THE IMPACT OF INTERNATIONAL BUSINESS ACTIVITIES (EXPORTS) ON THE PROFITABILITY OF MANE KANCOR INGREDIENTS PVT LTD

Project Report

Submitted in partial fulfillment of the requirements

For the award of the degree of

MASTER OF BUSINESS ADMINISTRATION



University of Calicut

By

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(YPAWMBA008)

IV Semester MBA

Under the guidance of

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NAIPUNNYA BUSINESS SCHOOL

Affiliated to University of Calicut, Accredited by NAAC with B++
Approved by AICTE, ISO 9001:2015 Certified
Pongam, Koratty East, Thrissur Dist.

Kerala. Pin: 680 308 MBA 2022-2024

AUGUST 2024

DECLARATION

I, ALEENA SHALU hereby declare that the project report entitled "THE IMPACT

OF INTERNATIONAL BUSINESS ACTIVITIES (EXPORTS) ON THE

PROFITABILITY OF MANE KANCOR INGREDIENTS PVT LTD" has been

prepared by me submitted to the University of Calicut in partial fulfillment of the

requirement for the award of Master of Business Administration, is a record of

original work done by me under the supervision and guidance of Dr. Suraj E. S

Assistant Professor, Naipunnya Business School, Pongam, Koratty East, Thrissur.

I also declare that this Project work has not been submitted by me fully or partly for

the award of any Degree, Diploma, Title or recognition before any authority.

Place: Koratty East, Thrissur

Aleena Shalu

Date:

YPAWMBA008

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have been completed.

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providing moral guidance, assistance and encouragement throughout my project

work.

Place: Koratty East, Thrissur

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Date:

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CHAPTER-1 INTRODUCTION

1.1 INTRODUCTION

Mane Kancor Ingredients Pvt Ltd, a leading name in the spice industry, has significantly contributed to the global spice market through its extensive exports. Established with a vision to bring the authentic flavors of Indian spices to the world, the company has evolved into a key player in the spice export domain. Mane Kancor's journey is marked by a commitment to quality, innovation, and sustainability, ensuring that their products meet the highest standards of international markets. The company sources a wide range of spices directly from farmers, maintaining stringent quality control measures to preserve the natural essence and potency of each spice.

The export portfolio of Mane Kancor includes a diverse array of spices such as black pepper, turmeric, cardamom, and chili, among others. Each of these spices undergoes meticulous processing and packaging to retain their freshness and aroma, thereby enhancing their appeal in overseas markets. The company's state-of-the-art processing facilities are equipped with advanced technology that adheres to global food safety standards, ensuring that every batch of spice is free from contaminants and impurities. This dedication to quality has earned Mane Kancor numerous certifications, including ISO, HACCP, and organic certifications, which further solidify its reputation in the international market.

Innovation is another cornerstone of Mane Kancor's export strategy. The company continuously invests in research and development to create new spice blends and extracts that cater to the evolving tastes and preferences of global consumers. By leveraging its expertise in extraction and distillation processes, Mane Kancor offers a range of value-added products such as oleoresins, essential oils, and natural colors, which have found a significant market in the food, beverage, and cosmetic industries worldwide. These innovative products not only enhance the culinary experience but also provide natural and healthy alternatives to synthetic additives.

Sustainability is deeply ingrained in Mane Kancor's operational ethos.

The company emphasizes sustainable farming practices and works closely with farmers to promote environmentally friendly cultivation methods. By supporting fair trade practices and ensuring a fair price for farmers, Mane Kancor contributes to the socio-economic development of farming communities. This sustainable approach not only ensures a steady supply of high-quality raw materials but also strengthens the company's brand image as a socially responsible entity.

In conclusion, Mane Kancor Ingredients Pvt Ltd has established itself as a formidable force in the spice export industry through its unwavering commitment to quality, innovation, and sustainability. By delivering the rich and diverse flavours of Indian spices to the global market, the company continues to enhance its stature and expand its footprint worldwide.

1.2 STATEMENT OF PROBLEM

The unpredictability of exchange rates creates a substantial difficulty to spice extract firms' export activities, such Mane Kancor Ingredients Pvt Ltd. This issue is multidimensional and affects the company's profitability, pricing tactics, and market competitiveness. Exchange rate variations can cause unpredictability in revenue streams when translated to local currency, hindering financial planning and budgeting. For a corporation with a strong worldwide presence, such as Mane Kancor, which exports a significant amount of its products, these changes may harm profit margins if not managed properly.

1.3 OBJECTIVE OF THE STUDY

- To know the impact of international business activities on the revenue generated from foreign market.
- To know the influence of exchange rate fluctuations on the profitability of Mane Kancor Ingredients Ltd

1.4 SCOPE OF THE STUDY

This study aims to comprehensively analyze the impact of exchange rate fluctuations on the export operations of spice extract companies, with a particular focus on Mane Kancor Ingredients Pvt Ltd.

1.5.1 RESEARCH DESIGN

A research design is the systematic and structured plan or blueprint that specifies how a research study will be conducted. Analytical research is a type of research that involves breaking down complex information into smaller parts, examining and analyzing each component, and then reassembling the information to draw conclusions, identify patterns, and develop explanations. It aims to understand the underlying mechanisms, relationships, and structures that govern a particular phenomenon or issue.

1.5.2 SOURCES OF DATA

This study The Impact of Exporting Business at Mane Kancor is fully based on secondary data. The sources of data provided by the company. It includes the

- Exporting Product
- Exporting Country
- Quantity of the Product
- Value of the Product

1.5.3 PERIOD OF STUDY

The period of study in a project refers to the specific time frame during which data is collected and analyzed. This duration can span days, months, or years, depending on the project's objectives and scope. Defining the period of study is crucial as it determines the relevance and accuracy of the findings, ensuring they reflect the intended temporal context.

This study carried out for the period of 3 years 2021-2023.

1.5.4 HYPOTHESIS OF THE STUDY

In a study a hypothesis is a testable and specific statement or prediction that is proposed to answer a research question or the explain a particular phenomenon. It serves as a tentative proposition or educated guess about the relationship between two or more variables in the study.

Null Hypothesis (H₀): There is no significant relationship between exchange rates and revenue in INR for Mane Kancor Ingredients Pvt Ltd.

Alternative Hypothesis (H₁): There is a significant relationship between exchange rates and revenue in INR for Mane Kancor Ingredients Pvt Ltd.

Interpretation of Hypotheses

- **H**₀ (Null Hypothesis): There is no significant relation between exchange rate and revenue
- **H**₁ (Alternative Hypothesis): There is significant relation between exchange rate and revenue

1.6 LIMITATIONS OF THE STUDY

- **Short Study Period**: If the period of study is too short, it may not capture long-term trends and fluctuations, leading to results that may not be generalizable over a longer period.
- Data Availability and Accuracy: The study's accuracy depends on the
 availability and reliability of historical exchange rate data and revenue
 figures. Inaccurate or incomplete data can skew results and
 conclusions.

1.7 INDUSTRIAL PROFILE

International-Scenario

International trade in spices is currently estimated to be around 4000,000 tons annually, at approximately US\$1.5 billion. The total value depends to a large extent on the prevailing price of pepper, which is the leading spice on the world market. This trade has expanded steadily over the past two decades. Spices exports in the 1970-75 periods were only slightly more than half the present amount, at 222,000 tons (\$300 million) annually. From 1981 to 1985 the yearly average moved up to 350,000 tons (\$1 billion). It is expected that import volume will continue to grow even beyond the current level, but the rate will vary from country to country and from one spice to another. Import values may not, however, follow the same upward trend, depending on the price level of individual spices, and in particular of pepper. Over the last several years prices of almost all spices, and particularly pepper, have gone down dramatically, primarily because of excess supply. In many cases market prices have been below production costs. This pattern likely to continue for another two or three

years. The result will probably be lower levels of production, which in turn may help to raise prices somewhat over the medium term. The United States is the world 's largest importer of spices. Its foreign purchase in 1991 (including spice herbs, mustard and sesame seeds) came to 242,719 tons, valued at \$395 million, compared with 239,960 tons (\$385 million) in 1990. The Canadian market for spices is relatively small, importing approximately 12,000 tons annually. Among other European markets, the principal importers are Austria, Sweden, Norway, Finland and Switzerland. Sweden and Finland are major consumers of cardamom., In recent years, markets in the Middle East, in particular Saudi Arabia, have accounted for a sustainable and increasing share of the spice trade, in terms of value, largely because of considerable imports of cardamom and pepper. These markets hold a share of over 80% of total world consumption of cardamom.

Morocco, Algeria and Libya are largest purchasers of pepper, but demand in these three closely tied to price levels. In the Asian and Pacific region, the major spice importer in Japan, the third largest market for spices in the world, followed at some distance by Australia and New Zealand. India is the world 's largest producer and overall consumer of spices. Although domestic consumption Singapore and Hong Kong is the small, the importance of the former, in particular, in the interparty trade of spices still remains considerable. Pepper, mainly from Indonesia and more recently from Vietnam, passes through Singapore to the main consuming markets. It is estimated that around one fifth of the pepper entering international trade moves through Singapore. During the last two decades fundamental changes have occurred in the structure of the spice trade, in both exporting and importing countries, which have influenced the pattern of this trade. Since the early days of the spice and herb trade, the industry has become progressively more concentrated. The demand and prices of spices and herbs fluctuate with global weather patterns, past production levels and changes in consumer and manufacturer preferences. In recent years, an increase in the number of countries supplying spices and herbs has led to an overall drop in the market price. These factors can make it very difficult for small-scale farmers to make a decent living.

National Scenario

The global demand for Indian spices continues to rise, with shipments reaching over 140 countries worldwide. These aromatic and flavorful spices have captivated the world, with their exceptional qualities leaving a lasting impression on discerning consumers. With an extensive selection of 52 spices and related goods in our export baskets, customers are delighted by the diverse range of options available from India. It is no surprise that India has been established as the leading source for high-quality spices.

In this thriving industry, there are currently 2100 registered exporters in India's spice business sector, with 100 of them responsible for approximately 80% of all exports. Significantly, 98 out of the total 380 manufacturer- exporters have invested in internal laboratories to ensure consistent quality standards. Additionally, 35 manufacturers have obtained ISO 9000 certification from the Spices Board, further solidifying India's reputation for excellence in spice production.

Furthermore, over twenty processing facilities have upgraded their technology to meet consumer demands and comply with stringent international quality standards. This continuous effort towards modernization is a testament to our commitment to providing customers with nothing but the best when it comes to Indian spices. The widespread distribution and admiration for Indian spices serve as a testament to the country's rich history and expertise in this industry. With strict quality control measures in place and constant advancements being made in technology, we are confident that our exported spices will continue to impress and satisfy customers around the globe.

Growth in Spice Market

The Indian spice market has shown remarkable growth in spice and culinary herbs exports. Indian spices manufacturers are making substantial efforts to improve the quality of spices backed up technological advancement in order to tap the international market.

Advanced technologies such as carbon dioxide extraction, cry grinding, encapsulation of spices oil is being undertaken to ensure high quality of spices and their derivatives.

