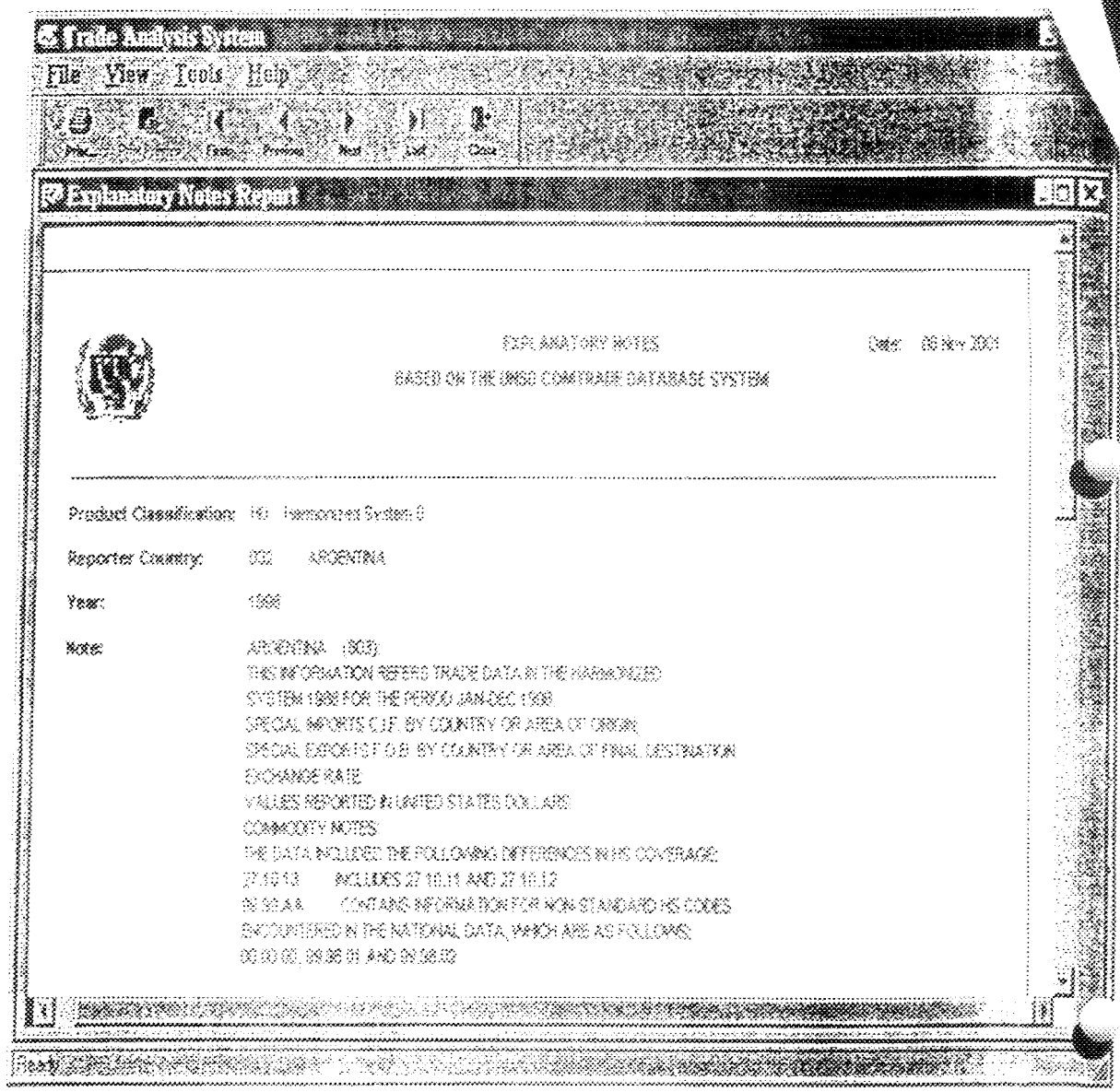


### 9.2 Viewing Explanatory Notes

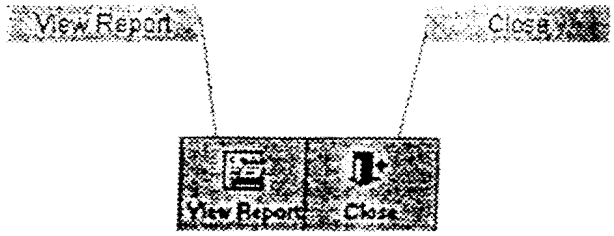
To view explanatory notes:

- ❒ Select the **Reporter Country** from the pull-down list.
- ❒ Select the **Year** from the pull-down list. You can select either one year or 'All'.
- ❒ Click on **View Report** in the toolbar.

5.3 Example of an Explanatory Notes Report



9.4 Tool tips for Explanatory Notes



***Any analysis should rightly culminate in effective reports that provide a clear picture of the components that were analyzed. Likewise, in TAS, the ability to generate dynamic reports is what makes the analysis wholesome.***

It would be a advisable to keep the following points in mind while generating reports:

1. If you change the criteria specification while your report window is still open, the changed criteria will not be reflected in the report. If both Criteria and Report windows are open, click on Run again to reflect the changes made in criteria.

2. Remember to set your page in the Page Setup as per your need. The default setup is A4 (210 x 297 mm). Otherwise the report will go beyond the page.

3. Asterisks in any of the computed columns denote that the calculation is not possible since some of the parameters have a value of zero. When data is exported to Excel and you wish to perform calculations on the columns that have asterisks, copy the contents of these columns to a new column and apply the following macro:

This is a macro for converting a string value to a numeric value. The syntax of the macro is as follows:

@ if (@ isnumber ( @ value (<column number>)), @ value (<column number>),0)

E.g. If A2 is the column containing a string value, then the syntax for converting it into a numeric value is as follows:

@ if (@ isnumber ( @ value (A2)), @ value (A2),0)

This macro has to be copied to all the cells in the new column.

The following are the salient features of the system:

**Find:** You can click on Find on any active window. You are allowed to select the column on which to perform the search, the direction i.e. upward or downward and case sensitivity. The special feature is that the tool button is not attached to a specific window area. If there are three lists within a window, you can just click on any of the lists to make it active for the search and click on Find. The search feature will be activated for the list within the active window.

**Sort:** You can customize viewing of the lists by simply clicking on the column heading of the list. A single click sorts data in the ascending order. Clicking again sorts the data in the descending order.

**Print:** You can see the report before printing it, in the Print Preview mode. The Zoom option can be used to increase/decrease the view. In addition, the Ruler can be used to determine report dimensions, based on which you can decide the page size required to print the report.

**Customize:** This is an option provided for the user to position the toolbar for ease of use. You can place it on the left, right, on the top or at the bottom of the window or just place it wherever desired. You may also choose to have the toolbar displayed with or without help text.

The following are the menu options that you will find on all the report screens:

**File**

| Select | To |
|---|---|
| Close | close the window |
| Print | go to the print dialog box |
| Print Preview | see what the report looks like prior to printing |
| Page Setup | define settings for the page |
| Exit | quit the system |

**View**

| Select | To |
|---|---|
| Ruler | display the top ruler |
| Zoom | enlarge or reduce the size of the report contents |
| First | go to the first page of the report |
| Next | go to the next page of the report |
| Previous | go to the previous page of the report |
| Last | go to the last page of the report |
| Previous Reporter | display data on the previous reporter with respect to the current reporter in the report |
| Next Reporter | display data for the next reporter with respect to the current reporter in the report |
| Previous Product | display data for the previous product with respect to the current product in the report |
| Next Product | display data for the next product with respect to the current product in the report |
| Graph | view the report content graphically *(available only for the Screening and Estimation options)* |
| Export | export the report to another application |

**The Ruler and Zoom options are available only in the Print Preview mode.**

**Tools**

| Select | To |
|---|---|
| Customize Toolbar | Position the toolbar as you desire (Top, Bottom, Left, Right Floating Large Buttons/Show ToolTips). |

**You can access this option by right clicking on the toolbar itself.**

**Help**

| Select | To |
|---|---|
| Help Topics | access on-line help on the displayed topics |
| About *TAS* | read copyright and system information on *TAS* |

**10.4 Tips**

Here are some useful hints that you could keep in mind while generating reports:

| Program | Criteria | Windows 95 (32 MB RAM, 400 MB free disk space, cache - 4196) | Windows NT (32 MB RAM, 400 MB free disk space, cache - 4196) |
|---|---|---|---|
| Profil/Import/Export (Common for each test: Data present for at least 1 year, Threshold for World 100, Threshold for Partner 2 - 20 ) | 5 products, 6 reporters, Partner 1 - World, Partner 2 - a country | 1 Min. | 1 Min. 30 Sec. |
| | 5 products, 15 reporters | 4 Min. | 3 Min. 30 Sec. |
| | 5 products, All reporters, Partner 1 - World, Partner 2 - a country | 11 Min. | 13 Min. |
| | 5 products, Reporters - Developed countries, Partner 1 - World, Partner 2 - a country | 2 Min 30 Sec. | 5 Min. 30 Sec. |
| | 10 products, Reporters - Developed countries, Partner 1 - World, Partner 2 - a country | 10 Min. | 10 Min. |
| | 5 products, All reporters, Partner 1 - World, Partner 2 - a country | 12 Min. | 10 Min. |
| | 5 products, Reporter - Developed countries, Partner 1 - World, Partner 2 - (a country other than above test case) | 8 Min. | 6 Min. |

| Program | Criteria | Windows 95 (32 MB RAM, 400 MB free disk space, cache - 4196) | Windows NT (32 MB RAM, 400 MB free disk space, cache - 4196) |
|---|---|---|---|
| Product Ranking (Common for each test : Trade flow - Import, Display 5 years data only -No, Ranking by Value partner) | 5 products, Partner 1 - a country, Partner 2 - a country | 5 Sec. | 5 Sec. |
| | 5 products, All reporters, Partner - a country | 10 Sec. | 10 Sec. |
| | 5 products, Reporter - Developed countries Partner - a country | 10 Sec. | 10 Sec. |

| Program | Criteria | Windows 95 (32 MB RAM, 400 MB free disk space, cache - 4196) | Windows NT (32 MB RAM, 400 MB free disk space, cache - 4196) |
|---|---|---|---|
| Estimation | 5 products, Reporter - a country, All partners, Trade Flow - Export | 1 Min. | 1 Min. 30 Sec. |
| | 10 products, Reporter - a country, All Partners, Trade Flow - Exports (executed immediately after previous result) | 30 Sec. | 30 Sec. |

| | | | |
|---|---|---|---|
| | All partners,<br>Trade Flow - Export | | |
| | 10 products,<br>Reporter - a country,<br>All Partners,<br>Trade Flow - Exports<br>(executed immediately after previous result) | 30 Sec. | 30 Sec. |

| Program | Criteria | Windows 95<br>(32 MB RAM, 450 MB free disk space, cache - 4196) | Windows NT<br>(32 MB RAM, 450 MB free disk space, cache - 4196) |
|---|---|---|---|
| Country Profile | All 4 and 5 digit products,<br>Reporter - a country | 2 Min. | 2 Min. |
| | All 4 and 5 digit products,<br>Reporter - a country,<br>Threshold value: 100 | 6 Min. | 10 Min. |

| Program | Criteria | Windows 95<br>(32 MB RAM, 450 MB free disk space, cache - 4196) | Windows NT<br>(32 MB RAM, 450 MB free disk space, cache - 4196) |
|---|---|---|---|
| Screening | 1 product,<br>All reporters,<br>All partners,<br>Sum reporters | 3 Min. | 5 Min. |
| | 2 products,<br>All reporters,<br>All partners,<br>Sum reporters | 4 Min. | 8 min. |
| | 5 products,<br>All reporters,<br>All partners,<br>Sum reporters (immediately after previous result) | 9 Min. | 13 Min. |
| | 5 products, Reporters - Developed countries,<br>Partner - a country | 1 Min. | 1 Min. |
| | 5 products,<br>Top 5 reporters, Top 5 partners | 5 Min. | 4 Min. |
| | 5 products,<br>Top 5 reporters, Partner - Developed countries | 2 Min. | 2 Min. |

This Glossary aims to explain expressions that might be unclear or difficult to understand, but which are important for using **TAS**.

| | |
|---|---|
| **Accelerator Ratio:** | Indicates the trend of a product for a partner country with respect to the world trend for the product. |
| **Aggregate:** | The summation done for a region. Regions are grouped for the purpose of aggregation as Long and Short. |
| **Explanatory Notes:** | Indicate information about the trade data which can be the source, explanation about trade figures, etc. |
| **Group:** | A number of reporters or partners that have been grouped together on certain criteria such as Political, Geographical, etc. |
| **Harmonized System:** | An internationally recognized product classification system. |
| **Index:** | Indicates the trade growth of a country for a product over 5 years. Trade Index of a product for a country or region or world = (Fifth year's trade value for the product / First year's trade value for the product) * 100. |
| **Long Aggregates:** | Long Aggregates are all the regions existing in the system, including the Short aggregate regions. |
| **Minimum Display Value:** | The system sets the minimum value by default at US $ 50,000. This means that only those values above US $ 50,000 will be displayed for a given year within the period. You can modify this default setting to a higher or a lower value. The higher the minimum value, the fewer the number of partner countries displayed. |
| **Partner:** | A country or region which trades a given product with a reporter. |
| **Product Code:** | A unique code that identifies the products in the system. |

| | |
|---|---|
| **Product Group:** | TAS allows you to create a product group by selecting a number of product items. These are ITC-defined grouping of products. |
| **Region:** | A group of countries that are grouped together on Geographical, Political, Economical or any other basis. |
| **Reporter:** | The country (usually an OECD and newly industrialized country) that reports its trade information to UNSD. The trade flow is with respect to this country. |
| **Share:** | Percentage of trade by a reporter with a partner as against the reporter's trade with the world, for a product. |
| **Short Aggregates:** | Short aggregates are regions based on the development levels of the member countries (e.g. Developed EC, Developing EC, DGME, Others) |
| **SITC:** | Standard International Trade Classification -an internationally recognized product classification system. |
| **Threshold Value:** | implies that at least one of the five years should have a trade value that is greater than or equal to the value specified as threshold. |
| **Trade Flow:** | The type of trade between reporter and partner i.e. Import or Export. |
| **Trend:** | The annual average growth rate (in percent) of selected values, based on a least squares exponential formula, over five years. |
| **Value:** | Represents the fraction of the world value, in US$' 000, for a given product which reporting country imports (or exports) to a given partner country. |
| **Weighted Partner** | (Trend Partner / 100) * Value Partner |
| **Weighted World:** | (Trend World / 100) * World Value |
| **World Value:** | Represents the total trade, in US$'000, of a reporting country for a given product (export to the world or import from the world). |

**World:** It is treated as a special partner. It provides the total trade of a reporter for a product.

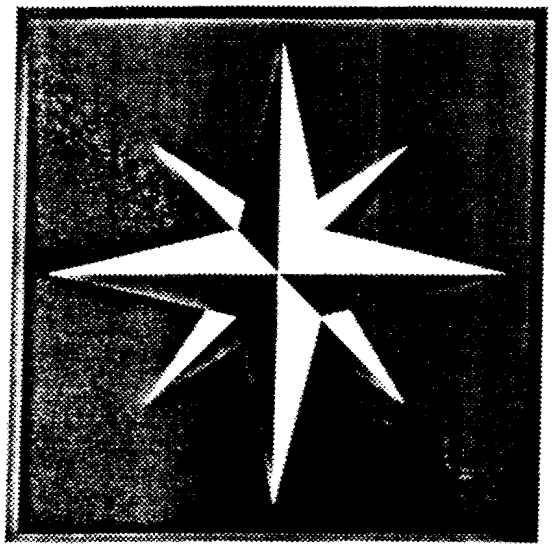
International Trade Centre
UNCTAD/WTO

Market Analysis Services

April 2003

# *TradeMap*

# *User Guide*



*Trade Statistics for Business Development*

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## Abbreviations

| | |
|---|---|
| CIF | Cost, insurance and freight |
| FOB | Free on board |
| HS | Harmonized System |
| IMF | International Monetary Fund |
| ITC | International Trade Centre UNCTAD/WTO |
| LDCs | Least developed countries |
| m. | million |
| p.a. | per annum |
| PC-TAS | Trade Analysis System on Personal Computer |
| RUV | relative unit value |
| SACU | Southern African Customs Union |
| SI | Specialization Index |
| SITC | Standard International Trade Classification |
| TPI | Trade Performance Index |
| TSI | Trade Support Institution |
| UNCTAD | United Nations Conference on Trade and Development |
| UNSD | United Nations Statistics Division |
| WTO | World Trade Organization |

**"ITC is a technical cooperation organization whose mission is to support developing and transition economies, and particularly their business sectors. It has a wonderful collection of country data, so if you need to know how much vodka is imported to Azerbaijan or the principal exports of Zambia, this is the place to look."**

GMGreer.com, a US-based Security Industry Data company
http://gmgreer.com/other/resrces.html
16 October 2001

## I. Introduction

Understanding the structure and evolution of international markets is essential for both firms and trade support institutions (TSIs). As outwardly oriented firms scan the world market for opportunities to diversify products and markets, as well as suppliers, they are confronted with the following questions:

- What is the structure of the world market for a product? What are the trends?
- With which countries does my country currently trade?
- Where are opportunities for market diversification?
- What tariff and non-tariff barriers to access exist in a specific market?
- Which countries are competing in a specific market and globally?

TSIs need to set priorities in terms of sectors, partner countries, and approaches to utilize limited resources effectively. Strategic market research helps them gauge the effectiveness of national and sectoral trade performance and identify priority products and markets for trade development by addressing the following types of questions:

- What are priority markets and products for trade promotion?
- What countries supply the majority of my country's imports? What alternative sources of supply are available?
- In what areas does my country have a competitive advantage?
- What is my country's current trade performance?
- For what products is there potential to increase bilateral trade?

TradeMap was developed by the International Trade Centre UNCTAD/WTO (ITC) to answer these and related questions with the explicit objectives of facilitating strategic market research, monitoring both national and product-specific trade performance, revealing comparative and competitive advantage, identifying the potential for market or product diversification and designing and prioritizing trade development programs for both firms and trade support institutions.

By transforming the large volume of primary trade data into an accessible, user-friendly, and interactive Web-based format, TradeMap provides users with indicators on country or product performance, demand, alternative markets and the role of competitors. It presents

information in both tables and charts, and allows queries based on product, country, and/or partner country for exports or imports.

The information contained in TradeMap is based on the world's largest database of trade statistics, COMTRADE, maintained by the United Nations Statistics Division. COMTRADE covers more than 90% of world trade, allowing TradeMap to include over 200 countries and territories and 5,000 products defined at the 2-, 4- or 6-digit level of the Harmonized System (HS).

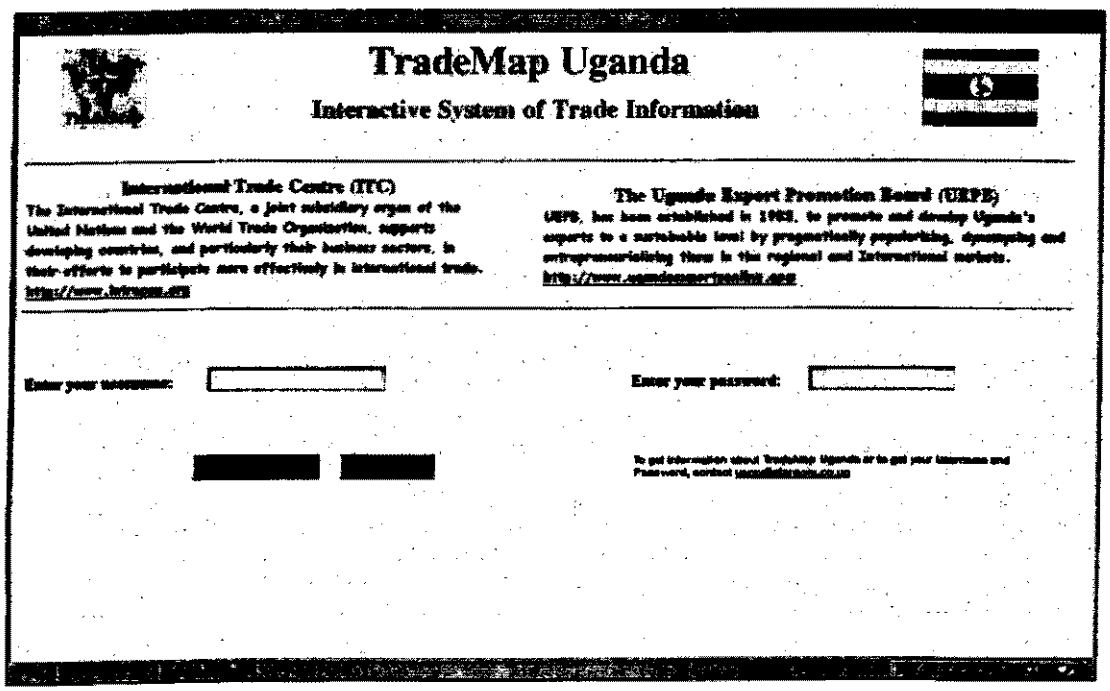
Data is available not only for countries that report their own trade data, but also for the over one hundred primarily low-income countries that do not report national trade statistics. The trade of these countries has been reconstructed on the basis of partner country data or mirror statistics. Although this approach has its shortcomings (see Annex I), it does generate a wealth of information, which would otherwise be unavailable. This mix of direct and mirror statistics gives the best estimation of the worldwide market for all products.

In addition, TradeMap makes tariff and non-tariff barriers more transparent at the tariff-line level for 133 countries and provides detailed information on bilateral market access conditions across products and countries, including ad-valorem and specific tariffs, tariff quotas and anti-dumping measures.

TradeMap is available on a subscription basis and a customized version is available for trade support institutions (TSI TradeMap) in English, French or Spanish. In this case, a special password-protected Internet site for subscribers allows multiple connections by larger user groups (see Figure 1, TradeMap Uganda). Alternatively, individual partners can access the application directly on a subscription basis. For further information please email ITC at: itm@intracen.org

TradeMap is now available in a number of developing countries, including Benin, Burkina Faso, Central Asia (Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan), Chile, Côte d'Ivoire, Egypt, Haiti, Indonesia, Kenya, Malaysia, Oman, the Philippines, Romania, Senegal, Slovenia, South Africa, Switzerland, Tanzania, Trinidad and Tobago and Uganda. TradeMap is in turn made available, via a local Trade Support Institution or Export Development Agency to companies and organizations in their country.

**Figure 1: Uganda TradeMap home page**



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## II. Product Approach

The two main approaches to using TradeMap are by product and by country. From a product perspective, some of the issues a user can analyze are the structure of and trends in the world market, the opportunities for diversifying into alternative markets or away from traditional sources of supply, and the potential for product diversification within current product-specific trade promotion strategies.

**Box 1: Peter Gallagher of Inquit Communications Pty. Ltd.**

*"I have been using the data now for about 3 months since I have had access to the TradeMap. Frankly, I found it fantastic, just really an excellent system, I have been surprised by the fact that it, first of all, works so fast across the Web, secondly, that it is so comprehensive and what I have really found terribly valuable is the ability to drill down through the data, to take several views of the data, to get quick responses not only on the static data, but also linking into the bubbles maps, giving me ideas about competitiveness by product. It is a fantastically rich resource. I have had to say over these three months, I certainly haven't come to the boundaries; I haven't found where the edge is....*

*My own view, you know, in the last round of the Uruguay Round I was a trade negotiator I was working on the market access negotiations and frankly I would have killed to have something like this. It is a wonderful resource and I encourage you to go on to developing it but right now, it is a functional, valuable, interesting resource, which frankly I am intending to try and acquire myself."*

Mr. Peter Gallagher, B.A. (Hons), M. Pub. Law
Inquit Communications Pty Ltd
12 April 2002



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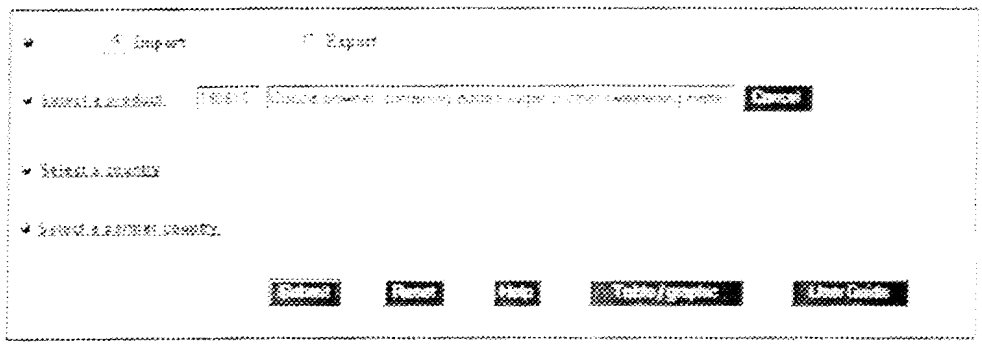
**"Strategic market research is an expensive commodity. That is why the ... work of the International Trade Center (ITC) in Geneva has brought new hope to farmers, investors and entrepreneurs in some of the world's poorest countries."**

World Trade Agenda
24 April 2000

What is the structure of the world market for a product?

What are the trends?

## A. Assess the world market – Sweetened cocoa powder from Colombia



A TSI in Colombia assisting exporters of *Sweetened cocoa powder* may begin by viewing the world import market for this product. By choosing *Sweetened cocoa powder* (above) as the product under review and selecting 'Import', a list of the world's importers of this product is generated (Table 1).

**Table 1: List of importers for selected product in 2001**

Product : 180610 Cocoa powder, containing added sugar or other sweetening matter

| Importers | Value imported in 2001, in US$ thousand | Quantity imported in 2001 | Quantity unit | Unit value (US$/unit) | Annual growth in value between 1997-2001, % | Annual growth in quantity between 1997-2001, % | Annual growth in value between 2000-2001, % | Share in world imports, % | Information on tariff and non-tariff barriers |
|---|---|---|---|---|---|---|---|---|---|
| World estimation | 173,407 | 156,532 | Tons | 1,108 | 5 | 20 | 4 | 100 | |
| France | 25,023 | 12,821 | Tons | 1,937 | 6 | 13 | 22 | 14 | TNTB |
| Philippines | 13,130 | 5,462 | Tons | 2,404 | -11 | -2 | -15 | 8 | TNTB |
| Japan | 12,415 | 20,455 | Tons | 607 | -2 | 3 | 5 | 7 | TNTB |
| Netherlands | 11,798 | 15,675 | Tons | 753 | 39 | 60 | -34 | 7 | TNTB |
| Spain | 10,460 | 13,329 | Tons | 784 | 56 | 102 | 19 | 6 | TNTB |
| United Kingdom | 7,568 | 2,029 | Tons | 3,404 | 6 | -4 | -13 | 4 | TNTB |
| Indonesia | 7,374 | 4,906 | Tons | 1,503 | 109 | 104 | 2417 | 4 | TNTB |
| Czech Republic | 5,657 | 16,780 | Tons | 337 | 30 | 95 | 664 | 3 | TNTB |
| South Africa (SACU) | 4,944 | 1,546 | Tons | 3,198 | 206 | 204 | 23 | 3 | TNTB |
| Saudi Arabia | 3,639 | 1,169 | Tons | 3,226 | 13 | -4 | 51 | 2 | TNTB |
| Belgium-Luxembourg | 3,810 | 2,144 | Tons | 1,777 | -10 | -2 | -6 | 2 | TNTB |
| Singapore | 3,362 | 1,462 | Tons | 2,299 | 14 | 7 | -19 | 2 | TNTB |
| Greece | 3,336 | 1,233 | Tons | 2,705 | -4 | -9 | -35 | 2 | TNTB |
| Finland | 3,223 | 1,547 | Tons | 2,083 | 2 | 0 | 23 | 2 | TNTB |
| Austria | 2,952 | 1,979 | Tons | 1,498 | 16 | 31 | -9 | 2 | TNTB |
| Canada | 2,782 | 1,447 | Tons | 1,923 | 7 | 9 | -2 | 2 | TNTB |
| Romania | 2,685 | 1,991 | Tons | 1,349 | 22 | 46 | 17 | 2 | TNTB |

Source: ITC calculations based on COMTRADE statistics

Next  World exporters  Selection menu  Help

One of the unique features of TradeMap is the inclusion of the *World estimation*, the first line of Table 1, which represents the sum of reporting and non-reporting countries for *Sweetened cocoa powder* and gives an overall impression of the world import market.

In this example, the world import market for *Sweetened cocoa powder* has a value of US$ 173 million in 2001 with an annual growth in value of 5% p.a. over the 1997 to 2001 period and growth over the 2000 to 2001 period of 4% p.a. We can also see also that the market is predominantly distributed between EU and Asian countries.

To assess those countries that compete with Colombia in the export of *Sweetened cocoa powder*, the TSI would click on World exporters at the bottom of Table 1, and a list of exporters for *Sweetened cocoa powder* is generated (see Table 2).

**Table 2: List of exporters for selected product in 2001**

**Product : 180610 Cocoa powder, containing added sugar or other sweetening matter**

| Exporters | Value exported in 2001, in US$ thousand | Quantity exported in 2001 | Quantity unit | Unit value (US$/unit) | Annual growth in value between 1997-2001, % | Annual growth in quantity between 1997-2001, % | Annual growth in value between 2000-2001, % | Share in world exports, % | Report in Comtrade in 2001 |
|---|---|---|---|---|---|---|---|---|---|
| World estimation | 169,993 | 170,816 | Tons | 995 | 5 | 14 | -4 | 100 | |
| United States of America | 21,136 | 8,625 | Tons | 2,451 | 10 | 6 | 19 | 12 | Y |
| Korea, Rep. of | 18,054 | 29,859 | Tons | 605 | -4 | 2 | -6 | 11 | Y |
| Germany | 14,446 | 10,328 | Tons | 1,399 | -4 | 4 | -16 | 8 | Y |
| Singapore | 14,282 | 14,735 | Tons | 969 | 1 | -2 | -9 | 8 | Y |
| Aruba | 14,229 | 22,133 | Tons | 643 | 232 | 256 | -17 | 8 | |
| Netherlands | 10,313 | 13,765 | Tons | 749 | 56 | 141 | -33 | 6 | Y |
| Poland | 9,242 | 10,526 | Tons | 878 | 2 | 12 | -5 | 5 | Y |
| Sweden | 8,620 | 5,612 | Tons | 1,536 | 27 | 35 | -6 | 5 | Y |
| Indonesia | 8,537 | 8,497 | Tons | 1,005 | 59 | 85 | -29 | 5 | Y |
| United Kingdom | 6,253 | 1,494 | Tons | 4,212 | -4 | -33 | 44 | 4 | Y |
| Colombia | 4,969 | 3,686 | Tons | 1,279 | 10 | 16 | 80 | 3 | Y |
| Mexico | 4,596 | 5,133 | Tons | 915 | 6 | 0 | -36 | 3 | Y |
| Slovakia | 4,410 | 12,496 | Tons | 353 | 51 | 135 | 241 | 3 | Y |

Source: ITC calculations based on COMTRADE statistics

Next World importers Selection menu Help

Table 2 shows the world export market for *Sweetened cocoa powder*. The TSI in Colombia can see that its exporters command a 3% share in world exports with an annual growth rate of 10% p.a., above the world market growth of 4% p.a. over the 1997-2001 period, which suggests that Colombia's market share is on the rise. Colombia's growth in quantity exported to the world is also increasing (16% p.a.) at a faster rate than its growth in value exported indicating a decline in prices in US dollars.