State Scenario

Kerala is a land of spices considering the large variety of spice grown in the state. Kerala had trade relations with Persia, ancient Europe, ancient Singapore and other Eastern countries. Kerala attracted foreigners only because of its abundant resources of spices. Pepper and 'Black Gold's it otherwise known is the sole reason why the European were particular in building the Suez Canal so they could reach the coast of Kerala with very less amount of time. Kerala plays a major role in the production and export of spices from India. Human substance pattern in Kerala were shaped primarily by its physical, climatic and ecological characteristics. The greatest natural endowed of this humid –tropic region was the existence of a high degree of biodiversity. The agricultural settlements of Kerala which evolved nearly 2000 years ago have depended on this bio diversity as their prime resources. Kerala is renowned the world over for being the major producers and exporter of pepper, better known as the 'king of spices. The most popular among the spices are pepper, cardamom, turmeric, chilies, and ginger. Pepper, known as the king of spices is perhaps the world 's oldest known spice and is cultivated in over 158000 hectares in Kerala, which account for 96% of the total production in the country. In Kerala, Kancor have fewer competitors owing to the smaller number of players in the field. The main competition is from synthetic industries. The other players in the state are:

Synthite Industrial Chemical limited

1.8 COMPANY PROFILE



Mane Kancor Ingredients Private Limited is a pioneer in Global Spice Extraction, whose roots can be traced back to 1857 Cochin. Mane Kancor specialises in complete natural food ingredient solutions from sustainable sourcing of raw materials, clean extracts, advanced research, and formulation. Mane Kancor has a presence in over 100 countries, regional distribution centers worldwide, and multi-locational factories in India.

The formula for the company's success lies in its sense of unyielding commitment to excellence. With its global sourcing programmers, Mane Kancor makes sure to work closely with the farmers to enrich their work and livelihoods. The initiatives of backward integration for specific crops and community development have already seen very positive responses. This sense of commitment continues in its facilities, where state-of-the- art plants deal with the delicate and intricate processes of extraction, distillation, and purification of actives. Mane Kancor's R&D division tirelessly innovates to fulfil complex orders from various industries- a knowledge base that has been expanding for decades. Our specializations include a full range of Oleoresins, Essential oils, Floral extracts, Natural antioxidants, Natural Colors, Culinary ingredients, Delivery platforms, and Organic Ingredients. Every product adheres to global standards, and Mane Kancor is certified with FSSC 22000, ISO 9001, ISO 14001, ISO 45001, ISO 50001, HACCP & GMP, RSPO & FAMI – QS. Our Products

are also certified for Halal, Kosher, and Organic (NPOP, NOP & EOS). Mane Kancor has also partnered with SEDEX as an ethical and responsible supplier. Mane Kancor's labs are equipped with sophisticated equipment to meet the current food safety requirement and are accredited by NABL.

1.8.1 History of Mane Kancor

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1.8.2 Origin of the name Mane Kancor

Kanji Moraji, grandfather of Chairman J.V M Mariwala was the founder of Mariwala group & Bombay oil Industry In 1990, Bombay oil Industry had a joint venture with Mc Cormick a leading American food company specializing in spices. This venture was named Kancor taken from Kanji's –Kan & MC Cormick's Cor & thus KANCOR. This Mariwala Family has been in spice business for an over a century. They started business operated in 1911 a Kanji Moraji trading in spice like pepper, ginger and turmeric.

In 1935, Vallabha Das Kanji ltd formed in Alleppey, Kerala to source and procures spices and copra in 1947. Bombay oil industries (BOI) established to refine coconut, groundnut and other oils; pioneering branded packaged consumers' products like parachute coconut oils, and saffola in Kerala in1970, BOI started oleoresins and botanical extracts division in Angamaly, Kerala.

The whole group restructured itself in 1989, the division into independent companies for each line of business.

- Oleoresins divisions became KANCOR Flavor and Extracts Limited (KFEL)
- Spices exports Organized under Vallabhadas Kanji Ltd (VKL)
- Stearic acids and Castrol oil remained with BOI
- Consumer production division became Morico Ltd.

In 1990, KFEL became a joint venture between the J V Mariwala groups (60%) and Mc Cormick and Co. Linc 40%. In 1996, the J V Mariwala group required Mc Cormicks 40% holding. The group' main food businesses are KANCOR, VKL and KM food Ingredients.

In 2007, January 1 the name of the KANCOR Flavour and Extracts Ltd changed to KANCOR Ingredients Limited.

1.8.3 Fast Moving Consumer Goods Industry

The fast-moving consumer goods (FMCG) industry is a broad term that encompasses a wide range of products, including food, beverages, personal care items, and household goods. FMCGs are typically low-cost, high- volume items that are sold through a variety of channels, including supermarkets, convenience stores, and online retailers. The FMCG industry is a global industry, with major players operating in all major markets. The industry is highly competitive, with companies constantly innovating and developing new products to meet the needs of consumers. The FMCG industry is also a major driver of economic growth. In many countries, FMCGs account for a significant share of total retail sales. The industry also employs millions of people around the world. The FMCG industry is facing a number of challenges, including changing consumer preferences, rising competition, and the increasing cost of doing business. However, the industry is also well-positioned to grow in the future, thanks to factors such as rising incomes, urbanization, and population growth.

1.8.4 Board of Directors

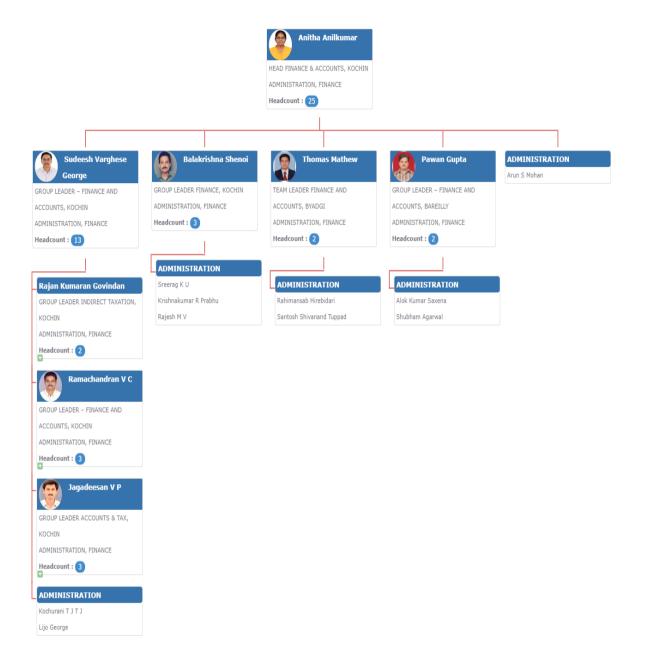
- 1. Jean M. Mane Chairman
- 2. Geemon Korah Executive Director and CEO.

1.8.5 Finance Functions

The main functions of the Finance department involve

- Financial Planning and Analysis
- Accounting and Reporting
- Treasury Management
- Taxation
- Cost Management
- Internal Controls and Risk Management
- Strategic Financial Management
- Investor Relations

1.8.6 Organizational Structure



1.8.7 Vision And Mission of The Organization

Vision

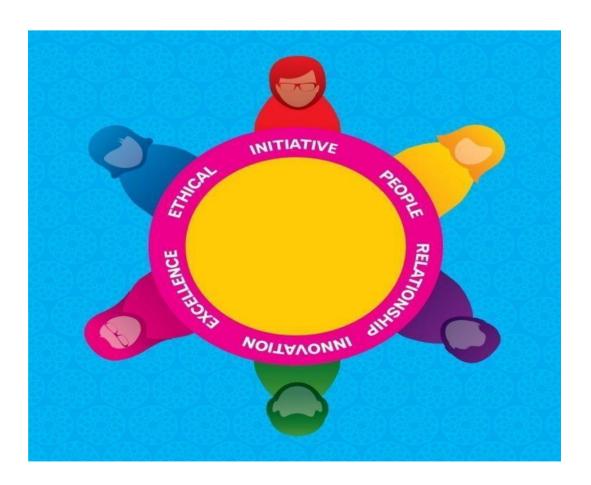
Our vision is to be the global partner of choice for our customers, to enhance their product appeal and increase our stakeholder value.

Mission

Our mission is to enrich lives globally by providing unique natural ingredient solutions.

Values

At Mane Kancor, we believe that vision and values function together, always. Values guide our daily actions, interactions and decisions in our journey toward achieving vision.



1.8.8 Business Process of Mane Kancor

- Steam Distillation.
- Solvent Extraction.
- Super Critical CO2 Extraction.
- Fractional Distillation.
- Crystallization
- Colour Formulation

Steam Distillation

Steam Distillation is used for distilling volatile components from various raw materials, like spices, seeds, leaves, roots etc. These oils are generally recovered by directly applying steam to raw material followed by condensation of the distillate. The temperature of the steam needs to be carefully controlled – just enough to force the plant material to let go of the essential oil, yet not too hot as to burn the plant material or the essential oil. Different components of these essential oils contribute to the characteristic fragrance and aroma. These oils can be customized to meet the exact requirement ofthe user.

Solvent Extraction

Solvent extraction is used to recover the active ingredients from the raw materials. Organic solvents are used as medium for extracting the required active components. The resultant miscella is subjected to desolemnization process there by delivering products commonly known as oleoresins with minimal solvent residues. Oleoresins meet all customer and regulatory requirements and can replace whole/ground spices without impairing any flavor and aroma characteristics. Oleoresins guarantee superior quality of flavor and aroma. Oleoresins are mainly used in processed meat, fish, vegetables, soups, sauces, chutneys & dressings, cheeses & other dairy products, baked foods, confectionery,

snacks and beverages.

Supercritical CO2 Extraction Fractional Distillation

The process of Fractional Distillation is a technique used to isolate or purify various components present in essential oils. Fractional distillation separates the volatile oil in different fractions or portions at various boiling points. The essential oil is evaporated in the fractionating column and its vapors are allowed to condense at different temperatures. A process of rectification is used to obtain the product in the purest form possible. Fractional Distillation is typically performed in large, vertical cylindrical columns known as 'distillation or fractionation towers' or 'distillation columns. The distillation towers have liquid outlets at intervals up the column, which allow withdrawal of different fractions or products having different boiling points or boiling ranges. By increasing the temperature of the product inside the columns, the different volatile components are separated. The 'lightest' products (those with the lowest boiling point) exit from the top of the columns and the 'heaviest' products (those with the highest boiling point) exit from the bottom of the column.

Crystallization

Crystallization is a separation and purification process. It is a phase change in which a crystalline product is obtained from a solution. Crystallization takes place only when a solution reaches supersaturation stage. By changing temperature (mainly, cooling) we achieve super-saturation stage.

The crystallization process consists of two major events – Nucleation & Crystal Growth. The first step is the phase separation of new crystals. The second is the growth of these crystals to a larger size. These two processes are known as nucleation and crystal growth, respectively.