The top exporter for *Sweetened cocoa powder* is the US with 12% world market share, growing at 10% p.a. over the period. However, the US' growth rate in value (10% p.a.) is higher than its growth in quantity exported (6% p.a.) suggesting an increase in prices.

Much of the discrepancy between the world estimation value listed on the import side (Table 1) and that on the export side (Table 2) can be explained by the CIF-FOB (Cost Insurance Freight-Freight On Board) difference. For the most part, countries report imports in CIF terms and exports in FOB terms. For more on the interpretation of trade statistics see Annex I.

## Explanatory Notes for Tables 1 and 2

**Importers (Exporters):** Country names are sorted by imported (exported) value.

**Imported (Exported) value in 2001, in US$ thousand:** Value imported (exported) in 2001 in current US$ thousand as reported by countries to the COMTRADE database or as calculated with mirror statistics.

**Quantity imported (exported):** Concerning the mirror quantity, it is possible to get different quantity units depending on the reporting countries.

**Quantity unit:** The unit in which quantities are reported.

**Unit value:** Price in US$ per unit.

**Annual growth in value between 1997-2001 p.a. of imports (exports) as a percentage:** This trend is calculated using the least squares method. If a country does not report trade data in 2001, the trend calculation is based on mirror statistics. No trend is calculated in cases where the reporting country data is not available for at least a four-year period.

**Annual growth in quantity between 1997-2001 p.a. of imports (exports) as a percentage:** This trend is calculated by the same method used in the calculation of the annual value trends.

**Annual growth in value between 2000-2001 p.a. of imports (exports) as a percentage:** This growth is a good complement to the 5-year trend, indicating whether growth trends have been stable or volatile over the 5 years and showing the country performance over the last two years.

**Market share in world imports (exports) as a percentage:** This indicator takes into account all countries, whether or not they have reported.

**Table 1 Information on tariff and non-tariff barriers:** Information on tariff and non-tariff barriers at the tariff-line level (i.e. 6-, 8-, or 10-digits depending on the country).

**Table 2 Report in COMTRADE:** The "Y" for 'yes' indicates which countries have reported their trade data to the COMTRADE database in 2001. If there is no entry, that country did not report and the data are based on mirror statistics.

**"The introduction by TIDCO of TradeMap ... is an important tool to assist entrepreneurs in Trinidad and Tobago in their export thrust. I wish to urge all entrepreneurs to make good use of the TradeMap."**

Hon. Mervyn Assam, Minister or Trade,
Industry and Consumer affairs Trinidad and Tobago
17 November 2000



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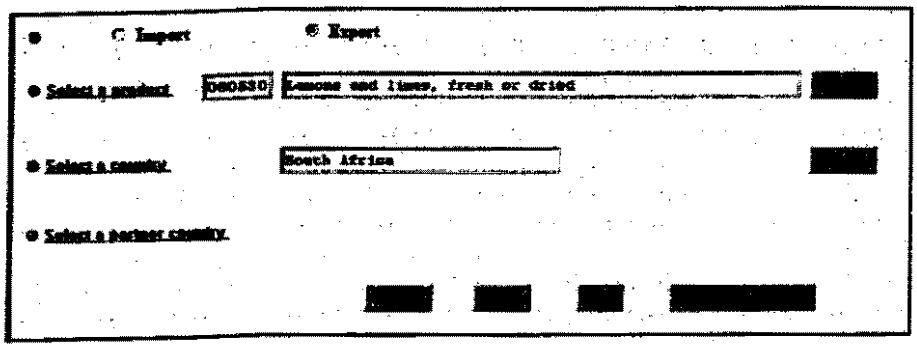
## What are priority markets for trade promotion?

### B. Identify new export markets – Lemons from South Africa




An exporter of *Lemons* in South Africa may wish to examine opportunities for diversifying export markets. In TradeMap, the exporter would select South Africa (above) as the country and *Lemons* as the product under review, making the specific selection of *Lemons and limes, fresh or dried* from a list of related products.

Several initial steps are involved in choosing a potential market for exports (presented in the following pages). The exporter should review his exports to present partner countries to gauge South Africa's current performance. Next, the world's leading importers for *Lemons and limes, fresh or dried* would need to be identified to see who else is importing, where current partners rank as importing countries and what other countries might be potential markets. Then, the exporter should find out what the access barriers are to these potential markets and which countries are currently supplying them.



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# With which countries does my country currently trade?

## 1. Review exports to present partner countries

As a first step, the South African exporter of *Lemons* could use TradeMap to see which countries import *Lemons* from South Africa. Once South Africa and *Lemons and limes, fresh or dried* have been selected in TradeMap, the exporter would chose to sort by 'Export' to view Table 3.

World imports from South Africa of *Lemons* amounted to US$ 20 million and South Africa's exports to the world grew at 15% p.a. while world imports remained constant. Saudi Arabia is South Africa's largest import market consuming 20% of its exports of *Lemons and limes, fresh or dried*, whereas Saudi Arabia only consumes 1% of total world exports and is ranked 17th among the world's importers.

On the other hand, Japan is the number one importing market in the world commanding 13% share of world imports, but is the 5th leading importer from South Africa with a 4% share of South Africa's *Lemon* exports. South Africa's exports to Japan have remained constant over the 1997-2001 period, while Japan's imports from the world have declined 6% p.a. We also see that for the third largest importer, the US, imports of *Lemons* grew at 22% p.a. over the 1997-2001 period. The US consumed 9% of the world's supply of *Lemons*, but less than 1% of that came from South Africa.

### Table 3: List of importing markets for a product from South Africa in 2001

Product : 080530 Lemons and limes, fresh or dried

South Africa's exports represent 3% of world exports for this product, its ranking in world exports is 6

| Importers | Exported value 2001 in US$ thousand | Share in South Africa's exports, % | Exported quantity 2001 | Quantity unit | Unit value (US$/unit) | Export trend in value between 1997-2001, % p.a. | Export trend in quantity between 1997-2001, % p.a. | Export growth in value between 2000-2001, % p.a. | Ranking of partner countries in world imports | Share of partner countries in world imports, % | Total import growth in value of partner countries between 1997-2001, % p.a. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| World | 19 830 | 100 | 74 889 | Tons | 265 | -15 | | 1 | | | 0 |
| Saudi Arabia | 3 922 | 20 | 11 415 | Tons | 344 | 1 | | -12 | 17 | 1 | 1 |
| United Arab Emirates | 2 883 | 15 | 10 739 | Tons | 268 | 96 | | 7 | 26 | 1 | 6 |
| United Kingdom | 2 045 | 10 | 6 628 | Tons | 309 | 9 | | -17 | 7 | 5 | -6 |
| Hong Kong, China (SAR) | 1 853 | 9 | 6 441 | Tons | 288 | 22 | | -15 | 13 | 3 | 2 |
| Italy | 1 043 | 5 | 3 625 | Tons | 288 | | | 207 | 9 | 3 | 5 |
| Japan | 752 | 4 | 2 844 | Tons | 265 | 0 | | -41 | 4 | 13 | 1 |
| Netherlands | 696 | 4 | 2 153 | Tons | 323 | 15 | | 430 | 14 | 3 | 4 |
| Switzerland | 530 | 3 | 1 470 | Tons | 360 | -4 | | 23 | 25 | 1 | 5 |
| Spain | 318 | 2 | 1 428 | Tons | 223 | | | 4 | 43 | 0 | 10 |
| Belgium | 230 | 1 | 918 | Tons | 251 | 4 | | -66 | 8 | 2 | -5 |
| Greece | 61 | 0 | 224 | Tons | 272 | | | -71 | 32 | 1 | -12 |
| Canada | 58 | 0 | 237 | Tons | 245 | -15 | | -68 | 18 | 4 | 5 |
| United States of America | 37 | 0 | 116 | Tons | 319 | 5 | | -80 | 2 | 9 | 11 |
| Others | 31 | 0 | 224 | Tons | 140 | 24 | | -15 | 53 | 0 | 5 |

Source : ITC calculations based on COMTRADE statistics

Next: Product quality exported to South Africa | Business partners | Market access | Trends | Macro data | Specific data | Bulletin board | Help

The selection menu at the bottom of Table 3 gives the option of viewing: more importers of *Lemons and limes, fresh or dried* (Next), a list of other products groups exported by South Africa (Product clusters exported by South Africa), a list of those markets that supply *Lemons and limes, fresh or dried* to South Africa (Supplying markets), a list of World importers or World exporters of *Lemons and limes, fresh or dried*, and the option to view Table 3 as reported by partner country imports (Mirror data) (See Annex 1).

## Explanatory Notes for Table 3

**Importers:** Country names are sorted by exported value.

**Exported value in 2001, in US$ thousand:** Value exported in 2001 in US$ thousand as reported by the selected country or as reported by the partner country (when the selected country does not report trade data).

**Share in South Africa's exports as a percentage:** Share of partner countries in the exports of the target country (South Africa).

**Exported quantity:** Quantity exported in 2001. Concerning the mirror quantity, it is possible to get different quantity units depending on the reporting countries.

**Quantity unit:** The unit in which quantities are reported.

**Unit value:** Price in US$ per unit.

**Export trend in value between 1997-2001 p.a. as a percentage:** This trend is calculated using the least squares method. If a country does not report trade data in 2001, the trend calculation is based on mirror statistics. No trend is calculated in cases where the reporting country data is not available for at least a four-year period.

**Export trend in quantity between 1997-2001 p.a. as a percentage:** This trend is calculated by the same method used in the calculation of the annual value trends. It is interesting to compare growth in value and growth in quantity to have an indication of the growth of prices in US$

**Export growth in value between 2000-2001 p.a. as a percentage:** This growth is a good complement to the 5-year trend, indicating whether growth trends have been stable or volatile over the 5 years and showing the country performance over the last two years.

**Ranking of partner countries in world imports:** This indicates the world ranking of the partner country as an importer. With this indicator, it is possible to know if the selected country trades with the leading markets for the selected product.

**Market share in world imports as a percentage:** This indicates the world share that the partner country represents as an importer of the selected product.

**Total import growth in value of partner countries between 1997-2001 p.a. as a percentage:** This indicates the global import growth of the partner country from the world for the selected product. This indicator is calculated on data as reported by the target market. This indicator combined with the export trend in value, calculated above, allows you to see if the country under review has increased or not its market share in the partner country.

# Where are opportunities for market diversification?

## 2. Identify the worlds leading importers

Now that the South African exporter of *Lemons* has an idea of South Africa's current partners and how they rank in its exports, TradeMap can be used to see which countries represent the major importing markets of the world. The exporter would choose to view World importers from the bottom of Table 3 in order to generate Table 4.

**Table 4: World importers in 2001 of Lemons**

Product : 080530 Lemons and limes, fresh or dried

| Importers | Value imported in 2001, in US$ thousand | Quantity imported in 2001 | Quantity unit | Unit value (US$/unit) | Annual growth in value between 1997-2001, % | Annual growth in quantity between 1997-2001, % | Annual growth in value between 2000-2001, % | Share in world imports, % | Information on tariff and non-tariff barriers |
|---|---|---|---|---|---|---|---|---|---|
| World importation | 847 142 | 1 533 534 | Tons | 552 | 0 | 4 | 4 | 100 | |
| Japan | 110 834 | 84 333 | Tons | 1 315 | -6 | -1 | -9 | 13 | TRTE |
| Germany | 84 520 | 139 616 | Tons | 605 | -4 | 1 | -1 | 10 | TRTE |
| United States of America | 80 470 | 177 811 | Tons | 452 | 22 | 10 | -3 | 9 | TRTE |
| France | 79 944 | 103 898 | Tons | 769 | -5 | -2 | 6 | 9 | TRTE |
| Poland | 52 118 | 106 230 | Tons | 490 | 14 | 4 | 18 | 6 | TRTE |
| Netherlands | 34 828 | 77 304 | Tons | 450 | -11 | -6 | -6 | 4 | TRTE |
| United Kingdom | 44 864 | 72 116 | Tons | 619 | -6 | 3 | 15 | 5 | TRTE |
| Italy | 42 450 | 70 062 | Tons | 606 | 5 | 13 | -3 | 5 | TRTE |
| Russian Federation | 38 839 | 135 366 | Tons | 288 | 1 | 5 | 41 | 5 | TRTE |
| Canada | 30 537 | 46 947 | Tons | 624 | 6 | 5 | 9 | 4 | TRTE |
| Belgium | 27 154 | 43 524 | Tons | 618 | 0 | 7 | 26 | 3 | TRTE |
| Spain | 23 538 | 39 344 | Tons | 598 | 10 | 16 | 56 | 3 | TRTE |

Source: ITC calculations based on COMTRADE statistics.

Next World exporters Selection menu Help

Table 4 shows those countries in the world that import *Lemons and limes, fresh or dried*, the value and quantity imported, unit of measurement, unit value, growth rate, global market share and tariff and non-tariff barriers for each country listed. As the US is a growing market (22% p.a.) it could be an interesting prospect for the South African exporter. However, in noting the growth rate over the 2000-2001 period (-3%) caution should be applied to the interpretation of the 5-year rate, as the 3% p.a. decline may signal either a downturn in the coming year or that the 5-year trend is volatile (see Annex 1).

By clicking on the United States of America, the exporter can view the list of countries that supply the US.

## Explanatory Notes for Table 4

**Importers**: Country names are sorted by imported value.

**Value imported in 2001, in US$ thousand**: These figures are as reported by countries to the COMTRADE database or as calculated with mirror statistics.

**Quantity imported in 2001**: In regard to the mirror quantity, if reporting countries use different units for quantity, no quantity will be displayed.

**Quantity unit**: The unit in which quantities are reported.

**Unit value**: Price in US$ per unit.

**Annual growth in value between 1997-2001 of imports as a percentage**: This trend is calculated using the least squares method. If a country does not report trade data in 2001, the trend calculation is based on mirror statistics. No trend is calculated in cases where the reporting country data is not available for at least a four-year period.

**Annual growth in quantity between 1997-2001 of imports as a percentage**: This trend is calculated by the same method used in the calculation of the annual growth in value.

**Annual growth in value between 2000-2001 p.a. of imports as a percentage**: This growth is a good complement to the 5-year trend, indicating whether growth trends have been stable or volatile over the 5 years and showing the country performance over the last two years.