We, at Mane Kancor, have deployed our own proprietary technology to conduct crystallization by the method of temperature change. The process is fully automated through the use of enclosed crystallization chambers, Programmable Logic Controller (PLC) and SCADA that help us avoid human error, thereby increasing batch yield and reduced cycle time.

Color Hue and Stability Management Process

C-CAPTURE's stabilization process is a substrate-specific systemic approach of carefully controlling the processing technology and the addition of in-house natural anti-oxidant, OxiKan. Mane Kancor uses advanced processing technology that creates high stability natural colours, without the addition of extra ingredients, making each product as label-friendly as possible. The colour range at Mane Kancor is produced using controlled particle size delivery platforms and colour dispersion technology. This advanced high energy method uses intense mechanical forces to break up macroscopic phases into smaller droplets.

The small size of the pigments has a number of potential benefits such as enhanced long-term stability, high optical clarity and increased expression in application. In addition to colour stability, it is important that our customer gets the same consistent hue every time; this is managed by controlling varied parameters in the agricultural and manufacturing processes.

1.8.9 Product Profile

1. Spice Oleoresins

Spice oleoresins are solvent-extracted residues that might be liquid, semi-solid, or solid and have the complete flavour of real spices. Essential oils, fixed oils, pigments, spicy ingredients, and natural antioxidants are an oleoresin's primary elements.

2. Essential Oil

The caliber of the oleoresins that Kancor produces reflects its skill in sourcing and extraction. Kancor's Oleoresins offer constancy in flavour and scent, maintaining the product's original flavour.

The concentrated liquid form of basic materials is called oleoresins. They are obtained through solvent extraction and solvent removal. Both volatile and non-volatile components are present. Kancor accurately mimics the characteristics of the relevant raw ingredients.

3. Mint, Menthol and Isolates

Kancor has had a long-standing, unparalleled relationship with the mint business. Proficiency in extracting menthol and mint essence. India has been the most competitive supplier among the nations that produce mint globally. Kancor has committed significant efforts to developing a robust supply chain in the mint-producing regions of distillation and crystallization facilities in response to India's rising power. To extract the finest molecules of mint isolates, it also features fractional distillation columns in addition to steam.

4. Floral Extracts

Kancor offers a variety of top-notch flower extracts thanks to its access to newly gathered blossoms of high quality and superior processing technology. Kancor's flower extracts offer a wide range of uses in cosmetics, aromatherapy, and perfumery and improve fragrance delivery in the finished product. It is challenging to extract aromatic compounds from flora, in part because these molecules are sensitive to steam. Kancor meticulously monitors the production parameters and isolates these mouth-watering fragrances using solvent extraction.

5. Cardamom Oleoresin

Cardamom is a member of the Zingiberaceae family. Cardamom seeds are frequently used as a spice. The seeds of Elletaria cardamom (L) Maton are extracted using a solvent to produce cardamom oleoresins. The product is a free-flowing liquid that ranges in colour from green to dark brown and has the distinct cardamom scent.

6. Clove Oleoresin

The fragrant flower buds known as cloves come from a tree in the Myrtaceae family and are frequently used in cooking. By solvent extracting dried flower buds of Eugenia caryophyllata, clove oleoresins are produced. The product has a strong clove bud aroma and a strong flavour. It is a uniform, freely flowing dark brown liquid.

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9. Black Pepper Oleoresin

The Piperaceae family includes black pepper. Since ancient times, it has been a very well-liked spice and is frequently referred to as the "King of spices." In seasonings and as a spice, pepper is often dried. Ground- dried berries of the Piper nigrum L. are extracted using a solvent to produce black pepper oleoresin. The end product has a pungency undertone and the distinctive perfume of black pepper. The flavour starts out mildly warm and nice before becoming strong and unpleasant. It is a thick liquid that varies in hue from dark to olive green. Leading supplier of black pepper oleoresin is Mane Kancor. We export our black pepper extract to more than 75 nations and it complies with international food safety standards.

10.Granort Tea Masala

Spice extracts are provided using Mane Kancor's proprietary delivery system, Granor, in a free-flowing granular shape. This gives the food matrix a crunchy feel. Tea masala is a mixture of spices based on the Masala Chai recipe that is well-known in Northern India. Granor Tea Masala has earthy, toasty aromas that are typical with masala chai. It includes food-grade emulsifiers, excipients, and spice oleoresins.

11. Capsicum Oleoresin

A genus of flowering plants in the nightshade family. Solanaceae, is called capsicum. It is becoming a crucial spice in many different cuisines. Capsicum annum L. or Capsicum fruitescens L. dried, ripe fruits are extracted with a solvent to produce capsicum oleoresin. The item has a strong scent reminiscent of freshly powdered, dried red capsicum. When tasting the flavour diluted, there is a harsh, pungent feeling. It is a homogenous, reddish-brown liquid that is viscous. Leading provider of capsicum oleoresin is Mane Kancor. We export our capsicum extract to more than 75 nations and it complies with international requirements for food safety.

12. Capsicum Oleoresin Decolourised

Capsicum is a genus of flowering plants in the nightshade family, Solanaceae. It has become a key spice in many cuisines, Capsicum De-colourised Oleoresin is obtained by the solvent extraction of dried ripe fruits of Capsicum annum L or Capsicum frutescent L. During extraction, capsicum undergoes a decolorization process. The product has a pungent aroma, characteristic of freshly ground, dried, red capsicum. There is a sharp, pungent sensation when flavour is evaluated in dilution. It is a free-flowing, homogeneous liquid that is yellowish to brownish-red in colour.

13. Curcumin Powder

Using solvent extraction on ground-dried rhizomes of Curcuma longa L., 95% of the curcumin in turmeric is extracted as curcumin powder. A free-flowing, orange-yellow powder characterises it. The product has a distinctive earthy, musky aroma that is indicative of turmeric, as well as a little bitter aftertaste.

14.Roasted Cumin Oleoresin

Industrially speaking, Mane Kancor's Roasted Cumin Oleoresins imitate a cooking environment. With these items, you always get the ideal cooked flavour notes according to your unique requirements. The extraction of ground, roasted cumin seeds yield roasted cumin oleoresins. It has a warm, earthy flavour and is a thick, dark brown colour. Natural extracts of roasted cumin seeds and approved emulsifiers of food grade make up the product.

15. Roasted Coriander Oleoresin

Mane Kancor's Roasted Coriander Oleoresins industrially replicate the feeling of cooking in a home. With these items, you always get the ideal cooked flavour notes according to your unique requirements.

The extraction of roasted coriander seeds yields roasted coriander oleoresin. It is a free-flowing, dark brownish liquid with a moderate nutty flavour and a lovely citrus scent. Natural extracts of roasted coriander and approved food grade emulsifying agents make up the product

16.Roasted Garlic Oleoresin

Industrially speaking, Mane Kancor's Roasted Garlic Oleoresins replicate a cooking environment. With these items, you always get the ideal cooked flavour notes according to your unique requirements. The extraction of roasted garlic flakes yields roasted garlic oleoresin. It is a thick, viscous liquid with a spicy flavour and an offensive fragrance. Natural roasted garlic extracts and approvedfood-grade emulsifying ingredients make up the product.

17. Roasted Onion Oleoresin

Industrially speaking, Mane Kancor's Roasted Onion Oleoresins imitate a cooking experience. With these items, you always get the ideal cooked flavour notes according to your unique requirements. The extraction of roasted onion flakes yields roasted onion oleoresin. It is a viscous, dark brownish liquid with a caramelised fragrance and a moderately sour, sweet taste. Natural roasted onion extracts and approved food-grade emulsifying ingredients make up the product.

18. White Pepper Oleoresin

The darker-coloured skin of the pepper fruit is removed to get white pepper, which is just the pepper plant's seed. This is typically done through a procedure called retting, in which fully ripe red pepper berries are submerged in water for about a week, allowing the pepper's flesh to soften and degrade.

White pepper is frequently used in salads, Chinese and Thai food, and cream sauces. The decorticated, ground- dried berries of Piper nigrum L. are extracted using a solvent to produce white pepper oleoresin.

19. Turmeric Oleoresin

At room temperature, turmeric oleoresin deodorised is a homogenous liquid made from the crushed, dried rhizomes of Curcuma longa L. that have been extracted using a solvent. There is barely any turmeric odour in the product. It is an orange-yellow to reddish-brown homogenous liquid that ranges in viscosity from freely flowing.

20. Pipevine Powder Oleoresin

When ground-dried berries of the Piper nigrum L. plant is extracted using a solvent, the pure natural extract of pepper, or pipevine, is obtained. It is a free-flowing, crystalline powder that ranges in colour from light green to off white and has the peppery taste and bite.

21.Dill Oleoresin

The product is natural and made from dried dill seed seeds that have undergone solvent extraction (Anethumgraveolens).

22. Mustard Oleoresin

The Brassicaceae family includes mustard. Cooks often utilise mustard seeds. Particularly in sauces. By steam distilling or extracting the pulverised seeds of Brassica SP. Mustard oleoresin is produced. The product is lachrymatory and has a strong odour. Liquid is a light-yellow colour.

23.Mace Oleoresin

The lacy reddish aril, or covering, of the nutmeg seed is known as mace. The Myristicaceae family includes nutmeg. By solvent extracting the arils or skin covering the nutmeg's shell, specifically Myristica fragrans Houtt, mace oleoresin is produced. The product has a warm flavour and the distinctively delicate mace aroma. It is a freely flowing, reddish-yellow liquid.

24. Anthocyanins

Numerous flowers, fruits, and vegetables contain anthocyanins, which give them their reddish-purple hues. Anthocyanins display a range of colours depending on the pH, going from red to purple to blue as the pH rises.

Because of this, it's crucial to understand the pH of the food product being coloured while utilising anthocyanin colour. Colours made from anthocyanins are more stable below pH 4 and are frequently employed in foods that are acidic. The water-soluble anthocyanin pigments may resist brief bursts of moderate heating.

25. Curcumin

The vivid, golden-yellow component in turmeric is called curcumin. Many cultures have used turmeric for ages as a popular ingredient to colour and flavour meals. It not only gives meals a distinct flavour but also a bright yellow colour. The dried tuber or rhizome of the turmeric plant, Curcuma longa, is ground, and then curcumin is extracted by an extraction process. The flavour can be kept or removed throughout the extractionprocedure. Although curcumin is an oil-soluble pigment, emulsification technology can make it water-soluble. Spraying powder formulations onto an appropriate carrier way to create them.

26.Spirulina

Spirulina may be found under Products Natural Colours Pigments. SPIRULINAS The dried biomass of Arthrospira platensis is what gives pirulina its naturally occurring blue colour. Cyanobacteria's primary colouring pigment, phycocyanin, is crucial to the process of photosynthesis. This natural colour can be used in frostings, ice cream and frozen desserts, dessert coatings and toppings, beverage mixes and powders, yoghurts, puddings, custards, cottage cheese, gelatine, breadcrumbs, and similar food applications with a PH>5. Spirulina is a naturally occurring, water-soluble pigment.

27. Carotneoids

The carotenoids in Mane Kancor come from paprika. Due to its high pigment concentration and versatility as a spice and culinary colour, it is widely utilised in the food business. Red pepper cultivars that have been dried and powdered produce carotenoids. It includes several carotenoid pigments, the three primary ones giving food and beverages an orange-red hue being beta-carotene, capsanthin, and capsorubin. The maturity of the capsicum plant, the species of plant, the producing environment, and the culture method all affect how much colour is present.

28.Betanin

Beetroot is the primary ingestible source of betanin. Like anthocyanin, betanin is a water-soluble pigment. Beetroot juice used for colouring is pasteurised to kill microorganisms. Up to 70% sucrose and 0.5% betanin pigment may be present.

By fermenting the juice and eliminating the alcohol during a concentration phase, the colour content can be boosted. Additionally, beetroot juice can be sprayed dried onto a support to create a powder. Betanin has a powerful hue. Therefore, compared to other natural pigments, the amounts needed to colour food or beverages are often lower.

29.Bixin And Norbixin

The seeds of the Bixa Orellana bush, which grows in Central and South America, are used to make annatto pigment. Since ancient times, annatto has been used as a food colouring and is the source of the pigments bixin and norbixin. Oil soluble bixin is isolated. From the seed covering. It is appropriate for applications dependent on fat and oil, such as margarine and other fat emulsions and extruded savoury treats. Norbixin, a second water-soluble pigment produced by alkaline hydrolysis of annatto, is used in products like fine bakery, breakfast cereals, cheese, confectionery, and salad dressings.

30. Black Pepper Supercritical Co2 Extract

Supercritical CO2 extraction of ground-dry pepper berries yields Mane Kancor's Supercritical CO2 Black Pepper Extract. By using high pressures and ambient temperatures, this procedure prevents actives from degrading and aromas from being lost. The substance is a thick, dark green to olive green liquid with an overarching pungent scent and the distinctive aroma of black pepper. It starts out with a mildly warm, agreeable flavour before turning pungent and biting. Additionally, this product is a pure, natural extract free of antioxidants or preservatives.

31.Saffron Extract

The carefully chosen stigma of the saffron flower are extracted with a solvent to create Mane Kancor's Saffron Extract, Saffranal, its aromatic component, is volatile and sensitive by nature, thus extra care is taken when extracting it. This unusual extract has a crimson colour and tastes somewhat sweet and hay-like. When compared to the expensive saffron that is sold in the market, saffron extracts are a more affordable option. The Crocus sativus flower, which is indigenous to India and the Eastern Mediterranean, yields the distinctive spice known as saffron. Saffron is utilised for its colour and mild flavour in addition to having a number of health advantages.

32.Cocoa Extract

Mane Kancor's cocoa extracts are made from specially selected parts of cocoa, extracted and concentrated under vacuum. This process preserves the true cocoa flavour profile. Cocoa plays major role in the flavour industry. Research has proven that cocoa is full of wholesome goodness — a bunch of anti-oxidants, a pinch of polyphenols and plenty of anti-carcinogens.

33. Asafetida Extract

Asafetida is the dried latex exuded from the taproot of several species of Ferule, an herb that grows in mountainous regions. It is a flavour enhancer that is widely used in Indian cuisine to harmonies sweet, sour, salty and spicy components in food. Asafetida increases salivation, resulting in better solubility of flavours, providing a great mouth feel.

34.Herb Oleoresin

The natural, concentrated flavour characteristics of various culinary items are provided by Mane Kancor's Herb Oleoresins. They are effective tools for expanding your palate and plate. Various foods and beverages use herb oleoresins to enhance flavour. The leafy green components of plants utilised for food, flavouring, medicine, or perfume are known as herbs. Both fresh and dried versions can be used. Herbs like basil, oregano, rosemary, dill, and thyme are typical examples. Both indoor and outdoor herb gardens are viable options.

35.Oxikan Cl

The ultimate solution for increasing the shelf life of perishable goods is Oxikan CL from Mane Kancor. A more refined extract of rosemary serves as our secret ingredient. The shelf life of this decolorized Rosemary Extract has been successfully extended without any discemible or obvious indicators of deterioration in the product's freshness. It functions essentially as an odourless, colourless antioxidant that can be used in delicate products like mayonnaise, fish oils, specialty fats, flavouring agents, cosmetic and personal care compounds, and essential oils.

36. Jasmine Grandiflorum

Jasmine is a native of China, northern India, and western Asia. In India alone, there are up to 43 different species of jasmine. The pinnacle of floral essences is our extract of India's Jasmine, known as the "King of Flowers." Jasminum Grandiflorum L. flower petals are extracted with a solvent to create Jasmine Grandiflorum Concrete. Jasmine Grandiflorum Absolute is created by additional solvent extraction from this Concrete. It's also noteworthy to know that just a few grammes of pure jasmine concretes and absolutes are made from thousands of meticulously hand-picked blooms.

37.De-Mentholized Pepper Mint Oil

The natural product is made from overground sections of the Mentha Arvensis plant that have undergone dementholization and steam distillation. It is a clear, light-yellow liquid that flows freely and has a distinctively terpinic, minty smell. Deep-freezing and centrifuging are used to process mentha arvensis oil to create dementholized peppermint oil, which has 1-menthol as its major component and ranges in concentration from 30% to 56%. Isomenthone, neomenthol, I-menthone, 1-limonene, methyl acetate, pulegone, pipretone, alpha pinene, and beta pinene are some of the other primary chemical components of dementholised mint oil

38. Thymol Isolate

Thymol is a naturally occurring monoterpene phenol derivative of cymene. C10H140, and isomeric with carvacrol. It is found in the oil of ajowan, Trachyspermum ammil. The product is made by fractionally distilling ajowan oil and then crystallising it. The substance is crystalline in form and ranges in colour from white to reddish brown. Mouthwashes, cosmetic products, and flavourings all use thymol.

39. Pink Lotus Extract

Ancient lotus flowers have long been connected to India's history, culture, religion, classical literature, arts, and crafts. It should come as no surprise that the lotus is India's national flower. Numerous mythical tales, epics, religious texts, Sanskrit literature, and historical accounts all contain descriptions of the flower. The cross section of a lotus flower even served as the inspiration for Mane Kancor's emblem. Our Pink Lotus Absolute is produced through the solvent extraction of Pink Lotus Concrete from Nelumbo Nucifera flowers. Soft and alluring is the sticky, molasses-like, reddish-brown Absolute of Pink Lotus. So, it should come as no surprise that the lotus has long been cherished as a sacred image of devotion and enlightenment.

40.Mimosa Extract

Mimosas are members of the Acacia plant family, which also yields cassie's essence. Flowers on acacias have a pleasant scent. Acacia decurrens var. dealbata and Acacia farnesiana are the only two species utilised in fragrance. Our mimosa concrete and mimosa absolute are made by solvent extracting the Acacia Decurren's flora. These are frequently employed in aromatherapy, cosmetics, and fragrance.

28

41. Ajowan Essential Oil

A Popular annual herb belonging to the Apiaceae family is ajowan. Popular in Indian cooking, this spice. Trachyspermum ammi L.'s dried seeds are steam-distilled to produce the essential oil of ajowan. The substance is liquid and ranges in colour from pale yellow. To brownish yellow. It smells cyminic, as is typical, with a thymolic aftertaste. Gama terpinene P-Cymene and Thymol are the two main ingredients of ajowan oil. Mostly, the product is utilised in flavour preparations.

1.8.10 Swot Analysis of Mane Kancor

SWOT stands for Strengths, Weaknesses, Opportunities, and Threats. It is a strategic planning tool used to assess the internal and external factors that can impact a company's performance. Here's how the SWOT analysis could be applied to Mane Kancor:

Strengths:

Established Brand: Mane Kancor may have a strong brand presence in the flavor and fragrance industry.

Diverse Product Portfolio: The company may offer a wide range of flavor and fragrance products, catering to various industries.

Technological Expertise: Mane Kancor may possess advanced research and development capabilities, leading to innovative products.

Global Presence: The company may have a widespread international presence, accessing various markets. Strong Customer Relationships:

Mane Kancor have long-standing relationships with key customers.

Weaknesses:

Dependency on Key Customers: The company may be reliant on a few major customers for a significant portion of its revenue, making it vulnerable to their business fluctuations.

Limited Geographic Reach: Mane Kancor might face challenges in entering or expanding into certain markets due to regional restrictions or competition.

Product Concentration: The company may have a heavy reliance on certain flagship products, making it susceptible to changes in demand or competition.

Opportunities:

Growing Flavor and Fragrance Market: Mane Kancor could capitalize on the increasing demand for natural and innovative flavors and fragrances globally.

Expansion into Emerging Markets: There may be opportunities for Mane Kancor

to enter and expand in emerging markets with untapped potential.

Diversification of Product Offerings: The company could explore the development of new product lines or applications beyond flavors and fragrances.

Acquisitions and Partnerships: Mane Kancor could consider strategic acquisitions or partnerships to expand its market presence or enhance capabilities.

Threats:

Intense Competition: The flavor and fragrance industry may have numerous competitors, posing a threat to Mane Kancor's market share.

Fluctuating Raw Material Prices: Changes in the prices of key raw materials may impact the company's production costs and profitability.

Regulatory and Compliance Challenges: Mane Kancor could face hurdles due to changing regulations and compliance requirements in different regions.

Economic and Political Instabilities: Global economic downturns or geopolitical uncertainties may affect the

company's operations and market access.

CHAPTER 2 REVIEW OF LITERATURE & THEORETICAL FRAMEWORK

2.1 REVIEW OF LITERATURE

INTRODUCTION

A review of literature, often known as a literature review, is a critical assessment and synthesis of previous research on a certain topic. It fulfils various essential functions in academic and research settings. To begin, a literature review summarizes and analyses the findings of previous research to determine the current level of knowledge on a topic. This procedure includes identifying major topics, concepts, theories, techniques, and gaps in previous research. Researchers might contextualize their individual work within the larger area, emphasizing its importance and relevance.

A literature review helps to identify research topics and hypotheses. By reviewing the current literature, researchers might identify unsolved difficulties or conflicts in earlier studies, which may lead to new study possibilities. This technique of identifying knowledge gaps helps to justify the necessity for future exploration while also contributing to the study's theoretical foundation. Furthermore, a well-conducted literature review indicates the researcher's familiarity with the topic matter and builds credibility by demonstrating a complete comprehension of relevant literature.

A literature review is essential for preventing duplication of effort. Instead of duplicating previously done investigations, researchers might expand on prior findings by synthesizing existing data. This not only saves time and resources, but also helps to the overall growth of knowledge. Furthermore, a literature review lays the groundwork for addressing the implications of results and their prospective applications. Overall, a thorough literature analysis is required for doing rigorous and significant research that adds value to the subject.