**Market share in world imports as a percentage.** This indicator takes into account all countries, whether or not they have reported.

**Information on tariff and non-tariff barriers**: Information on tariff and non-tariff barriers at the tariff-line level (i.e. 6-, 8-, or 10-digits depending on the country).

"TradeMaps ... are ... very important tools of the trade, for they will allow for a more thorough understanding of the international marketplace."

Hon. Mervyn Assam, Minister of Trade, Industry and Consumer affairs
Trinidad and Tobago
17 November 200

# What tariff and non-tariff barriers to access exist in a specific market?

## 3. Examine market access barriers in partner countries

TradeMap also contains information on tariff and non-tariff barriers at the tariff-line level which is derived from national sources and covers tariffs, para-tariffs, price controls, finance measures, automatic licensing measures, quantity controls, monopolistic measures and technical measures. With this information, access to any potential market can be gauged. By clicking on TNTB in Table 4 for the US, Table 5 is generated. Table 5 indicates that the South African exporter is faced with a specific tariff of US$ 0.022/kg on *Lemons, fresh or dried*, as well as the need to have an import permit.

Note that selecting Country notes, at the bottom of Table 5, will generate more detailed notes on the country whose market access barriers are under review (in this case the US) for all products, including such information as duration of the barrier, country coverage, special provisions, rules of origin and beneficiary countries. Selecting Explanatory notes will give more in-depth definitions of the specific access barriers covered.

Table 5: Tariff and non-tariff barriers reported by the United States of America in 2000

for product 08053020 Lemons, fresh or dried

| Tariffs and non-tariff measures | Tariff ad-valorem | Tariff specific | Agreement with the following countries | Non-tariff measures or product description |
|---|---|---|---|---|
| MFN duties | | $0.022/KG | | |
| Non-MFN tariff | | $0.055/KG | | |
| LDC - Least Developed Countries rates | 0% | | | |
| Caribbean Basin Economic Recovery Act | 0% | | | |
| US-Canada free trade area | 0% | | | |
| US-Israel free trade area | 0% | | | |
| Rates for ANDEAN Trade Preference Act | 0% | | | |
| US-Mexico free trade area | | $0.008/KG | | |
| Prior authorization to protect plant health | | | | Import permits are required to import these products to protect against the introduction of pests and diseases<br>Source: G/LIC/N/3/USA/2 16-10-1998 |

Source: National data reported to UNCTAD (TRAINS)

Note: Please refer to explanatory notes concerning tariff definitions

List of supplying markets to United States of America | World exporters | World importers | Selection menu | Country notes | Explanatory notes

## Which countries are competing in a specific market and globally?

### 4. Analyze competitor performance

By clicking on List of supplying markets in United States of America in Table 5, further information can be gathered on those countries that supply *Lemons, fresh or dried* to the US market (see Table 6). This allows the exporter in South Africa to know who the major players are in the US market for *Lemons, fresh or dried*, such as Mexico. The table will also show if the US market is already importing from any of South Africa's neighbors, which could mean easier penetration for its exporters. In this case, however, it is evident that the top suppliers of lemons to the US are largely neighboring Latin American countries.

Once the South African exporter knows in which countries the main competitors for export to the US operate, further research can be conducted into what sorts of advantages they may have, e.g. logistics, treaties, political ties, etc. In this case, Mexico is the predominant supplier, which can probably be explained by its proximity to the US and the North American Free Trade Agreement (NAFTA).

**Table 6: List of countries supplying a product to the US in 2001**

Product : 080530 Lemons and limes, fresh or dried

United States of America's imports represent 9% of world imports for this product, its ranking in world imports is 3

| Exporters | Imported value 2001 in US$ thousand | Share in United States of America's imports, % | Imported quantity 2001 | Quantity unit | Unit value (US$/unit) | Import trend in value between 1997-2001, %, p.a. | Import trend in quantity between 1997-2001, %, p.a. | Import growth in value between 2000-2001, %, p.a. | Ranking of partner countries in world exports | Share of partner countries in world exports, % | Total export growth in value of partner countries between 1997-2001, %, p.a. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| World | 80,479 | 100 | 177,911 | Tons | 452 | 22 | 10 | -3 | | | 2 |
| Mexico | 53,253 | 66 | 140,128 | Tons | 379 | 23 | 10 | -13 | 8 | 1 | -19 |
| Argentina | 14,344 | 18 | 17,552 | Tons | 817 | | | 103 | 2 | 18 | 6 |
| Spain | 5,622 | 7 | 7,536 | Tons | 746 | 2 | 5 | -8 | 1 | 38 | -4 |
| Chile | 4,628 | 6 | 6,736 | Tons | 725 | -4 | -11 | -11 | 10 | 2 | 19 |
| Ecuador | 908 | 1 | 1,414 | Tons | 642 | 29 | 37 | 98 | 28 | 0 | 36 |
| El Salvador | 643 | 1 | 350 | Tons | 1,168 | 137 | 121 | 1 | 36 | 0 | 11 |
| Bahamas | 208 | 0 | 3,033 | Tons | 69 | -36 | -25 | 23 | 45 | 0 | |
| Dominican Republic | 168 | 0 | 183 | Tons | 918 | 2 | 8 | -31 | 47 | 0 | -19 |
| Israel | 78 | 0 | 5 | Tons | 15,206 | | | 46 | 38 | 0 | -21 |
| Honduras | 68 | 0 | 204 | Tons | 258 | 74 | 131 | -36 | 37 | 0 | 13 |
| Guatemala | 36 | 0 | 48 | Tons | 1,184 | -3 | -16 | -17 | 29 | 0 | 98 |
| Venezuela | 28 | 0 | 44 | Tons | 1,264 | 10 | 18 | -90 | 34 | 0 | 31 |
| Iran (Islamic Republic of) | 41 | 0 | 8 | Tons | 5,125 | | | | 25 | 0 | 76 |
| Oman | 31 | 0 | 7 | Tons | 4,429 | -8 | -14 | 138 | 50 | 0 | -45 |
| Cyprus | 17 | 0 | 22 | Tons | 773 | | | | 15 | 0 | -10 |
| Costa Rica | 14 | 0 | 30 | Tons | 467 | -16 | 0 | -74 | 69 | 0 | -36 |
| Egypt | 14 | 0 | 3 | Tons | 7,000 | | | 56 | 33 | 0 | |
| Italy | 13 | 0 | 22 | Tons | 585 | | | -40 | 9 | 0 | -4 |

Source: ITC calculations based on COMTRADE statistics

## Explanatory Notes for Table 6

**Exporters**: Partner name sorted by exported value.

**Value imported in 2001 in US$ thousand**: This figure is as reported by the selected country or as reported by the partner country, when the selected country does not report trade data.

**Share of partner country's imports as a percentage**: Share of partner countries in the imports of the target country.

**Quantity imported in 2001**: Concerning the mirror quantity, it is possible to have different quantity units depending on the reporting countries.

**Quantity unit**: The unit in which quantities are reported.

**Unit value**: Price in US$ per unit.

**Import trend in value between 1997-2001 per annum as a percentage**: This trend is calculated using the least squares method. No trend is calculated in cases where the reporting country data is not available for at least a four-year period.

**Import trend in quantity between 1997-2001 per annum as a percentage**: This trend is calculated with the same method used in the calculation of annual value trends.

**Import growth in value between 2000-2001 per annum as a percentage**: This growth is a good complement to the 5-year trend, indicating whether growth trends have been stable or volatile over the 5 years and showing the country performance over the last two years.

**Ranking of partner countries in world exports**: The world ranking of the partner country as an exporter. With this indicator, it is possible to know if the selected country trades with the leading markets for the selected product and how those markets rank within the country under review.

**Market share of partner countries in world exports as a percentage**: The world share that the partner country represents as an exporter of the selected product.

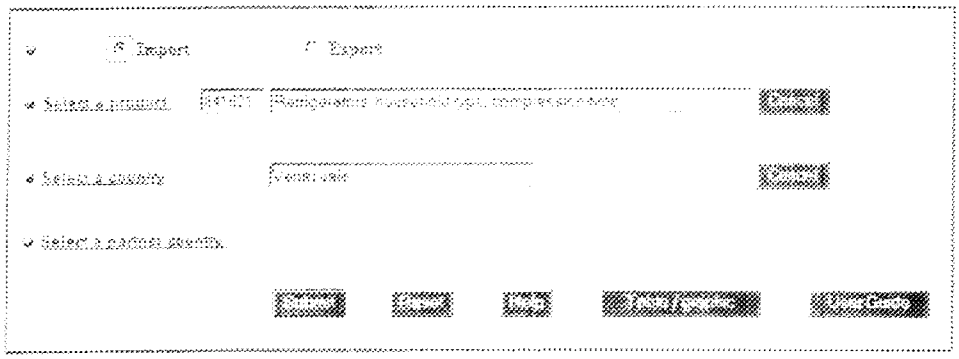
**Total export growth in value of partner countries between 1997-2001 per annum as a percentage**: The export growth of the partner country to the target country over the period, not to be confused with an increase in market share.

**"Since 1987, the ITC has organized 35 buyers-sellers meetings in Africa, with the participation of more than 1000 local enterprises. Over the year, it is estimated that additional trade of some US$500 million has been generated as a result."**

World Trade Agenda
24 April 2001

What countries supply the majority of my country's imports?
What alternative sources of supply are available?

C. Identify new sources of supply – Refrigerators to Venezuela



TradeMap also provides leads for importers on supplier diversification. An importer of *Refrigerators* in Venezuela may want to investigate the possibility of diversifying suppliers. The importer would type Venezuela as the country under review and *Refrigerators*, as the product under review (above). By next choosing 'Import', a list of those markets supplying *Refrigerators* to Venezuela is generated (see Table 7).

**Table 7: List of supplying markets for a product imported by Venezuela in 2001**

*Product : 841821 Refrigerators, household type, compression-type*
*Venezuela's imports represent 2% of world imports for this product. Its ranking in world imports is 11*

| Exporters | Imported value 2001 in US$ thousand | Share in Venezuela's imports, % | Imported quantity 2001 | Quantity unit | Unit value (US$/unit) | Import trend in value between 1997-2001, %, p.a. | Import trend in quantity between 1997-2001, % p.a. | Import growth in value between 2000-2001, %, p.a. | Ranking of partner countries in world exports | Share of partner countries in world exports, % | Total export growth in value of partner countries between 1997-2001, %, p.a. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| World | 42,662 | 100 | 16,888 | Tons | 2,548 | 30 | 36 | 23 | | | 2 |
| Colombia | 17,105 | 40 | 6,404 | Tons | 2,671 | 23 | 30 | 19 | 20 | 1 | 18 |
| United States of America | 8,960 | 21 | 4,858 | Tons | 1,844 | 22 | 11 | 8 | 7 | 4 | -11 |
| Korea, Rep. of | 6,311 | 12 | 1,992 | Tons | 2,666 | 36 | 88 | 128 | 8 | 3 | -4 |
| Mexico | 4,855 | 11 | 2,027 | Tons | 2,395 | 32 | 54 | -1 | 22 | 11 | 50 |
| Ecuador | 1,565 | 4 | 456 | Tons | 3,432 | 46 | 534 | 46 | 43 | 0 | 26 |
| Peru | 1,308 | 3 | 433 | Tons | 3,074 | | | 232 | 39 | 0 | 7 |
| Chile | 756 | 2 | 326 | Tons | 2,786 | | | 38 | 48 | 0 | 4 |
| Brazil | 562 | 1 | 371 | Tons | 1,515 | | | -61 | 15 | 1 | 61 |
| China | 42 | 0 | 30 | Tons | 1,400 | | | -66 | 3 | 10 | 43 |
| Spain | 19 | 0 | 5 | Tons | 3,800 | | | 58 | 13 | 2 | -9 |

Source: ITC calculations based on COMTRADE statistics

Table 7 shows that Colombia, with 40% of Venezuela's import market for *Refrigerators*, has increased its market share in Venezuela as well. This is shown by looking at Colombia's growth in exports to the world (18% p.a.) over the 1997-2001 period, which is greater than Venezuela's growth in imports from Colombia (23% p.a.). The table also shows that China, the third largest exporter in the world, commands less than 1% of Venezuela's market for *Refrigerators*. Although Venezuela's imports from China have experienced growth of 10%

p.a. over the 2000-2001 period. China's growth in exports to the word have grown at 43% p.a. over the 5-year period.

We can also see that the unit value of *Refrigerators* from China is significantly lower than those from Colombia. If transportation costs are not prohibitive, China could be a viable alternative supplier. It could also be interesting to investigate why the number one largest exporter in the world (column 9) is not among Venezuela's top suppliers or what other Latin American countries export *Refrigerators*.

## Explanatory Notes for Table 7

**Exporters:** Country names are sorted by imported value

**Imported value in 2001, in US$ thousand:** Value imported in 2001 in US$ thousand as reported by the selected country or as reported by the partner country (when the selected country does not report trade data)

**Share in Ukraine's imports as a percentage:** Share of partner countries in the imports of the target country (Ukraine)

**Imported quantity:** Quantity imported in 2001. Concerning the mirror quantity, it is possible to get different quantity units depending on the reporting countries.

**Quantity unit:** The unit in which quantities are reported.

**Unit value:** Price in US$ per unit.

**Import trend in value between 1997-2001 p.a. as a percentage:** This trend is calculated using the least squares method. If a country does not report trade data in 2001, the trend calculation is based on mirror statistics. No trend is calculated in cases where the reporting country data is not available for at least a four-year period.

**Import trend in quantity between 1997-2001 p.a. as a percentage:** This trend is calculated by the same method used in the calculation of the annual value trends.

**Import growth in value between 2000-2001 per annum as a percentage:** This growth is a good complement to the 5-year trend, indicating whether growth trends have been stable or volatile over the 5 years and showing the country performance over the last two years.

**Ranking of partner countries in world exports:** This indicates the world ranking of the partner country as an exporter. With this indicator, it is possible to know if the selected country trades with the leading suppliers of the selected product.