- 1 R. NAGARAJAN 2024: The Indian spice industry in attaining the vision of becoming the international processing hub and premier supplier of clean and value-added spices and herbs to the industrial, retail and food service segments of the global spices market. Spices export from India continued its upward trend and crossed the milestone of US \$ 4 billion mark for the first time in the history of spices export. India produces 75 out of the 109 spices listed out by the International Organization for Standardization (ISO), earning the name 'Spice Bowl of the World'. Indian spices export basket also is diverse and vibrant with around 225 spices and spice products which are exported to more than 180 countries. Indian spice exports contribute nine Percent to India's total agri-export and over 40 Percent of India's horticultural exports. The leading destinations among them were China, the USA, Bangladesh, Thailand, the UAE, Sri Lanka, Malaysia, the UK, Indonesia, and Germany. These nine destinations contributed more than 70 Percent of the total export earnings. There is high competition as spices economy has shifted to consumer driven enterprises, rather than producer driven economy. India emerged as a reliable supply of spices to the world market.
- **2 Korhan Arun, 2023** In this paper, the authors analyzed the effects of environmental competitiveness on export performance by examining the moderating roles of these variables and found that competitor orientation positively affects the relationship between a competitive environment and export performance.
- 3 Abebe Birara Dessie (2020): An increasing demand of black cumin seed and oil in local, national and international market for medicinal, consumption and commercial purpose makes the best alternative crop for small holder farmers in Ethiopia. In spite of its importance, not much has been done to improve its production and productivity in Ethiopia. Therefore, this research was designed to examining efficiency variations and factors influencing technical inefficiency levels of producers on black cumin production in northwest Ethiopia. Primary data were collected using a semi-structured questionnaire administered on 188 black cumin producers selected using systematic random sampling technique. The empirical result obtained by applying maximum likelihood estimate of stochastic frontier model revealed that seed (p < 0.01) labor (p < 0.05), chemical

(p < 0.01) and land (p < 0.05) were significant input variables in determining black cumin production. The mean technical efficiency level of black cumin producer was generally low, about 53.1%. The mean value of actual yield, potential yield and yield gap was 3.131, 5.832 and 2.701 quintals, respectively. Moreover, the result of stochastic frontier model together with the inefficiency parameters revealed that market price of black cumin (p < 0.01) and access of extension service (p < 0.1) were significant variables and positively influenced the efficiency levels of black cumin producers.

4 Tejada Moral, Manuel (2020): This paper attempts to describe the status, challenges and opportunities of spices production and marketing in Ethiopia. Ethiopia has enormous potential to produce and export various spice crops. The country mainly produces and exports; chilies, turmeric, ginger, black pepper, cumin, fenugreek, coriander and so forth. Insite of the fact that the country has tremendous potential for various spices production, the subsector of spices had remained untapped and neglected and subsequently the level of production and share of spice crops of the total export earning of the country is at considerably low level. Hence, it is essential to describe the status, challenges and opportunities of spices sector in Ethiopia, for best uses of the potential and untapped spice crop resources. Among the various spice's crops, chilly/hot pepper is the most commonly produced spices in Ethiopia. However, the production of ginger has devastated in 2013 on wards due to bacterial wilt epidemic and hence, turmeric occupies the large share of its production and exports. Similarly, the Ethiopian spice exports has showed a declining trend from 2013 onwards. This is mainly due to the disease that considerably affect ginger production and the rapid increasing domestic demand of spices. Hence, the share of spices export has been remained low compared to the country's total export earnings. Therefore, intervention and provide awareness for spices growers on using improved production and processing technology, training across all value chains, formulating strong marketing regulations and proclamation is of paramount importance to increase the production, profits and export values.

- 5 Thomas* & P C Sanil (2019): Spices are one of the most traded agricultural commodities across the globe. India, as the world's leading producer and exporter of spices is a significant stakeholder in spices export trade. The paper reviews the studies conducted on the spices export sector with special focus on India and the policy issues applicable to this sector. The review focuses on the history, trade competitiveness and issues related to regional trade agreements, trade barriers and food safety in the export trade of spices. Research gaps on issues like linkages between economic development and spice export are identified. The review concludes with suggestions for promoting growth and development of the spice export sector in India.
- 6 Raju Guntukula (2018) have studied on Exports, imports and economic growth in India: Evidence from cointegration and causality analysis. The main objective of study is to Determine relationship between import and export & to measure growth and export promotion strategy, to also determine economic growth in unexplored way. Data was collected from the Handbook of Indian economy and statistics, RBI. All the variables of the study are converted into a natural logarithm. Various tools like unit root, granger, & cointegration were used. The conclusion of study was, export, imports and economic growth are stationary after the first difference form by using ADF and DF test and suggests that both growth as well as export promotion strategy is pursued consistently with an emphasis on sustainable and inclusive growth
- **7 A Asale, TB Ashango** (2017) This study tries to analyze the determinants of ginger (Zingiber Officinale Rosc) in Boloso Bombe and Kindo Koisha woredas of Wolaita zone in SNNPR Hence, the Multiple Linear Regression Model was employed to see factors that determine the supply of ginger. The study has evaluated the main factors affecting the supply of ginger based on the Multiple Linear Regression Model. Thus, the econometric model has identified the amount of introduced seed made available for farmers to be the most important variable affecting (positively) the supply of ginger. As a result, the findings of this work have suggested Research Institutions, NGOs and other stockholders can play a vital role in addressing the farmers' question of introduced seed.

Further, the number of livestock owned significantly and positively affected the volume of ginger supplied. The results of thismanuscript also suggested building household assets (i.e. livestock) through household asset building programs will remedy the case. But income from other sources (exclude ginger) adversely affected the amount of ginger supplied. Thus, the findings pointed out that farmers should compare and contrast between the two and decide accordingly. Hence, extension workers and other concerned bodies were expected to play valuable roles in teaching and directing the farmers so as they opt effectively and efficiently.

- 8 **Dr. Sachin N. Mehta** (2017) studied on The Dynamics of Relationship between Exports, Import and Economic Growth in India. The objective of study was to measure export & import relationship including GDP. Data were collected from HAND BOOK OF INDIA (RBI) 2014-15. Test like Stationarity Test, Co-Integration Test & Granger Causality Test were used. The findings of the study were that the unit root tests show that GDP, Export and Import series become stationary when first difference are considered, and evidence of unidirectional causality running from GDP to Export, it means in long term GDP led to Export but Export does not lead to GDP.
- 9 Sani Hassan Hussaini, Bashir Ado Abdullahi, Musa Abba Mahmud (2015) studied on An Exports, Imports and Economic Growth in India: An Empirical Analysis. The main objective of the research was to investigate the dynamics of the relationship between exports, imports and economic growth in India using the annual data for the period 1980 to 2013. All necessary data for the sample period were obtained from IECONOMICS and Ministry for Commerce and Industry, Government of India. The variable use for this research was Total Exports by India (EXP), total Import (IMP) and Economic Growth (GDP) i.e. Gross Domestic Product (GDP). The major findings of the research were export causes economic growth which also turns around to cause export and economic reform policies and the shift towards a free market helped the economy to reallocate its resources to productive uses.

10 Dr. Vijay Gondaliya & Mr. Paresh Dave (2015) have studied - The Impact of Exports and Imports on Exchange Rates in India. The main objective of study is to examine whether the import or export effect the exchange rate (USD, EURO, POUND and YEN) in India. Data under this study was time series data, The data were collected from database of Reserve Bank of India and SEBI. Various technique was used like regression analysis, unit root test, granger casualty test. The major findings of this study were positive relationship between export and exchange rate but negative relationship between import and exchange rate. Also, the change in export will influence in positive changes in Indian Rupee against Euro, Pound, Dollar and Yen. But Import is not positively influence on exchange rate between Euro, Dollar, Pound and Yen

11 Michele Ruta 2012: This paper surveys a wide body of economic literature on the relationship between currencies and trade. Specifically, two main issues are investigated: the impact on international trade of exchange rate volatility and of currency misalignments. On average, exchange rate volatility has a negative (even if not large) impact on trade flows. The extent of this effect depends on a number of factors, including the existence of hedging instruments, the structure of production (e.g. the prevalence of small firms), and the degree of economic integration across countries. The second issue involves exchange rate misalignments, which are predicted to have short run effects in models with price rigidities. However, the exact impact depends on a number of features, such as the pricing strategy of firms engaging in international trade and the importance of global production networks. 12 Angles, S.; Sundar, A.; Chinnadurai, M. (2011): India is a major supplier of turmeric to the world with more than 60 per cent share in turmeric trade. The production and export performance of turmeric in India have been examined using secondary data for the period from 1974-75 to 2007-08 and exponential form of growth function has been used for the analysis. The growth in production and export of turmeric has been reported significant, because of the high demand coupled with inflation. Instability index has been worked for the production and export for pre liberalization and post-liberalization periods.

13 László Kónya and Jai Pal Singh (2006) studied on - Exports, Imports and Economic Growth in India. The main objective was to determine Export and/or import and GDP are cointegrated & to Determine Export and/or import Granger cause GDP. The data were collected from several publications and websites, such as the Directorate General of Commercial Intelligence and Statistics, National Accounts Statistics, Planning Commission of India, Reserve Bank of India, and various issues of Economic Surveys. Tools like unit test & cointegration was used. The conclusion of the study was, indirect approach assumes that the variables are stationary or can be made stationary by differencing. It makes use of pretesting for unit roots and cointegration and, depending on the outcomes, testing for causality is carried out with Wald tests in VAR and/or VEC models in levels and/or first differences.

14 "A Study on Impact of Import and Export on Economic Growth of India" by Jairaj Joshi and Peenal Sankhla1:

This study investigates the impact of import and export on India's economic growth from 1980 to 2018. The authors analyze data from the RBI Handbook of Indian Economics & Statistics using various statistical tools such as Unit Root Test, Regression Analysis, and Correlation Analysis. They explore the relationship between imports, exports, and exchange rates, aiming to understand their effects on economic development.

15 "Exporter-importer business relationships: Past empirical research and content analysis"2:

This systematic review covers 196 articles published in academic journals between 1975 and 2017. It examines empirical literature on exporter-importer business relationships. The study provides insights into the dynamics of these relationships, including factors influencing trade partnerships and strategies.

16 "Three decades of export competitiveness literature: A systematic review"3:

The authors synthesize research articles published in Scopus-listed journals

between 1991 and 2020. They identify determinants of export competitiveness (EC) and classify widely used theories and methodologies. The review also suggests directions for future research in this area.

17 The Role of International Trade and FDI in the UKTI Model"4:

While this review focuses on international trade and foreign direct investment (FDI), it provides valuable insights into the interplay between exports, imports, and economic growth. The authors discuss different processes, including firms evolving from supplying domestic to export markets and becoming multinational.

18 Sakarya University Every one-unit increase in import ratio decreases long term debt ratio by 0.0764, and every one-unit increase in export ratio decreases profitability by 0.0517. According to empirical findings there is no effect of import level on the short-term debt ratio, shareholder equity ratio and profitability. At the same time there is no effect of export level on the long-term debt ratio, short term debt ratio and shareholder equity ratio.