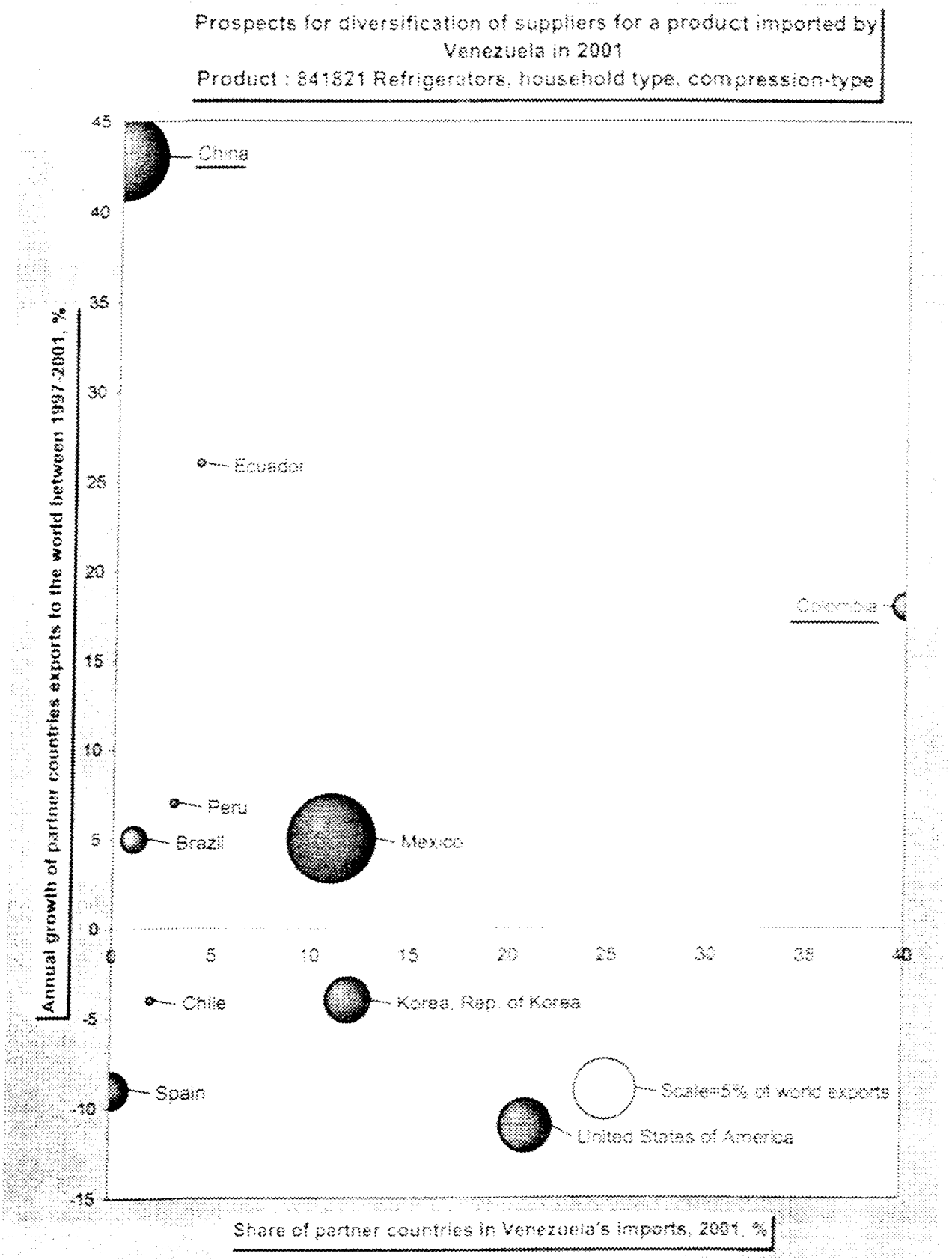
**Market share in world exports as a percentage:** This indicates the world share that the partner country represents as an exporter of the selected product.

**Total export growth in value of partner countries between 1997-2001 p.a. as a percentage:** This indicates the global export growth of the partner country to the world for the selected product. This indicator is calculated on data as reported by the target market. This indicator combined with the import trend in value, calculated above, allows you to see if the partner country has increased or not its market share in the country under review.

The information given in Table 7 is also available in bubble chart format (see Chart 1). Chart 1 presents **growth of Venezuela's major partner markets** for *Refrigerators* **(on the vertical)** as compared to those same **partner markets' share in Venezuela's imports (on the horizontal)**, providing an overview of the prospects for supplier diversification.

Chart 1 illustrates that Colombia, as mentioned above commands a large portion of Venezuela's market for *Refrigerators* (40%), but has a small share of world exports (1%), although reasonable export growth to the world (18%). China is shown as having significant export growth to the world (43% p.a.), but a relatively small share of Venezuela's imports (< 1%).

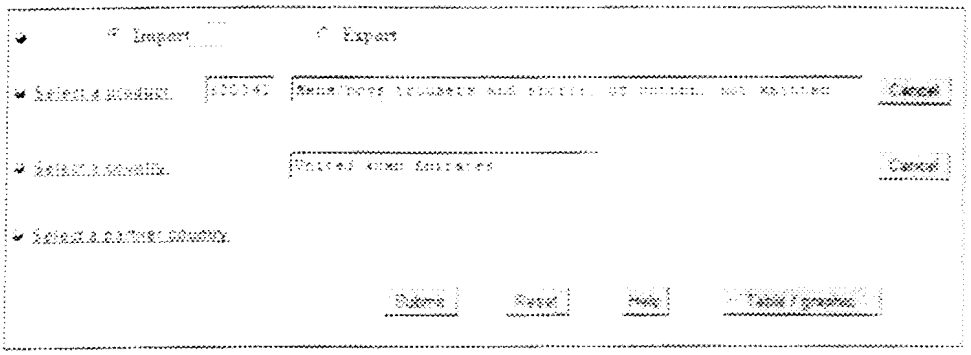
Chart 1: Prospects for supplier diversification for Refrigerators in Venezuela in 2001




Note: The area of the circles corresponds to the share in world exports of supplying markets for the selected product.
Source: ITC calculations based on COMTRADE statistics.

## What are priority products for trade promotion?

### D. Scan potential for product diversification – Apparel from the Philippines




An exporter of *Men's/boys trousers of cotton* in the Philippines may be considering opportunities for product diversification in the United Arab Emirates (UAE) and need to know what other related products are in demand. A list of those markets supplying the UAE is generated by selecting *Men's/boys trousers of cotton* in the product selection menu (above), UAE as the country under review and 'import' (see Table 8).

**Table 8: List of supplying markets for a product imported by the UAE in 2001**

Product : 620342 Mens/boys trousers and shorts, of cotton, not knitted
United Arab Emirates's imports represent 6% of world imports for this product. Its ranking in world imports is 23
United Arab Emirates has not reported trade data in the COMTRADE database. Therefore figures are based on data from supplying countries

| Exporters | Imported value 2001 in US$ thousand | Share in United Arab Emirates' imports, % | Imported quantity 2001 | Quantity unit | Unit value (US$/unit) | Import trend in value between 1997-2001, % p.a. | Import trend in quantity between 1997-2001, % p.a. | Import growth in value between 2000-2001, % p.a. | Ranking of partner countries in world exports | Share of partner countries in world exports, % | Trade account growth in value of partner countries between 1997-2001, % p.a. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | 69 719 | 100 | | No quantity | | 1 | | 23 | | | |
| Pakistan | 28 249 | 41 | 2 994 | Tons | 9 435 | -9 | -4 | 61 | 15 | 0 | 13 |
| China | 15 689 | 23 | 5 277 708 | Units | 3 | 69 | 64 | 8 | 3 | 12 | 5 |
| Thailand | 5 080 | 8 | 2 661 999 | Units | 2 | -21 | -16 | -21 | 20 | 1 | -6 |
| Philippines | 4 961 | 7 | 561 | Tons | 8 848 | 36 | 51 | 28 | 27 | 1 | -4 |
| United Kingdom | 1 757 | 3 | 45 | Tons | 39 044 | 13 | 6 | 8 | 28 | 1 | -12 |
| Sri Lanka | 687 | 1 | 23 | Tons | 29 870 | 4 | 6 | 75 | 13 | 3 | 3 |
| Turkey | 548 | 1 | 30 | Tons | 21 433 | 17 | 4 | 1 | 18 | 4 | 8 |
| France | 521 | 1 | 21 | Tons | 25 000 | 67 | 108 | 80 | 19 | 3 | -1 |

Source : ITC calculations based on COMTRADE statistics

Next | Product suppliers imported by United Arab Emirates | Importing markets | World exporters | World suppliers | Selection menu | Sources used | Help

Table 8 shows the Philippines' competitors in the UAE market for *Men's/boys trousers of cotton*. We can see that in the UAE, the Philippines ranks 4th with a 7% share of the market. Although the UAE's overall import trend in value grew by only 1% p.a. over the 1997-2001 period, the import growth trend over the 2000-2001 period was 23% p.a., suggesting the possibility of an upward trend in the coming year.

## Explanatory Notes for Table 8

**Exporters:** Partner name sorted by exported value.

**Value imported in 2001 in US$ thousand:** This figure is as reported by the selected country or as reported by the partner country, when the selected country does not report trade data.

**Share of partner country's imports as a percentage:** Share of partner countries in the imports of the target country.

**Quantity imported in 2001:** Concerning the mirror quantity, it is possible to have different quantity units depending on the reporting countries.

**Quantity unit:** The unit in which quantities are reported.

**Unit value:** Price in US$ per unit.

**Import trend in value between 1997-2001 per annum as a percentage:** This trend is calculated using the least squares method. No trend is calculated in cases where the reporting country data is not available for at least a four-year period.

**Import trend in quantity between 1997-2001 per annum as a percentage:** This trend is calculated with the same method used in the calculation of annual value trends.

**Import trend in value between 2000-2001 per annum as a percentage:** This growth is a good complement to the 5-year trend, indicating whether growth trends have been stable or volatile over the 5 years and showing the country performance over the last two years.

**Import growth in value between 2000-2001 per annum as a percentage:** This growth is a good complement to the 5-year trend, indicating whether growth trends have been stable or volatile over the 5 years and showing the country performance over the last two years.

**Ranking of partner countries in world exports:** The world ranking of the partner country as an exporter. With this indicator, it is possible to know if the selected country trades with the leading markets for the selected product and how those markets rank within the country under review.

**Market share of partner countries in world exports as a percentage:** The world share that the partner country represents as an exporter of the selected product.

**Total export growth in value of partner countries between 1997-2001 per annum as a percentage:** The export growth of the partner country to the target country over the period, not to be confused with an increase in market share.

In order to see what complimentary products the UAE imports that are experiencing growth, the exporter would click Product clusters imported by United Arab Emirates (see Table 9). According to Table 9, the Philippine exporter may want to explore opportunities in *Womens/girls trousers and shorts, of cotton*. The UAE's imports of these products grew in value 24% p.a. over the 1997-2001 period and 36% p.a. over 2000-2001. As world exports are growing at a lower rate (11% p.a.) this may be an opportunity to gain market share in the UAE.

## Table 9: List of products imported by the UAE in 2001

United Arab Emirates has not reported trade data to the COMTRADE database. Therefore figures are based on data from partner countries.

| HS rev. 0 | Product | Value 2001 in US$ thousand | Quantity 2001 | Quantity unit | Annual growth in value between 1997-2001 % | Annual growth in quantity between 1997-2001 % | Annual growth in value between 2000-2001 % | Share in market % | Ranking in world market | Annual growth in value of world exports between 1997-2001 % |
|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | [illegible] | 10,879 | 0 | No quantity | 11 | | 14 | 0 | 38 | 3 |
| [illegible] | [illegible] | 10,818 | 0 | No quantity | 34 | | 36 | 0 | 33 | 11 |
| [illegible] | [illegible] | 10,596 | 0 | No quantity | 7 | | 69 | 1 | 16 | 10 |
| [illegible] | [illegible] | 10,213 | 0 | No quantity | 19 | | 18 | 13 | 2 | 8 |
| [illegible] | [illegible] | 10,163 | 0 | No quantity | 16 | | 39 | 4 | 7 | 11 |
| [illegible] | [illegible] | 9,841 | 0 | No quantity | 2 | | -36 | 1 | 13 | -6 |
| [illegible] | [illegible] | 9,371 | 0 | No quantity | 19 | | -32 | 0 | 24 | -3 |

Source: ITC calculations based on COMTRADE statistics

| Next | The leading products imported by United Arab Emirates in value | Product codes exported by United Arab Emirates | Selection | Guide | Help |
|---|---|---|---|---|---|

## Explanatory Notes for Table 9

**Hs rev. 0**: Product code for product imported in 2001.

**Product**: Abbreviated product description corresponding to an HS 6-digit position.

**Value imported in 2001, in US$ thousand**: These figures are as reported by countries to the COMTRADE database or as calculated with mirror statistics.

**Quantity imported in 2001**: Concerning the mirror quantity. If reporting countries used different units for quantity, no quantity will be displayed.

**Quantity unit**: The unit in which quantities are reported.

**Annual growth in value between 1997-2001 of imports as a percentage**: This trend is calculated by the least squares method. If a country does not report trade data in 2001, the trend calculation is based on mirror statistics. No trend is calculated in cases where the reporting country data is not available for at least a four-year period.

**Annual growth in quantity between 1997-2001 of imports as a percentage**: This trend is calculated by the same method used in the calculation of the annual value growth.

**Annual growth in value between 2000-2001 per annum as a percentage**: This growth is a good complement to the 5-year trend, indicating whether growth trends have been stable or volatile over the 5 years and showing the product performance over the last two years.

**Market share in world imports as a percentage**: This indicator takes into account all countries, whether or not they reported.

**Ranking in world imports**: The world ranking of the selected country in the import of the product under review.

**Annual growth in value between 1997-2001 of world exports as a percentage**: The trend is calculated for the product under review by the least squares method.

"...TradeMap, Product Maps, and Country Maps ... have responded to one of the Haitian Ministry of Commerce and Industry's major preoccupations with regard to achieving a better mastery of information in order to have strategically oriented investment activities for the production of goods and services in Haiti."

M. Stanley Theard
Ministère du Commerce et de l'Industrie (translation)
20 July 2006

## III. Country Approach

The second approach, or country approach, allows analysis using TradeMap from a country perspective. From this angle, a user can assess the national trade performance of a country and also review the potential for bilateral trade with a partner.

**Box 2: Florence Kata of the Uganda Export Promotion Board**

In August 2001, Florence Kata, the acting Executive Director of the Uganda Export Promotion Board, contacted MAS at ITC's regional Executive Forum in Nairobi and asked how she might find new overseas markets:

*"I heard about the...TradeMap in Nairobi...I found it extremely useful and so versatile that I did not leave the Forum until I had already secured a provision to have it connected in my country..."*

*"It's not only me who has used it, because as soon as I got it into my Board, I invited a core of decision makers and gave them a demonstration. I immediately made the Policy Makers, the Minister of Finance, the Minister of Trade, a few Associations aware of it... recently, when we are analysing a market, trying to see how Uganda can participate in AGOA (the African Growth Opportunity Act, a preferential trade provision given to the Sub-Saharan African countries), we use ... TradeMap in order to be able to analyse the US market vis-à-vis export performance and I must say that even my Ministers found it very, very useful in developing our strategy for entering the American market. We still even use it today in the databases to provide information to clients who enquire about specific product performance and advise them on how the products are performing..."*

*"I don't find it difficult to use. The HS codes help a lot because most of the exports that we have out of our country are already HS coded. So, it is easy to go directly to the product that one is looking for...You have to find out the trends, the competition, the position in your own country, the prices. It's not really difficult..."*

Ms. Florence Kata, Executive Director
Uganda Export Promotion Board
25 April 2002

TradeMap provided the Uganda Export Promotion Board with:

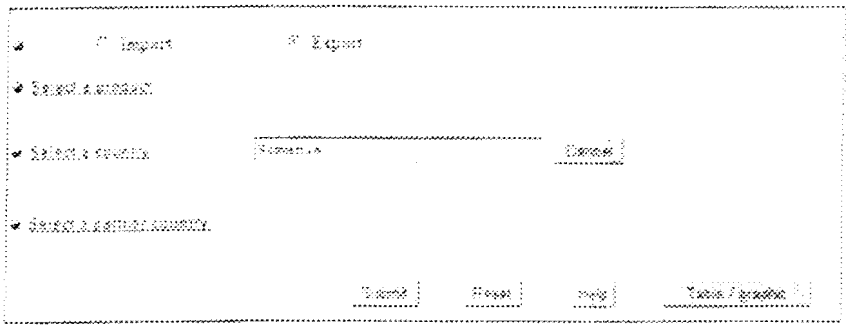
- An overview of Uganda's current export performance and existing country clients.
- A list of the top world importers not currently supplied by Uganda.
- The volume and value of product imported by these countries.
- Uganda's potential competitors in these new markets.
- An indication of prices paid by these countries and trade barriers applied.

These key indicators help the Uganda Export Promotion Board to focus its efforts on the markets with the largest potential and provide starting points for further market research to identify potential importers in the selected markets.

The Uganda Export Promotion Board has become ITC's TradeMap country partner in a project supported by the Integrated Framework.

## What is my country's current trade performance?

### A. Assess national trade performance – Romania



The government of Romania may wish to investigate how the country's exports compete in the world market in order to best prioritize their efforts to attract foreign or domestic investment or to promote trade. By selecting Romania as the country in TradeMap and indicating 'Export' (above), a list of Romania's exports is generated at the 2-digit level which can then be sorted by value to yield Table 10. The 2-digit level provides a sectoral overview of Romania's exports.

Table 10: Leading products exported by Romania in 2001, 2-digit level

| HS rev. 0 | Product | Value 2001 in US$ thousand | Annual growth in value between 1997-2001, % | Annual growth in value between 2000-2001, % | Annual growth of world exports between 1997-2001, % | Ranking in country exports | Share in world exports, % | Ranking in world exports |
|---|---|---|---|---|---|---|---|---|
| | All products | 11,384,994 | 9 | 10 | 4 | | 0 | 56 |
| 62 | Articles of apparel, accessories, not knit or crochet | 2,065,992 | 9 | 18 | 1 | 1 | 2.1 | 14 |
| 85 | Electrical, electronic equipment | 995,436 | 43 | 22 | 7 | 2 | 0 | 41 |
| 64 | Footwear, gaiters and the like, parts thereof | 975,599 | 16 | 24 | 0 | 3 | 2.3 | 11 |
| 72 | Iron and steel | 725,279 | -4 | -16 | -1 | 4 | 0.7 | 28 |
| 27 | Mineral fuels, oils, distillation products, etc. | 707,112 | 13 | -5 | 15 | 5 | 0.1 | 66 |
| 84 | Nuclear reactors, boilers, machinery, etc. | 683,972 | 11 | 8 | 3 | 6 | 0.1 | 48 |
| 61 | Articles of apparel, accessories, knit or crochet | 569,139 | 20 | 23 | 2 | 7 | 1 | 34 |
| 94 | Furniture, lighting, signs, prefabricated buildings | 532,645 | 2 | 12 | 5 | 8 | 0.7 | 25 |
| 44 | Wood and articles of wood, wood charcoal | 525,380 | 14 | -6 | -1 | 9 | 0.9 | 24 |
| 73 | Articles of iron or steel | 366,935 | 0 | 26 | 0 | 10 | 0.4 | 35 |

Source: ITC calculations based on COMTRADE statistics

Next | List of product groups sorted by HS code | List of product groups ranked | The leading products in HS 4-digit exported | The leading products in HS 4-digit exported | Search menu

From this table the Romanian government can see that overall, Romania ranks 58 among the world's exporters, with a 9% p.a. growth in exports over the 1997-2001 period and 10% p.a. over the 2000-2001 period. At the same time the 5-year growth trend for the world is only 4% p.a. indicating and overall increase in the competitiveness of Romania's exporters.

Looking at exports at the HS 2-digit level highlights which sectors might be interesting from the perspective of attracting foreign or domestic investment. Sectors such as *Electronic equipment* or *Apparel* are experiencing high growth (43% and 20% p.a. respectively), while world exports of these products are only growing at 7% and 2% p.a. respectively. These may be attractive sectors for investment.

## Explanatory Notes for Table 10

**Hs rev. 0:** Product code for product exported in 2001.

**Product:** Abbreviated product description corresponding to an HS 2-digit position.

**Value exported in 2001, in US$ thousand:** These figures are as reported by countries to the COMTRADE database or as calculated with mirror statistics.

**Annual growth in value between 1997-2001 of exports as a percentage:** This trend is calculated by the least squares method. If a country does not report trade data in 2001, the trend calculation is based on mirror statistics. No trend is calculated in cases where the reporting country data is not available for at least a four-year period.

**Annual growth in value between 2000-2001 of exports as a percentage:** This growth is a good complement to the 5-year trend, indicating whether growth trends have been stable or volatile over the 5 years and showing the product performance over the last two years.

**Annual growth of world exports between 1997-2001 as a percentage:** This trend is calculated by the least squares method. If a country does not report trade data in 2001, the trend calculation is based on mirror statistics. No trend is calculated in cases where the reporting country data is not available for at least a four-year period.

**Ranking in country exports:** This indicator is interesting when the table is sorted by product code. It gives you an idea of the importance of the product group in the country's exports or imports.

**Market share in world exports as percentage:** This indicator takes into account all countries, whether or not they have reported.

**Ranking in world exports:** The world ranking of the selected country in the export of the product under review.

For a more in depth look at those sectors which may be interesting for targeting investment the 4-digit level should be explored. By clicking on 85 in Table 10, the Romanian government can see in Table 11 what areas within that sector may be interesting.

HS 8544 *Insulated wire/cable* is an area that is showing growth in world imports, 5%, over the 1997-2001 period. This is a sizeable sector for Romania and has shown substantial growth over both the 5- and 2-year period (33% and 65% p.a.), while world imports have grown 5% p.a. from 1997-2001.

Table 11: Leading products exported by Romania in 2001, HS85 4-digit level

| HS rev. 0 | Product | Value 2001 in US$ thousand | Quantity 2001 | Quantity unit | Annual growth in value between 1997-2001, % | Annual growth in quantity between 1997-2001, % | Annual growth in value between 2000-2001, % | World market share, % | Ranking in world market | Annual growth in value of world imports between 1997-2001, % |
|---|---|---|---|---|---|---|---|---|---|---|
| 8573 | Electric furnaces or discharge lamps | 16 830 | 0 | No quantity | 7 | | 0 | 0 | 35 | 1 |
| 8540 | Thermionic, cold cathode or photocathode valves (e.g. tv camera tubes) | 368 | 0 | No quantity | -11 | | 11 933 | 0 | 54 | -2 |
| 8541 | Diodes, transistors & semiconductor devices; etc. | 5 037 | 0 | No quantity | 27 | | -6 | 0 | 48 | 9 |
| 8542 | Electronic integrated circuits and microassemblies | 32 892 | 0 | No quantity | 167 | | -16 | 0 | 44 | 9 |
| 8543 | Electrical machines having individual function, nes | 1 452 | 0 | No quantity | 28 | | 122 | 0 | 54 | 7 |
| 8544 | Insulated wire, cable | 276 812 | 33 253 | Tons | 33 | | 65 | 3 | 11 | 5 |
| 8545 | Carbon electrodes for industrial or electrical purposes | 4 754 | 0 | No quantity | -18 | | 12 | 0 | 28 | -2 |
| 8546 | Electrical insulators of any material | 934 | 695 | Tons | -9 | -1 | -7 | 0 | 45 | -3 |
| 8547 | Insulating fittings for elec. mach., appar. & equip. (not insulator of hd ceram.) | 1 256 | 0 | No quantity | 62 | | 328 | 0 | 44 | 4 |
| 8548 | Electrical parts of machinery, appar. nes | 663 | 76 | Tons | | | 16 475 | 0 | 36 | -4 |

Source: ITC calculations based on COMTRADE statistics.

Product clusters (HS4) exported by Romania | The leading products (HS6) exported by Romania | The leading products (HS4) exported by Romania | Selection criteria | Building blocks

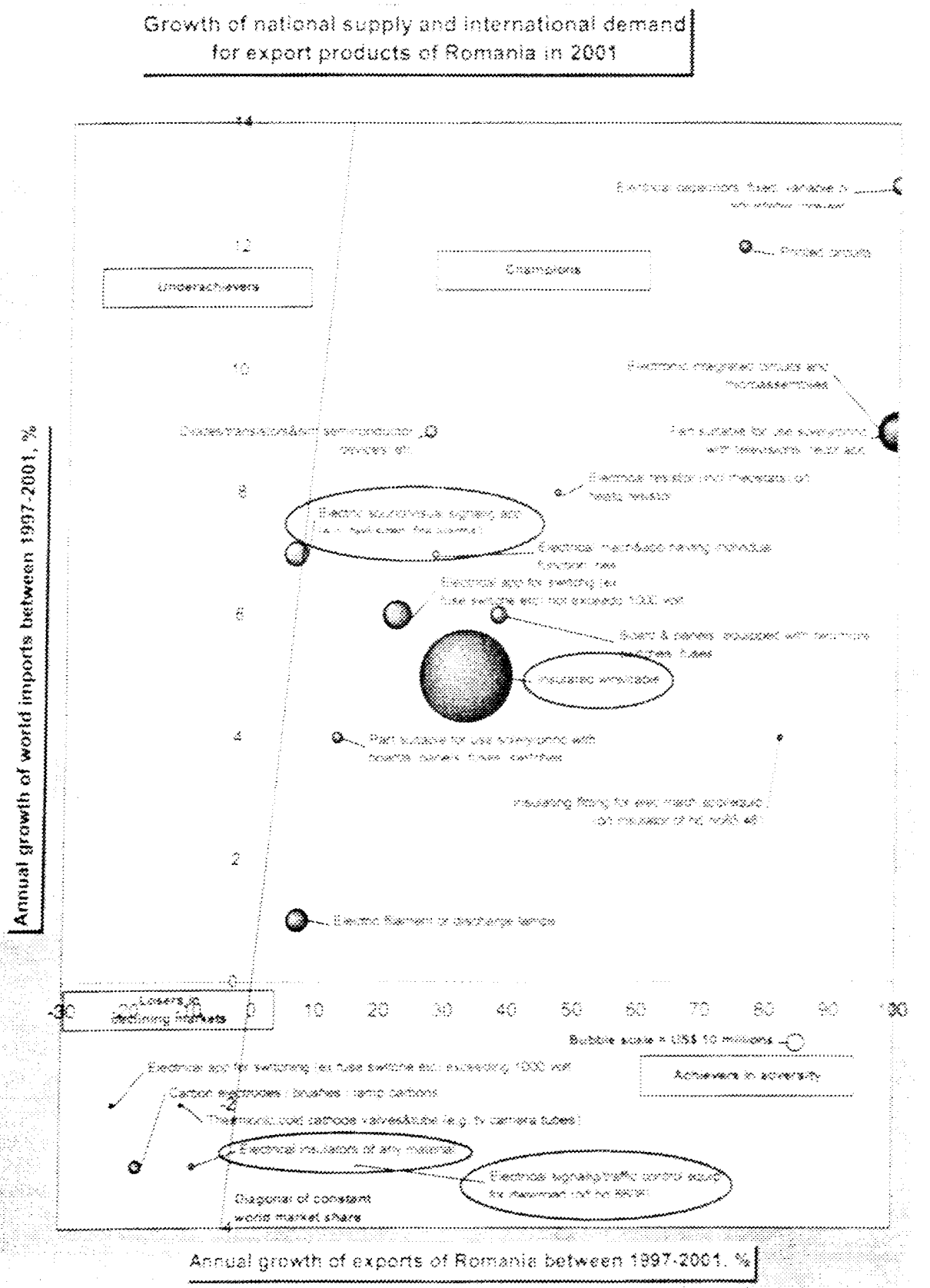
From Table 11, Chart 2 can be generated, which presents the performance of Romania's export products with in the HS85 *Electronic equipment* sector. The chart shows the export **value of each product (size of the bubbles)**, and compares **Romania's export growth (horizontal axis)** with the **growth of international demand (vertical axis)**. In addition, the **diagonal line (the line of constant world market share)** divides the chart into two parts. Romania's exports of products to the right of this line have grown faster than world imports thus increasing their share in the world market. Conversely, products to the left of the diagonal line have seen an erosion of their world market share.

The diagonal and the horizontal reference lines are particularly interesting in terms of trade development, since they divide the chart into four quadrants with different characteristics:

**Champions - winners in growth markets:** These are the export products for which Romania has performed very well, such as *Insulated wire/cable*. This sector contains particularly dynamic products that are growing faster than world trade in general, and for which Romania has been able to outperform world market growth and increase its share in world imports. Exporters of these products have proven their international competitiveness over the late-1990s. Trade promotion efforts for these products are less risky, as they are national success stories that can serve as benchmarks for other industries. Promotional efforts in these products should aim at broadening supply capacity.

**Underachievers - losers in growth markets:** These products represent particular challenges for trade promotion efforts in Romania. While international demand has been growing at above-average rates, Romania has been falling behind. Its exports of *Electric sound/visual signaling apparatus*, for example, have either declined or grown less dynamically than world trade. As a result, Romania has been losing international market share. In general, the bottleneck is not international demand, but rather on the supply side. For these products, it is essential to identify and remove the specific bottlenecks that impede a more dynamic expansion of exports.

Chart 2: Growth of national supply and international demand for export products of Romania in 2001, HS85 4-digit




Note: The area of the circles corresponds to the export value of the product for Romania.
Source: ITC calculations based on COMTRADE statistics.

**Losers in declining markets**: The export prospects for these products tend to be bleak, such as *Electrical insulators* in the case of Romania. World imports of the product concerned have increased at a below-average rate or actually declined, and the market share of Romania has gone down. Trade promotion efforts for products in this category face difficulty. They need to adopt an integrated approach to take into account bottlenecks on both the supply and demand side.

**Achievers in adversity - winners in declining markets**: Products in this quadrant, such as *Electrical signalling/traffic control equipment*, are characterized by the growing shares of Romanian exporters in world import markets, which are either declining or growing at a below average rate. From a trade promotion perspective, niche-marketing strategies are required to isolate positive trade performance from the overall decline in these markets.

The chart also provides an overview of the concentration of exports. The appearance of one or a few comparatively large circles in one area shows that exports are highly concentrated. This does not appear to be the case for Romania.

The circle labeled scale, in the bottom right-hand corner of Chart 2, serves as reference for the size of the bubbles. The scale could vary from US$ 10.000 to US$ 100 million depending on the country under review.

Should the government of Romania wish to conduct deeper analysis still, the 6-digit level is accessible for any of the 4-digit codes by clicking on that code.

By next clicking on The leading products (HS6) exported by Romania at the bottom of Table 11, Table 12 is generated which lists Romania's top 600 exports at the HS 6-digit level. Table 12 shows that Romania's second largest export of *Furniture* declined, 1% p.a. over the 1997-2001 period, however, within the last two years of that period there was growth of 5% p.a. and world imports of these products grew 7% p.a. Also interesting in Table 12 are Romania's exports of *Footwear*, which grew at 101% p.a. over the 1997-2001 period (50% p.a. over 2000-2001) while world imports grew at only 4% p.a. These may be interesting sectors in which to focus trade promotion efforts.