19 Jambor, A.; Toth, A.T.; Koroshegyi, D(2015). Comparative advantage is an important indicator in the analysis of international trade flow, however, in empirical studies on agriculture it is often neglected. In this article we aim to analyze comparative advantage in global spices trade and to test stability of trade indices as well as to identify the determinants behind different country performances. Our paper draws global spices trade data from the period 1991 to 2015. Results suggest that global spice trade is pretty much concentrated with Guatemala, Sri Lanka and India obtaining the highest comparative advantages in 1991-2015. However, duration and stability tests indicate that trade advantages have weakened for the majority of the countries concerned. Our model runs show that factor endowments, agricultural value added and regional trade agreements are negatively, while land as well as labour productivity are positively related to comparative advantages in global spices trade. Acknowledgement: This paper was supported by the National Research, Development and Innovation Office Grant No. 119669 Titled Competitiveness

of Agriculture in International Trade: A Global Perspective as well as the UNKP-17-4-III-BCE-7 New National Excellence Program of the Ministry of Human Capacities of Hungary.

20 Pamela Galvin-King: The global herb and spice industry, valued at approximately US\$4 billion, continues to grow. This industry is continuously under threat from criminals dealing in economically motivated adulteration. Opportunities for criminals to adulterate herbs and spices can occur at any point along the long and complex supply chains. This review looks at the cases and effects of adulteration in the herb and spice industry, and analytical methods being used to detect it and ultimately prevent it. The economy and consumer confidence can be negatively affected following a food fraud scandal. Fraud may also pose a health risk to consumers, even though it is economically motivated, such as the case with nut protein in cumin and paprika. Therefore, for these reasons, rapid screening techniques are required to detect and help prevent fraud from occurring in the industry.

2.2 THEORETICAL FRAMEWORK

INTRODUCTION

Theoretical framework refers to the structure of concepts, theories, and ideas that support and inform research endeavors. It serves as the foundation upon which research questions are formulated, hypotheses are generated, and data are interpreted. At its core a theoretical framework provides researchers with a lens through which they can view and interpret their study's findings within the broader context of existing knowledge and scholarly debates.

In academic and scientific research, the theoretical framework plays a crucial role in guiding the research process and shaping its outcomes. It helps researchers conceptualize the relationships between variables, understand the mechanisms underlying observed phenomena, and predict outcomes based on established theories or models. Moreover, a robust theoretical framework provides a basis for making informed decisions about research design, methodology, and data analysis techniques.

Developing a theoretical framework involves identifying and integrating relevant theories, concepts, and models from literature that are pertinent to the research topic. This process requires careful consideration of how different theoretical perspectives align or complement each other, as well as recognizing any contradictions or gaps in existing theories that the study aims to address. Ultimately, a well-constructed theoretical framework not only enhances the rigor and coherence of research but also contributes to advancing theoretical knowledge in the field by building upon and refining existing frameworks.

The Impact of Exchange Rates on Exporting

Exchange rates play a pivotal role in international trade, influencing the competitiveness of a country's exports, the profitability of its businesses, and the overall economic health of its export sector. Understanding the dynamics of exchange rates is crucial for exporters, policymakers, and economists alike, as fluctuations can have far-reaching consequences. This essay delves into the

impact of exchange rates on exporting, examining how changes affect export prices, business profitability, trade balances, and economic stability.

Influence on Export Prices and Competitiveness

One of the most direct impacts of exchange rate fluctuations is on the pricing of exported goods. When a country's currency depreciates, its exports become cheaper for foreign buyers, potentially boosting demand. For instance, if the euro weakens against the dollar, European goods become more affordable for American consumers, enhancing their competitiveness in the U.S. market. Conversely, an appreciation of the home currency makes exports more expensive and less attractive to foreign buyers. This price sensitivity is crucial for exporters who operate in highly competitive global markets, where even small changes in pricing can lead to significant shifts in market share.

Effect on Business Profitability

Exchange rates also directly affect the profitability of exporting businesses. When a company invoices in a foreign currency, fluctuations in the exchange rate between the time the invoice is issued and when payment is received can lead to gains or losses. For example, if a European exporter sells goods to the U.S. and the dollar depreciate after the sale is made; the revenue converted back to euros will be lower than anticipated. Companies often use hedging strategies to mitigate this risk, but not all firms have the resources to implement such measures. Small and medium-sized enterprises (SMEs) can be particularly vulnerable to exchange rate volatility, impacting their financial stability and growth prospects.

Impact on Trade Balances

At the macroeconomic level, exchange rates significantly influence a country's trade balance, which is the difference between the value of exports and imports. A weaker currency can help improve a country's trade balance by making exports more competitive and imports more expensive. This can lead to a reduction in the trade deficit or an increase in the trade surplus. However,

the relationship is not always straightforward. Structural factors, such as the elasticity of demand for exports and imports, the presence of long-term contracts, and the time lag in adjusting to exchange rate changes, can affect how quickly and significantly these adjustments take place.

Economic Stability and Policy Implications

Exchange rate volatility can pose challenges for economic stability. Sudden and unpredictable changes can create uncertainty for businesses and investors, potentially leading to reduced investment and economic slowdown. For policymakers, managing exchange rate impacts involves a delicate balance. On one hand, allowing the currency to float freely can lead to natural adjustments based on market forces, promoting economic efficiency. On the other hand, excessive volatility might necessitate intervention through monetary policy or exchange rate controls to stabilize the economy. Central banks may engage in currency market interventions or adjust interest rates to influence exchange rate movements.

In exchange rates have a profound impact on exporting, affecting everything from the pricing and competitiveness of goods to the profitability of businesses and the overall trade balance of a country. For exporters, understanding and managing exchange rate risks is crucial to maintaining profitability and market share in the global economy. Policymakers must navigate the complex interplay between exchange rates and economic stability, striving to create an environment that supports sustainable growth. As global trade continues to expand, the role of exchange rates in shaping international economic relationships remains as important as ever.

EXCHANGE RATE MECHANISMS

- ➤ Floating Exchange Rates: These are determined by market forces without direct government or central bank intervention. Supply and demand factors, such as trade balances and investment flows, influence the currency value.
- ➤ **Fixed Exchange Rates**: A country pegs its currency to another currency or a basket of currencies. The central bank maintains this rate through interventions in the foreign exchange market.
- ➤ Managed Float Systems: A hybrid approach where a currency primarily floats in the market but the central bank occasionally intervenes to stabilize or steer the currency.
- Currency Pegs and Currency Boards: Currency pegs involve fixing a currency's value to another currency. Currency boards are extreme forms of pegs where the local currency is fully backed by foreign currency reserves.

IMPACT ON EXPORT PRICES

- ➤ Effect of Currency Depreciation: When a currency depreciates, exports become cheaper for foreign buyers, potentially increasing demand and competitiveness.
- ➤ Effect of Currency Appreciation: An appreciating currency makes exports more expensive and less competitive in foreign markets, whichmay reduce demand.
- ➤ Price Elasticity of Demand for Exports: The responsiveness of foreign buyers to changes in export prices. High elasticity means significant changes in demand with price fluctuations.
- ➤ Comparative Advantage and Export Competitiveness: How exchange rates influence a country's comparative advantage in producing goods and services more efficiently than other countries.

BUSINESS PROFITABILITY AND RISK MANAGEMENT

- Exchange Rate Risk and Hedging Strategies: The risk that changes in exchange rates will affect profitability. Businesses use hedging strategies like forwards, futures, and options to mitigate this risk.
- ➤ Invoicing in Foreign Currencies: Choosing the currency of invoice can help manage exchange rate risk. Exporters might invoice in their own currency to avoid currency risk.
- ➤ Forward Contracts and Options: Financial instruments used to lock in exchange rates for future transactions, protecting against adverse currency movements.
- ➤ Impact on Small and Medium-sized Enterprises (SMEs): SMEs often lack resources to hedge effectively, making them more vulnerable to exchange rate volatility compared to larger firms.

TRADE BALANCES AND ECONOMIC INDICATORS

- ➤ Trade Surplus and Trade Deficit: A trade surplus occurs when a country exports more than it imports, while a deficit occurs when imports exceed exports. Exchange rates influence these balances.
- ➤ **Balance of Payments:** The overall record of a country's economic transactions with the rest of the world, including trade, investment, and financial transfers.
- ➤ Current Account and Capital Account: The current account tracks goods and services trade, while the capital account records cross-border investments and financial flows.
- ➤ Curve Effect and Marshall-Lerner Condition: The J-Curve effect describes how a currency depreciation initially worsens the trade balance before improving it. The Marshall-Lerner condition states that a depreciation will improve the trade balance if the sum of export and import demand elasticities is greater than one.

POLICY AND REGULATORY ENVIRONMENT

- ➤ Monetary Policy and Exchange Rate Policy: Central banks use monetary policy to influence currency values through interest rates and other tools. Exchange rate policies may involve direct market interventions.
- ➤ Central Bank Interventions: Actions taken by central banks to stabilize or influence their currency's value, often through buying or selling foreign currencies.
- ➤ Exchange Rate Controls and Regulations: Government-imposed restrictions on currency trading and exchange rates to stabilize the economy.

➤ Impact of Trade Agreements and Tariffs: Trade agreements and tariffs can influence exchange rates by altering trade flows and economic relationships between countries.

MACROECONOMIC IMPLICATIONS

- ➤ Inflation and Exchange Rates: Exchange rate fluctuations can influence inflation. A depreciating currency can increase import prices, leading to higher inflation.
- ➤ Interest Rates and Capital Flows: Higher interest rates can attract foreign capital, leading to currency appreciation. Conversely, lower rates can lead to depreciation.
- ➤ Foreign Direct Investment (FDI): Exchange rates affect the attractiveness of a country for FDI. A stable and competitive currency can attract more investment.
- ➤ Global Economic Stability and Currency Crises: Exchange rate volatility can lead to economic instability and crises, affecting global trade and investment patterns.

CASE STUDIES AND HISTORICAL EXAMPLES

- ➤ **Historical Currency Crises:** Analysis of past currency crises, such as the Asian Financial Crisis and the Argentinian Crisis, to understand theimpact of exchange rate volatility.
- ➤ Impact of Euro Introduction on EU Exports: How the adoption of the euro affected export dynamics within the EuropeanUnion.
- China's Yuan Peg and Export Strategy: Examination of China's policy of pegging the yuan to the US dollar and its effects on exports.
- ➤ **Brexit and the British Pound**: The impact of the UK's decision to leave the EU on the value of the pound and its export competitiveness.

TECHNOLOGICAL AND MARKET INNOVATIONS

- Digital Currencies and Their Impact on Trade: The rise of cryptocurrencies and their potential effects on international trade and exchange rates.
- ➤ Role of Financial Markets and Speculation: How financial markets and speculative activities influence exchange rates and trade.
- ➤ E-commerce and Exchange Rate Dynamics: The impact of online trade on currency fluctuations and export strategies.

SECTOR-SPECIFIC IMPACTS

- ➤ Impact on Manufacturing Exports: How exchange rates affect the manufacturing sector's export performance.
- ➤ Impact on Agricultural Exports: Exchange rate effects on the competitiveness and pricing of agricultural goods.
- ➤ Impact on Service Exports: How currency fluctuations influence the export of services, including tourism, finance, and technology.
- ➤ Sectoral Competitiveness and Exchange Rates: Analysis of which sectors are most affected by exchange rate changes and howthey adapt.

Regional and Country-Specific Analysis

- ➤ Emerging Markets and Exchange Rate Volatility: The challenges faced by emerging markets in managing exchange rate volatility and its impact on exports.
- ➤ Developed Markets and Exchange Rate Stability: How developed economies maintain exchange rate stability and its implications for trade.
- Regional Trade Blocs (e.g., NAFTA, ASEAN): The role of regional trade agreements in influencing exchange rates and exportperformance.
- ➤ Bilateral Trade Relationships and Currency Dynamics: The impact of bilateral trade relationships on exchange rate policies andtrade flows.

EXCHANGE RATE FLUCTUATIONS: AN OVERVIEW

Exchange rate fluctuations refer to the variations in the value of one currency relative to another over time. These fluctuations are a fundamental aspect of the global financial system and can significantly impact international trade, investment, and economic stability. Exchange rates are influenced by a variety of factors, including interest rates, inflation, political stability, economic performance, and market speculation. As currencies appreciate or depreciate, they affect the cost of imports and exports, which in turn can influence a country's trade balance and overall economic health.

One of the primary drivers of exchange rate fluctuations is differences in interest rates between countries. When a country raises its interest rates, it often attracts foreign capital seeking higher returns, leading to an appreciation of its currency. Conversely, lower interest rates can lead to capital outflows and currency depreciation. Inflation rates also play a crucial role; countries with lower inflation rates typically see an appreciation in their currency value because their purchasing power increases relative to countries with higher inflation. Additionally, political events, such as elections, policy changes, or geopolitical tensions, can cause uncertainty, leading to increased volatility in exchange rates.

Exchange rate swings have serious consequences for enterprises involved in international commerce. Exporters benefit from a falling home currency because it makes their products cheaper and more competitive in overseas markets, thus increasing sales. This competitive advantage can lead to higher market shares and enhanced revenue streams from foreign buyers who find the lower-priced goods more attractive. However, a depreciating currency also raises the cost of imported supplies and raw materials needed for production. This increase in input costs can erode profit margins, as companies have

to spend more to procure the same number of materials from abroad. Exchange rate volatility can have both positive and negative effects. On one hand, a flexible exchange rate regime can help absorb external shocks, providing a buffer against economic disturbances. On the other hand, excessive volatility can create uncertainty, deterring investment and complicating economic planning. Central banks often intervene in the foreign exchange markets to stabilize their currency, using tools like interest rate adjustments and foreign exchange reserves to influence exchange rates. However, such interventions can sometimes lead to unintended consequences and are subject to diminishing returns.

Exchange rate fluctuations are a critical component of the international economic landscape, affecting trade, investment, and economic stability. Understanding the drivers and implications of these fluctuations is essential for policymakers, businesses, and investors alike. By employing strategies to mitigate the risks associated with exchange rate volatility, stakeholders can better navigate the complexities of the global market and enhance economic resilience.

Importance

- ➤ Impact on Trade: Exchange rate fluctuations directly affect the cost of exports and imports. A weaker domestic currency makes exports cheaper and imports more expensive, potentially boosting export-oriented industries.
- ➤ Investment Decisions: Investors monitor exchange rate movements to make informed decisions about foreign investments. A strong currency can enhance the returns on foreign investments when converted back to the investor's home currency.
- ➤ Economic Policy: Governments and central banks use exchange rate management as part of their monetary policy to control inflation, stabilize the economy, and manage foreign reserves.

Advantages of Exchange Rate Fluctuations

I. Competitiveness

Depreciation of a country's currency can significantly impact the global competitiveness of its goods and services. When a country's currency depreciates, its goods and services become cheaper for foreign buyers. This price advantage can lead to several beneficial outcomes:

- ➤ **Boosting Sales**: Lower prices due to currency depreciation make exports more attractive to foreign buyers. This can increase the volume of goods sold internationally, boosting overall sales.
- ➤ Market Share Growth: Competitive pricing can help domestic companies gain market share in international markets. As foreign buyers switch to more cost-effective options, the demand for domestic exports increases, allowing companies to expand their footprint abroad.
- **Economic Growth:** Increased export activity can contribute to the overall economic growth of a country. Higher demand for exports can

lead to more production, job creation, and increased income within the export sectors.

➤ Counteracting Trade Deficits: By boosting exports and reducing imports (due to higher costs for foreign goods), a country can work towards improving its trade balance and reducing trade deficits.

II. Foreign Investment Attraction

- Favorable exchange rates: can make a country an attractive destination for foreign direct investment (FDI). When a country's currency is weaker relative to others, foreign investors may find it more cost-effective to invest in that country.
- **Lower Production Costs:** For multinational companies, establishing operations in a country with a weaker currency can reduce production costs. Expenses such as labor, materials, and local services become cheaper when converted from a stronger foreign currency.
- ➤ Higher Returns on Investment: Investors can potentially achieve higher returns when investing in a country with a depreciating currency. When the local currency strengthens in the future, the value of their investments can increase when converted back to their home currency.
- ➤ **Economic Development:** Increased FDI can spur economic development in the host country. Investments in infrastructure, technology, and human capital can lead to improved productivity, innovation, and overall economic growth.
- ➤ **Job Creation:** Foreign investments often lead to the creation of jobs and the development of new industries. This can reduce unemployment rates and improve living standards within the host country.

III. Diversification of Markets

- > Fluctuating exchange: rates can encourage businesses to diversify their markets as a strategy to manage and mitigate currency risk. This approach offers several benefits:
- ➤ Hedging Against Currency Risk: By operating in multiple markets with different currencies, businesses can hedge against the risk associated with currency fluctuations. When one market experiences unfavorable exchange rate movements, other markets might offer more stability or favorable conditions.
- ➤ **Global Expansion:** Diversification drives businesses to explore and enter new international markets. This global expansion can lead to increased brand recognition, a broader customer base, and enhanced revenue streams from various geographical locations.
- Reduced Dependency: Relying heavily on a single market or currency can be risky. Diversification reduces dependency on one market, insulating businesses from localized economic downturns, political instability, or unfavorable exchange rate movements in any one country.
- ➤ Market Adaptability: Engaging in multiple markets allows businesses to adapt to different consumer preferences, regulatory environments, and competitive landscapes. This adaptability can make companies more resilient and innovative.
- ➤ Increased Market Opportunities: Access to a variety of markets opens up opportunities for growth and expansion. Businesses can tap into new consumer segments, benefit from different economic cycles, and leverage the strengths of diverse markets.

Disadvantages of Exchange Rate Fluctuations

- ➤ Uncertainty and Risk: Frequent and unpredictable exchange rate fluctuations introduce uncertainty and risk for businesses engaged in international trade, potentially affecting profitability and planning.
- ➤ **Inflation**: A devaluation of the domestic currency can lead to higher import prices, contributing to inflationary pressures within the economy.
- ➤ **Economic Instability:** Volatile exchange rates can lead to economic instability, affecting consumer and investor confidence, disrupting financial markets, and complicating economic policy implementation.

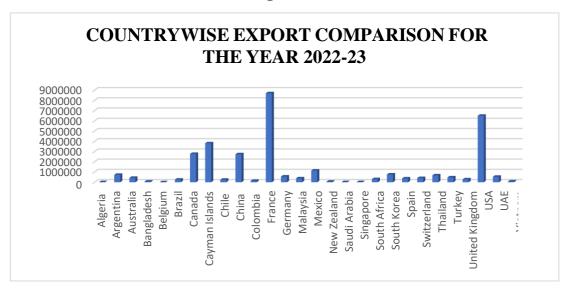
CHAPTER 3 DATA ANALYSIS AND INTERPREATION

COUNTRYWISE EXPORT COMPARISON FOR YEAR 2022-23

Table 3.1

COUNTRY	EXPORT AMOUNT (USD)
Algeria	9708
Argentina	721400
Australia	427077
Bangladesh	66780
Belgium	3400
Brazil	252209
Canada	2765360
Cayman Islands	3807456
Chile	246214
China	2734408
Colombia	136860
France	8705483
Germany	559840
Malaysia	385090
Mexico	1141970
New Zealand	50892
Saudi Arabia	10500
Singapore	14872
South Africa	301139
South Korea	760255
Spain	371922
Switzerland	406260
Thailand	672122
Turkey	478615
United Kingdom	283570
USA	6501044
UAE	534732
Vietnam	81590

Figure 3.1



Interpretation:

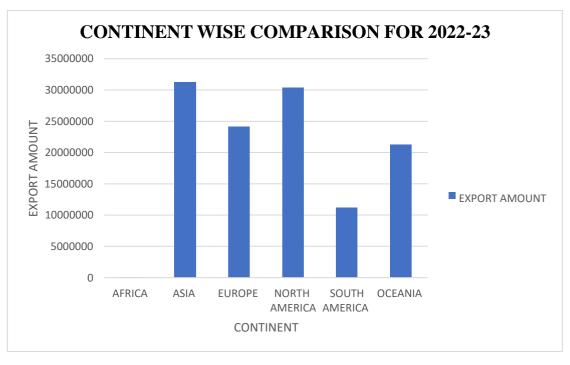
Shows that the highest export values were to the USA and France, with significantly lower export values to other countries such as Algeria, Singapore, New Zealand etc.

Table 3.2

CONTINENT WISE COMPARISON FOR YEAR 2022-23

CONTINENT	EXPORT AMOUNT (USD)
AFRICA	31087
ASIA	31272583
EUROPE	24088437
NORTH AMERICA	30333872
SOUTH AMERICA	11161164
OCEANIA	21283039

Figure 3.2



Interpretation:

The bar chart shows that Asia and North America had the highest export amounts for the year 2022-23, both exceeding 30,000,000 kg, while Africa had the lowest export amount.

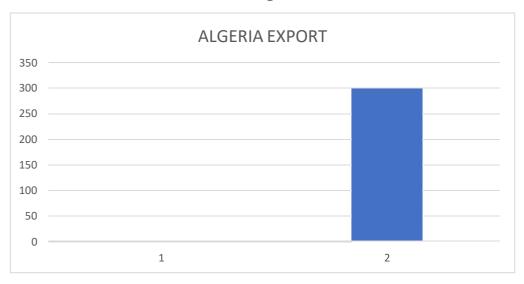
COUNTRY WISE COMPARISON FOR YEAR 2022-23

Table 3.3

ALGERIA EXPORT DETAILS FOR 2022-23

Export Quantity	Price (dollar)	Export Value	currency	Exchange Rate	Export Total Value (USD)
2	54	108	Dinar	135.9334	14680.81
300	54	16200	Dinar	135.9334	2202121.08

Figure 3.3



Interpretation:

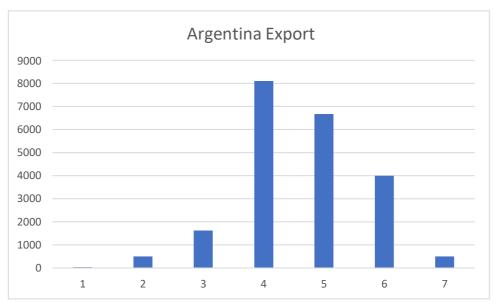
For Algeria, the data indicates that increasing the export quantity from 2 to 300 kg dramatically raises the export total value in Dinar, from 14,680.81 to 2,202,121.08, underscoring the significant financial impact of larger bulk export quantities.