**Table 12: Leading products exported by Romania in 2001, 6-digit level**

| HS rev. 0 | Product | Value 2001 in US$ thousand | Quantity 2001 | Quantity unit | Annual growth in value between 1997-2001, % | Annual growth in quantity between 1997-2001, % | Annual growth in value between 2000-2001, % | Share in world exports, % | Ranking in world exports | Annual growth in value of world imports between 1997-2001, % |
|---|---|---|---|---|---|---|---|---|---|---|
| TOTAL | All products | 11.364.894 | 0 | No quantity | 9 | | 10 | 0 | 58 | 4 |
| 271000 | Petroleum oils&oils obtained from bituminous minerals,other crude etc | 609.328 | 285.938 | Tons | 11 | 0 | -8 | 1 | 12 | 10 |
| 440349 | Coniferous woods, nes | 313.783 | 227.883 | Tons | -1 | 3 | 5 | 3 | 15 | 7 |
| 940169 | Chairs and parts thereof, other than softseats | 308.132 | 15.998 | Tons | 10 | 16 | 18 | 13 | 1 | 4 |
| 640419 | Footwear with outer soles of rubber/plastics, uppers of leather, nes | 221.371 | 33.787 | Tons | 30 | 51 | 54 | 2 | 14 | 4 |
| 640510 | Footwear with outer soles of rubber/plastics, uppers of leather, nes | 213.350 | 19.526 | Tons | 101 | 178 | 50 | 2 | 14 | 4 |
| 620342 | Trousers, bib and brace overalls, breeches and shorts, of cotton, not knitted | 156.899 | 10.505 | Tons | 28 | 41 | 45 | 1 | 19 | 2 |
| 440710 | Lumber, coniferous (softwood), sawn or chipped lengthwise, sliced or peeled, whether or not planed, sanded or finger-jointed, of a thickness exceeding 6 mm | 157.060 | 748.665 | Tons | 8 | 15 | -19 | 1 | 13 | -3 |

Source : ITC calculations based on COMTRADE statistics

## Explanatory Notes for Tables 11 and 12

**Hs rev. 0:** Product code for product exported in 2001.

**Product:** Abbreviated product description corresponding to an HS 6-digit position.

**Value exported in 2001, in US$ thousand:** These figures are as reported by countries to the COMTRADE database or as calculated with mirror statistics.

**Quantity exported in 2001:** Concerning the mirror quantity, if reporting countries used different units for quantity, no quantity will be displayed.

**Quantity unit:** The unit in which quantities are reported.

**Annual growth in value between 1997-2001 of exports as a percentage:** This trend is calculated by the least squares method. If a country does not report trade data in 2001, the trend calculation is based on mirror statistics. No trend is calculated in cases where the reporting country data is not available for at least a four-year period.

**Annual growth in quantity between 1997-2001 of exports as a percentage:** This trend is calculated by the same method used in the calculation of the annual value growth.

**Annual growth in value between 2000-2001 of exports as a percentage:** This growth is a good complement to the 5-year trend, indicating whether growth trends have been stable or volatile over the 5 years and showing the product performance over the last two years.

**Market share in world exports as a percentage:** This indicator takes into account all countries, whether or not they reported.

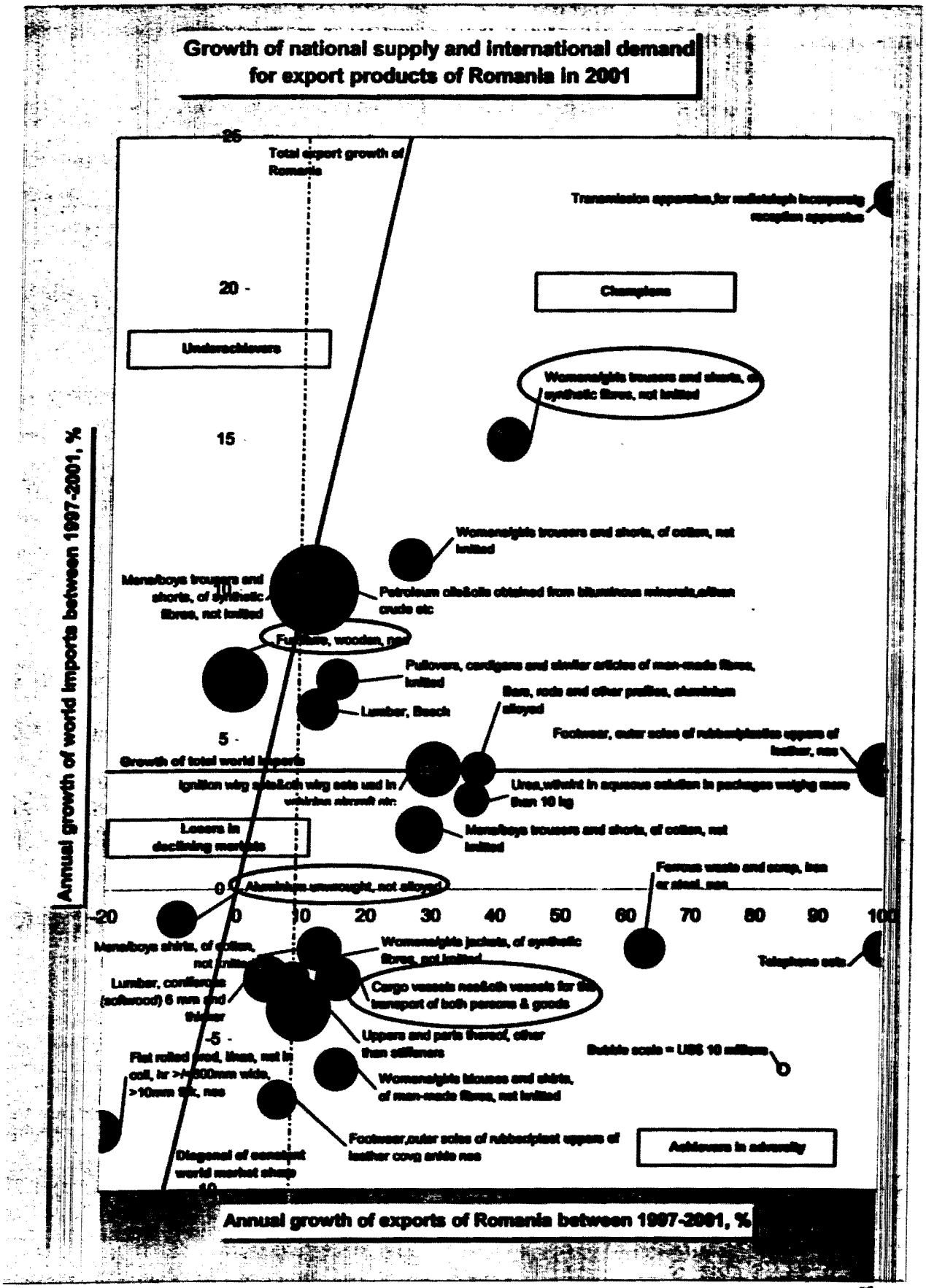
**Ranking in world exports:** The world ranking of the selected country in the export of the product under review.

**Annual growth in value between 1997-2001 of world imports as a percentage:** The trend is calculated for the product under review by the least squares method.

From Table 12, Chart 3 can be generated, which is similar to Chart 2 but with significant differences. Chart 3 presents the performance of the twenty leading export products of Romania, indicating the average nominal growth of the total exports of Romania for the period 1997 to 2001 (dotted vertical reference line) and the average nominal growth of world imports over the same period (horizontal reference line), which was 4% p.a. In Chart 3 it is the diagonal and the horizontal reference lines that divide the chart into four quadrants.

It should be noted that the criterion for distinguishing growing and declining products is the average nominal growth rate of total world imports from 1997 to 2001, which was 4% annually. Products, whose world imports have grown below this rate, e.g. at 3% annually, are classified as declining products, as their share in world trade is declining.

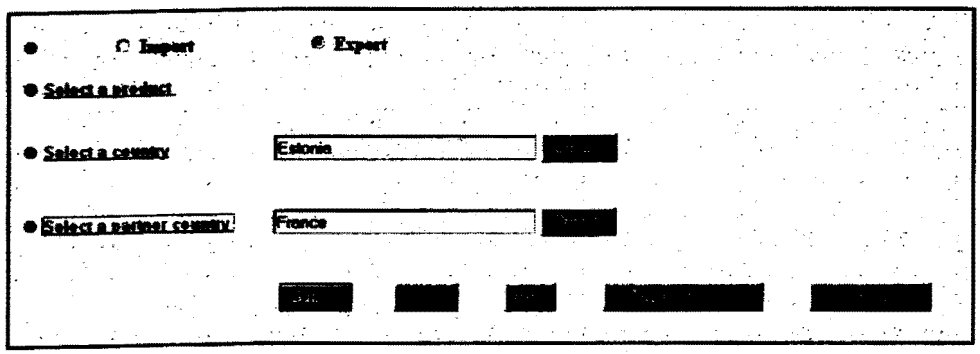
## Chart 3: Growth of national supply and international demand for the twenty leading Romanian exports in 2001




Note: The area of the circles corresponds to the export value of the product for Romania
Source: ITC calculations based on COMTRADE statistics.

## For what products is there potential to increase bilateral trade?

### B. Bilateral Trade Potential – Prefabricated buildings between Estonia and France




A TSI in Estonia may wish to explore the trade potential between Estonia and France. By selecting Estonia as the country, France as the partner country and 'Export' in the selection menu (above), the information given in Table 13 appears at the HS 2-digit level.

**Table 13: Existing and potential trade between Estonia and France in 2001, 2-digit level**

Estonia's exports have been reported by Estonia
France's imports have been reported by France

| Product code | Product label | Estonia's exports to France | | France's imports from world | | | Estonia's exports to the world | | | Indicative potential in US$ thousand |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Value 2001 in US$ thousand | Annual growth in value between 1997-2001, % | Value 2001 in US$ thousand | Annual growth in value between 1997-2001, % | Market share in world imports % | Value 2001 in US$ thousand | | | |
| | All products | 41,707 | 21 | 353,866,240 | 7 | 6 | 4,013,048 | 8 | 0 | 3,971,341 |
| 90 | Optical, photo, technical, medical, etc apparatus | 1,260 | 115 | 11,044,905 | 8 | 5.7 | [illegible] | | | 57,013 |
| 91 | Clocks and watches and parts thereof | 0 | | 938,473 | 6 | 5 | [illegible] | | | 568 |
| 92 | Musical instruments, parts and accessories | 0 | | 164,173 | 0 | 4.2 | [illegible] | | | 2,403 |
| 93 | Arms and ammunition, parts and accessories thereof | 0 | | 88,011 | -1 | 2 | [illegible] | | | 23 |
| 94 | Furniture, lighting, signs, prefabricated buildings | 3,641 | 14 | 5,456,590 | 9 | 7 | 243,330 | 18 | 0.3 | 239,689 |
| 95 | Toys, games, sports requisites | 278 | -8 | 2,802,492 | 7 | 5 | [illegible] | | | 25,403 |
| 96 | Miscellaneous manufactured articles | [illegible] | | 928,627 | 5 | 6.4 | [illegible] | | | 8,342 |
| 97 | Works of art, collectors pieces and antiques | [illegible] | | 227,577 | 12 | 2 | [illegible] | | | 1,352 |

Source: ITC calculations based on COMTRADE statistics

First Previous List of products exported by Estonia List of products imported by France Import side Selection menu Help



394

From Table 13, the TSI can see actual trade between Estonia and France. France's imports from the world and Estonia's exports to the world, both for overall trade and the products listed. On the whole, trade between Estonia and France amounted to US$ 42 million in 2001 and grew at 21% p.a. over the 1997-2001 period. France's imports from the world were US$ 364 billion with an annual growth rate of 7% p.a., while Estonia's exports to the world were US$ 4 billion and grew at a rate of 8% p.a.

If we take the sector of *Furniture, lighting, signs, prefabricated buildings*, we see that trade took place between Estonia and France valued at US$ 4 million with a growth rate of 14% p.a. France's imports from the world were US$ 6.6 billion in 2001 and grew at 9% p.a. over the 1997-2001 period, while Estonia's exports to the world were US$ 243 million and grew at 18% p.a. As current trade is relatively small and growing perhaps there is potential in one or more products within this sector for increased promotion efforts.

## Explanatory Notes for Table 13

**Product code:** Product code for the product traded between the two countries under review.

**Product label:** Abbreviated product group description corresponding to an HS 6-digit position.

**Value exported in 2001, in US$ thousand:** The trade between the two selected countries, as reported by the selected country to the COMTRADE database or as reported by the selected partner country to the COMTRADE database if the selected country has not reported trade data.

**Annual growth in value between 1997-2001:** The trend of bilateral trade as a percentage. The trend is calculated using the least squares method. If the selected country does not report trade data in 2001, the trend calculation is based on partner statistics. No trend is calculated in cases where country or partner country data is not available for at least a four-year period.

**Global value imported in 2001, in US$ thousand, by the partner country:** The value imported by the partner country from the world for the product group under review, as reported to the COMTRADE database or as calculated with mirror statistics.

**Annual growth in value between 1997-2001 of world imports by the partner country:** The growth of imports from the world for the selected partner country. The trend is calculated using the least squares method. If the selected partner country does not report trade data in 2001, the trend calculation is based on mirror statistics. No trend is calculated in cases where partner country data is not available for at least a four-year period.

**Market share in world imports, for the partner country:** The world import share for the selected partner country and product group. This indicator takes into account all countries, whether or not they have reported.

**Global value exported 2001, in US$ thousand, by the selected country:** The value exported by the country to the world for the product group under review, as reported to the COMTRADE database or as calculated with mirror statistics.

**Annual growth in value between 1997-2001 of world exports for the selected country:** The growth of exports to the world for the selected country. The trend is calculated by the least squares method. If the country under review does not report trade data in 2001, the trend calculation is based on mirror statistics. No trend is calculated in cases where country data is not available for at least a four-year period.

**Market share in world exports for the country:** The world export share for the selected country and product group under review. This indicator takes into account all countries, whether or not they have reported.

**Indicative Trade potential:** The potential trade between the two selected countries as calculated in 2001. Trade potential is defined as the lower value of the amount a market exports (imports) to the world and the amount the partner country imports (exports) from the world, minus the existing trade between the two countries under review. Trade potential = Minimum (Export supply capacity, Import demand) - existing trade. In other words, high potential means that the partner country's imports are significant and the country's exports are also significant, however the share of the country in the imports of the partner country is small.

To know for which specific products potential may exist, the HS 6-digit level should be explored. By clicking on the 2-digit code in Table 13, 94 in the case of *Furniture, lighting, signs, prefabricated buildings*, Table 14 is generated.

**Table 14: Existing and potential trade between Estonia and France in 2001, 6-digit level**

Estonia's exports have been recorded by Estonia
France's imports have been recorded by France

| | | Estonia's exports to France | | | France's imports from the world | | | | Estonia's exports to world | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Product code | Product label | Value 2001 in US$ thousand | Annual growth in value between 1997-2001, % | Share in Estonia's exports, % | Value 2001 in US$ thousand | Annual growth in value between 1997-2001, % | Quantity 2001 | Quantity unit | Value 2001 in US$ thousand | Annual growth in value between 1997-2001, % | Quantity 2001 | Quantity unit | Indicative potential trade in US$ thousand |
| 940161 | Seats, whether or not convertible into beds, and parts thereof, n.e.s. | 0 | | 0 | 111 545 | 11 | 14 178 | Tons | 1 813 | 0 | 258 | Tons | 111 |
| 940169 | Upholstered seats with wooden frames | 0 | | 0 | 33 662 | 20 | 6 156 | Tons | 343 | 0 | 38 | Tons | 343 |
| 940180 | Seating furniture, whether or not convertible into beds, n.e.s. | 0 | | 0 | 15 033 | 5 | 1 812 | Tons | 878 | 63 | 77 | Tons | 878 |
| 940310 | Metal office furniture, n.e.s. | 0 | | 0 | 11 481 | 7 | 1 870 | Tons | 422 | 0 | 44 | Tons | 422 |
| 940320 | Metal furniture, n.e.s. | 0 | | 0 | 1 139 | -6 | 577 | Tons | 88 | -37 | 8 | Tons | 88 |
| 940330 | Wooden furniture of a kind used in offices | 0 | | 0 | 61 644 | 10 | 5 825 | Tons | 887 | 11 | 85 | Tons | 887 |
| 940600 | Prefabricated buildings | 474 | 20 | 1 | 220 341 | 20 | 144 894 | Tons | 43 283 | 19 | 58 720 | Tons | 42 809 |

Source: ITC calculations based on COMTRADE statistics

Note: List of product label(s) exported by Estonia | Value of product label(s) imported by France | Click: see | Selection menu | Double click: see | map

According to Table 14 there is trade potential between Estonia and France in *Prefabricated buildings* in which current trade is US$ 474 thousand. France imported US$ 220 million from the world and those imports grew 20% p.a. indicating increasing demand, while Estonia's exports to the world of US$ 43 million grew 19% p.a. indicating increasing supply. If Estonia were to redirect its entire export supply to France, the indicative trade potential would be US$ 43 million.

Indicative Trade potential = Minimum (Export supply capacity, Import demand) - current trade

Trade potential is defined as the lower of the value a selected market exports to the world or the value the partner country imports from the world (in this case US$ 43 million in Estonia's exports), minus the current trade between the two countries under review (which is US$ 474 thousand). The trade potential is indicative only and serves as a departure point for further investigation.

By clicking on the value of the France's imports from the world (column 6), all supplying markets of *Prefabricated buildings* to France are listed (available in both table and bubble chart format). Alternatively, by clicking on the product code (column 1), the importing markets for *Prefabricated buildings* from Estonia are listed.

## Explanatory Notes for Table 14

**Product code:** Product code for the product traded between the two countries under review.

**Product label:** Abbreviated product group description corresponding to an HS 2-digit position.

**Value exported in 2001, in US$ thousand:** The trade between the two selected countries, as reported by the selected country to the COMTRADE database or as reported by the selected partner country to the COMTRADE database if the selected country has not reported trade data.

**Annual growth in value between 1997-2001:** The trend of bilateral trade as a percentage. The trend is calculated using the least squares method. If the selected country does not report trade data in 2001, the trend calculation is based on partner statistics. No trend is calculated in cases where country or partner country data is not available for at least a four-year period.

**Share in Estonia's exports as a percentage:** Share of partner countries in the exports of the target country (Estonia).

**Global value imported in 2001, in US$ thousand, by the partner country:** The value imported by the partner country from the world for the product group under review, as reported to the COMTRADE database or as calculated with mirror statistics.

**Annual growth in value between 1997-2001 of world imports by the partner country:** The growth of imports from the world for the selected partner country. The trend is calculated using the least squares method. If the selected partner country does not report trade data in 2001, the trend calculation is based on mirror statistics. No trend is calculated in cases where partner country data is not available for at least a four-year period.

**Imported quantity:** Quantity imported in 2001. Concerning the mirror quantity, it is possible to get different quantity units depending on the reporting countries.

**Quantity unit:** The unit in which quantities are reported.

**Global value exported 2001, in US$ thousand, by the selected country:** The value exported by the country to the world for the product group under review, as reported to the COMTRADE database or as calculated with mirror statistics.

**Annual growth in value between 1997-2001 of world exports for the selected country:** The growth of exports to the world for the selected country. The trend is calculated by the least squares method. If the country under review does not report trade data in 2001, the trend calculation is based on mirror statistics. No trend is calculated in cases where country data is not available for at least a four-year period.

**Exported quantity:** Quantity exported in 2001. Concerning the mirror quantity, it is possible to get different quantity units depending on the reporting countries.

**Quantity unit:** The unit in which quantities are reported.

**Indicative Trade potential:** The potential trade between the two selected countries as calculated in 2001. Trade potential is defined as the lower value of the amount a market exports (imports) to the world and the amount the partner country imports (exports) from the world, minus the existing trade between the two countries under review. Trade potential = Minimum (Export supply capacity, Import demand) - existing trade. In other words, high potential means that the partner country's imports are significant and the country's exports are also significant, however the share of the country in the imports of the partner country is small.

**"I will be teaching an international trade course to B.A. level students at CIDE...I want to use the TradeMap as a tool to help them understand the real world of international trade (and its tariffs and non-tariff barriers)."**

Dr. Antonio Ortiz Mena L.N., Director
División de Estudios Internacionales
Centro de Investigación y Docencia Económicas, A.C. (CIDE), México
E-Mail 22 January 2003



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## IV. Summary

Whether from the public or business sector, actors in international trade must have the ability to analyze trade flows from both a product and country perspective. TradeMap provides this information in a user friendly and easily accessible format. Users have access to the world's largest trade database, COMTRADE, containing indicators on national export performance, international demand, alternative markets, and the role of competitors from both the product and country perspective. Users can quickly and easily:

- **Analyze present export markets.** Examine the performance and dynamics of a country's export markets for any product, identifying the number and size of export markets and the concentration of exports and highlights countries where market share has increased.

- **View the competitors in the global market.** Competing countries, exporting the same product, are ranked in terms of value, with additional indicators on quantities, growth and market share, highlighting the position of a country in world exports, as well as the position of neighboring countries.

- **Pre-select priority markets.** View the world's major importing countries, with indicators illustrating the extent of import concentration in the world's markets and in which countries' demand has increased greatly over the period.

- **Find information on tariff and non-tariff barriers.** Based on the TRAINS database of UNCTAD, this function provides tariff-line information on countries' major instruments of trade control, such as ad-valorem and specific tariffs, MFN tariffs, tariff quotas, anti-dumping duties, prohibitions and norms at the most detailed level.

- **Assess competitors in specific export markets.** View a country's competitors in any leading target market, with information on the export performance of these competitors, showing the number of supplying countries and their performance in the market.

- **Identify new sources of supply.** Countries exporting a product both to the world and to a specific country are ranked against one another, allowing direct comparisons of current and potential sources of national supply.

- **Review opportunities for product diversification in a specific market.** Make a comparative assessment of import demand for related products in the market under review and identify whether similar products are imported by the country under review and if synergies are possible.

- **Assess national trade performance.** Make and overall evaluation of national trade performance and identify priority areas for investment and trade promotion at the sectoral and product level.

- **Identify existing and potential bilateral trade with any partner country.** Bilateral trade opportunities can be identified by comparing actual bilateral trade, demand in terms of the global imports of partner countries and the global export supply capacity of the home country.

TradeMap can be customized for trade support institutions (TSI TradeMap) via a special password-protected Internet site for subscribers, allowing multiple connections by larger user groups. Alternatively, individual partners can access the application directly on a subscription basis (ITC TradeMap). For further information please contact: itm@intracen.org

## Annex I: Foreign Trade Statistics as a Basis for Strategic Market Research What Users Should Take into Consideration

Foreign trade statistics provide a differentiated picture of trade flows among countries. They are comprehensive in terms of product coverage (more than 5,000 products under the Harmonized System), geographical coverage (around 100 countries covering 90% of world trade) and time series (data under the Harmonized System are available for the last decade). Moreover, they are readily available at moderate costs. This makes them an attractive source for market research and the assessment of trade performance.

Against this background, ITC has developed a number of tools for international marketing and trade promotion based on trade statistics. *Country Maps*, *TradeMap* and *Product Maps* are all cases in point. All of these tools strive to present trade statistics in an analytical and user-friendly format. Notwithstanding the attractiveness of this comprehensive source of information, users should factor in the following weak points of foreign trade statistics:

- Trade data are never complete. Smuggling and non-reporting represent a serious problem in a number of countries. In addition, trade statistics, like any source of information, are not free of mistakes and omissions.
- Most countries include imports for re-exports and re-exports in their trade statistics. A low-income country may show up as an exporter of airplanes simply because its national airline has sold used planes.
- According to international conventions for reporting trade statistics, the export value refers to the total or contract value, which may of course, be very different from local value-added. For many processing activities the local value added remains below 20% of the export value.
- Detailed trade statistics are available only for merchandise trade and not for services, although the latter may account for a sizeable share of national exports.
- Even at the lowest level of disaggregation, product groups in the trade nomenclatures do not necessarily reflect trade names and often contain a wide range of different products. Moreover, the product nomenclature is sometimes misleading. The labels of aggregated product groups are often very general and provide at times only limited guidance on the leading items within the group of products concerned.
- Exchange rate fluctuations are not always properly recorded in international trade statistics. Values are normally aggregated over the period of one year in local currency and converted into US dollars.
- For countries that do not report trade data to the United Nations, ITC uses partner country data, an approach referred to as mirror statistics. Mirror statistics are a second-best solution, being better than having no data at all. At the same time, they have a number of shortcomings when compared to the first-best solution of nationally reported data. First and foremost, they do not cover trade with other non-reporting countries. As a result, mirror statistics hardly cover South-South trade and would not be a suitable source for an assessment of intra-African trade. Second, there is the problem of transshipments, which may hide the actual source of supply. Third, mirror statistics invert the reporting standards by valuing exports in c.i.f. terms (i.e. including transport cost and insurance) and imports in f.o.b. terms (excluding these items).

In an effort to make some of these discrepancies more transparent, we have included the option of viewing Mirror statistics within TradeMap (See bottom of Table 15). Table 15 presents the data of those countries that import *Panty hose* from Slovenia as reported by Slovenian exports. While Table 16 presents the same data as reported by the imports of Slovenia's partner countries.

## Table 15: List of importing markets for a product exported by Slovenia in 2001

Product : 611511 Panty hose&tights,of synthetic fibre yarns <67 dtex,single yarn knitted
Slovenia's exports represent 1% of world exports for this product. Its ranking in world exports is 19

| Importers | Exported value 2001 in US$ thousand | Share in Slovenia's exports, % | Exported quantity 2001 | Quantity unit | Unit value (US$/unit) | Export trend in value between 1997-2001, % p.a. | Export trend in quantity between 1997-2001, % p.a. | Export growth in value between 2000-2001, % p.a. | Ranking of partner countries in world imports | Share of partner countries in world imports, % | Total import growth in value of partner countries between 1997-2001, % p.a. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| World | 10 131 | 100 | 612 | Tons | 15,076 | -2 | -2 | -9 | | | -2 |
| Germany | 5 508 | 57 | 443 | Tons | 13,111 | -6 | -3 | -24 | 5 | 13 | -14 |
| Netherlands | 1 528 | 15 | 78 | Tons | 20,846 | 11 | 22 | -24 | 9 | 2 | -10 |
| Austria | 1 336 | 13 | 88 | Tons | 15,362 | 135 | 86 | 0,2 | 11 | 2 | -7 |
| Croatia | 814 | 8 | 40 | Tons | 20,350 | 29 | 28 | -29 | 35 | 0 | 3 |
| Hungary | 110 | 2 | 14 | Tons | 12,143 | | | 161 | 53 | 0 | 4 |
| The former Yugoslav Rep. of Macedonia | 185 | 2 | 8 | Tons | 19,875 | 2 | 10 | -19 | 69 | 0 | -10 |
| Bosnia and Herzegovina | 125 | 1 | 8 | Tons | 15,625 | -5 | 5 | 89 | 57 | 0 | -9 |
| Italy | 43 | 0 | 3 | Tons | 14,333 | 139 | | -34 | 5 | 3 | 25 |
| Portugal | 24 | 0 | 1 | Tons | 24,000 | | | -20 | 25 | 1 | -14 |
| Poland | 11 | 0 | 0 | Tons | 1 222 | -10 | 0 | -8 | 16 | 1 | -13 |
| Russian Federation | 11 | 0 | 0 | No quantity | | | | -73 | 24 | 1 | -3 |

Source : ITC calculations based on COMTRADE statistics

Product's customs exercise in Slovenia | Supplying markets | World exchanges | World importers | Mirror data | Selection menu | Subject search | Help

## Table 16: List of importing markets for a product exported by Slovenia in 2001
### Mirror data

Product : 611511 Panty hose&tights,of synthetic fibre yarns <67 dtex,single yarn knitted
Figures are based on data reported to Comtrade by importing countries (mirror statistics)

| Importers | Exported value 2001 in US$ thousand | Share in Slovenia's exports, % | Exported quantity 2001 | Quantity unit | Unit value (US$/unit) | Export trend in value between 1997-2001, % p.a. | Export trend in quantity between 1997-2001, % p.a. | Export growth in value between 2000-2001, % p.a. | Ranking of partner countries in world imports | Share of partner countries in world imports, % | Total import growth in value of partner countries between 1997-2001, %, p.a. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | 9 073 | 100 | | | | | | | | | |
| Germany | 5 557 | 61 | 455 | Tons | 12,301 | -33 | -26 | -14 | 5 | 13 | -14 |
| Netherlands | 1 363 | 15 | 81 | Tons | 16,428 | 40 | 49 | 9 | 9 | 2 | -10 |
| Austria | 1 034 | 11 | 68 | Tons | 14,985 | 91 | 91 | 804 | 11 | 2 | -7 |
| Croatia | 166 | 2 | 41 | Tons | 19,220 | 30 | 30 | -33 | 35 | 0 | 3 |
| The former Yugoslav Rep. of Macedonia | 169 | 2 | 8 | Tons | 19,875 | 6 | 13 | -19 | 69 | 0 | -10 |
| Italy | 41 | 0 | 3 | Tons | 13,667 | 53 | 11 | -40 | 5 | 3 | 25 |
| France | 27 | 0 | 0 | No quantity | | -41 | | 35 | 2 | 11 | -4 |
| Russian Federation | 24 | 0 | 1 | Tons | 24,000 | | | -80 | 24 | 1 | -3 |
| Czech Republic | 20 | 0 | 3 | Tons | 6,667 | -1 | 25 | -69 | 36 | 1 | -10 |
| Latvia | 20 | 0 | 2 | Tons | 10,000 | 66 | | 29 | 33 | 0 | 8 |
| Slovenia | 16 | 0 | 4 | Tons | 4,000 | 21 | | -57 | 33 | 0 | -4 |
| Ireland | 16 | 0 | 0 | No quantity | | -16 | | -32 | 79 | 0 | -11 |

Source : ITC calculations based on COMTRADE statistics

Direct data | Selection menu | Help

Note that Yugoslavia, Bosnia and Herzegovina, Portugal in Table 15 are not shown in Table 16. This is due to the fact that these countries do not report statistics to the COMTRADE database. However, Poland is not shown in Table 16 and it is a reporting country. Perhaps

Slovenia re-exports to Poland and counts it as exports, while Poland may not consider Slovenia to be the country of origin and does not include it in imports.

Similarly, in Table 16 we see that France, the Czech Republic, Latvia, Slovakia and Iceland report imports from Slovenia, whereas Slovenia does not report exports to these countries. Maybe these countries consider Slovenia to be the country of origin, but Slovenia does not export to them directly and therefore does not include them in its export statistics.

In view of the above shortcomings, foreign trade statistics should never be the sole source of insight, but need to be complemented by other sources and in particular cross-checked by product specialists and industry insiders. Overall, ITC's experience suggests that trade statistics represent a very useful source of information and a valid point of departure for strategic market research, if analyzed with a healthy mix of skepticism and pragmatism vis-à-vis their strengths and shortcomings.



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