Table 3.4

ARGENTINA EXPORT DETAILS FOR 2022-23

Export Quantity	Price (dollar)	Export Value	currency	Exchange Rate	Export Total Value (USD)
40	37	1480	Peso	208.45	308506
500	37	18500	Peso	208.45	3856325
1620	34	55080	Peso	208.45	11481426
8100	34	275400	Peso	208.45	57407130
6660	34	226440	Peso	208.45	47201418
4000	30	120000	Peso	208.45	25014000
500	35	17500	Peso	208.45	3647875

Figure 3.4



Interpretation:

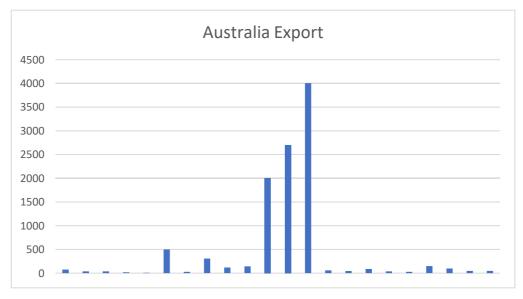
The chart shows that the bulk of Argentina's export quantity is concentrated primarily in the fourth category, followed by the fifth and sixth categories, with significantly lower quantities in the other categories.

Table 3.5

AUSTRALIA EXPORT DETAILS FOR 2022-23

AUSTRALIA EXPORT DETAILS FOR 2022-25					
Export Quantity	Price (dollar)	Export Value	currency	Exchange Rate	Export Total Value (USD)
75	85	6375	dollar	1.528	9741
40	85	3400	dollar	1.528	5195.2
40	85	3400	dollar	1.528	5195.2
20	85	1700	dollar	1.528	2597.6
10	85	850	dollar	1.528	1298.8
500	88	44000	dollar	1.528	67232
30	88	2640	dollar	1.534	4050.288
310	88	27280	dollar	1.534	41852.976
120	88	10560	dollar	1.534	16201.152
144	88	12672	dollar	1.534	19441.3824
2010	84	168840	dollar	1.534	259034.328
2700	84	226800	dollar	1.534	347956.56
4005	84	336420	dollar	1.534	516135.564
60	84	5040	dollar	1.537	7747.992
45	84	3780	dollar	1.537	5810.994
90	88	7920	dollar	1.537	12175.416
40	88	3520	dollar	1.537	5411.296
30	88	2640	dollar	1.537	4058.472
150	88	13200	dollar	1.537	20292.36
100	88	8800	dollar	1.537	13528.24
50	88	4400	dollar	1.537	6764.12
50	88	4400	dollar	1.537	6764.12

Figure 3.5

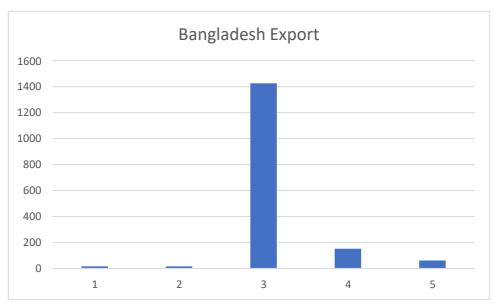


Interpretation: The data table shows that Argentina's bulk export quantities vary widely, with the largest export quantities being 4005, 2700, and 2010 kg, indicating that a few high-quantity exports contribute significantly to the overall export value.

Table 3.6
BANGLADESH EXPORT DETAILS FOR 2022-23

Export Quantity	Price (dollar)	Export Value	currency	Exchange Rate	Export Total Value (USD)
15	42	630	Taka	107.35	67630.5
15	42	630	Taka	107.35	67630.5
1425	42	59850	Taka	107.35	6424897.5
150	42	6300	Taka	107.35	676305
60	42	2520	Taka	107.35	270522

Figure 3.6



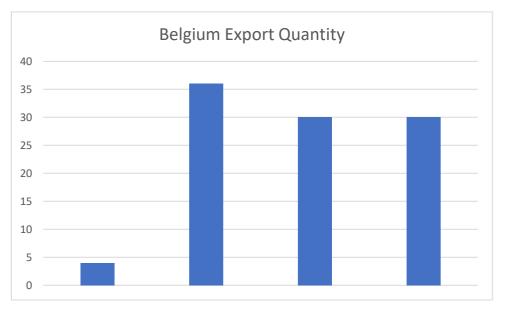
Interpretation:

The data table indicates that the country's bulk exports include both small and large quantities, with the largest export quantity being 1425 kg, which significantly impacts the overall export value when compared to smaller quantities of 15, 60, and 150 kg.

Table 3.7
BELGIUM EXPORT DETAILS FOR 2022-23

Export Quantity	Price (dollar)	Export Value	currency	Exchange Rate	Export Total Value (USD)
4	34	136	Belgium Franc	37.81	5142.16
36	34	1224	Belgium Franc	37.81	46279.44
30	34	1020	Belgium Franc	37.81	38566.2
30	34	1020	Belgium Franc	37.81	38566.2

Figure 3.7



Interpretation:

The bulk export quantities of 4, 36, and 30 kg each at a consistent price of \$34 reflect significant export activities. The export values, when converted from Belgium Francs to dollars using the exchange rate of 37.81, show substantial total export values of 5142.16, 46279.44, and 38566.2 respectively, indicating robust trade transactions.

Table 3.8
BRAZIL EXPORT DETAILS FOR 2022-23

_	DRAZIL EXI ORT DETAILS FOR 2022-23						
Export Quantity	Price (dollar)	Export Value	Currency	Exchange Rate	Export Total Value (USD)		
200	40	8000	Brazilian real	5.226	41807.2		
600	40	24000	Brazilian real	5.226	125421.6		
600	40	24000	Brazilian real	5.226	125421.6		
600	40	24000	Brazilian real	5.226	125421.6		
2000	40	80000	Brazilian real	5.253	420216		
2000	40	80000	Brazilian real	5.253	420216		
2000	38	76000	Brazilian real	5.253	399205.2		
68	41	2788	Brazilian real	5.253	14644.5276		
100	41	4100	Brazilian real	5.253	21536.07		
3000	41	123000	Brazilian real	5.201	639698.4		
2000	39	78000	Brazilian real	5.201	405662.4		
3000	39	117000	Brazilian real	5.201	608493.6		
3000	39	117000	Brazilian real	5.201	608493.6		
6000	39	234000	Brazilian real	5.253	1229131.8		
100	39	3900	Brazilian real	5.253	20485.53		
2000	39	78000	Brazilian real	5.253	409710.6		

Figure 3.8



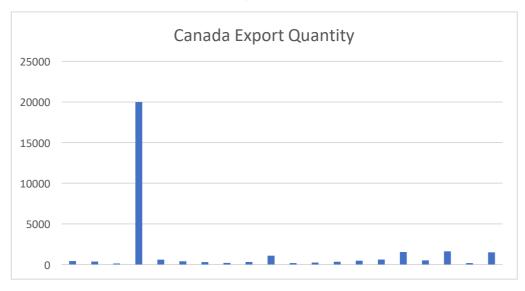
The bulk export quantity data for Brazil shows a significant peak at around 6000 kg, with other export quantities varying considerably, including several smaller peaks around 2000-3000 kg and much lower quantities below 500 kg, indicating a diverse range of export volumes.

CANADA EXPORT DETAILS FOR 2022-23

Table 3.9

CANADA EAI ORI DETAILS FOR 2022-23							
Export Quantity	Price (dollar)	Export Value	Currency	Exchange Rate	Export Total Value (USD)		
408	32	13056	Canadian Dollar	1.36	17705.24		
360	32	11520	Canadian Dollar	1.36	15622.27		
119	32	3808	Canadian Dollar	1.36	5164.03		
20000	32	640000	Canadian Dollar	1.36	867904.00		
600	32	19200	Canadian Dollar	1.36	26037.12		
400	34	13600	Canadian Dollar	1.34	18290.64		
300	34	10200	Canadian Dollar	1.34	13717.98		
200	34	6800	Canadian Dollar	1.34	9145.32		
324	34	11016	Canadian Dollar	1.34	14815.42		
1080	34	36720	Canadian Dollar	1.34	49384.73		
170	33	5610	Canadian Dollar	1.34	7537.60		
240	33	7920	Canadian Dollar	1.34	10641.31		
340	33	11220	Canadian Dollar	1.34	15075.19		
476	33	15708	Canadian Dollar	1.34	21105.27		
612	33	20196	Canadian Dollar	1.34	27135.35		
1530	33	50490	Canadian Dollar	1.34	67838.36		
510	33	16830	Canadian Dollar	1.34	22612.79		
1615	33	53295	Canadian Dollar	1.34	71607.16		
170	33	5610	Canadian Dollar	1.34	7537.60		
1500	33	49500	Canadian Dollar	1.34	66508.20		

Figure 3.9



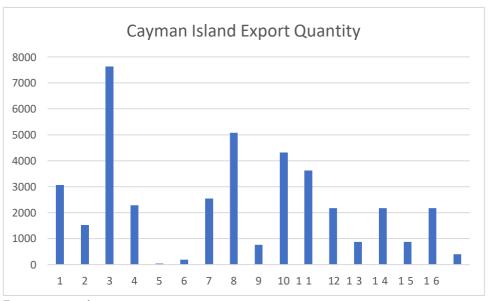
Interpretation:

The bulk export quantity data for Canada shows a dominant peak at around 20,000 kg, with the rest of the export quantities being significantly lower and relatively evenly distributed, indicating one major export event or item contributing to the majority of the export volume.

Table 3.10
CAYMAN ISLANDS EXPORT DETAILS FOR 2022-23

		ı			
Export Quantity	Price (dollar)	Export Value	Currency	Exchange Rate	Export Total Value (USD)
3047	43	131021	Dollar	0.83	108747
1523	43	65489	Dollar	0.83	54356
7618	43	327574	Dollar	0.83	271886
2285	43	98255	Dollar	0.83	81552
40	43	1720	Dollar	0.83	1428
190.47	43	8190.21	Dollar	0.83	6798
2539	43	109177	Dollar	0.83	90617
5079	43	218397	Dollar	0.83	181270
761	43	32723	Dollar	0.83	27160
4320	43	185760	Dollar	0.83	154181
3628	43	156004	Dollar	0.83	129483
2176	43	93568	Dollar	0.83	77661
870	43	37410	Dollar	0.83	31050
2176	43	93568	Dollar	0.83	77661
870	43	37410	Dollar	0.83	31050
2176	43	93568	Dollar	0.83	77661
399	43	17157	Dollar	0.83	14240

Figure 3.10

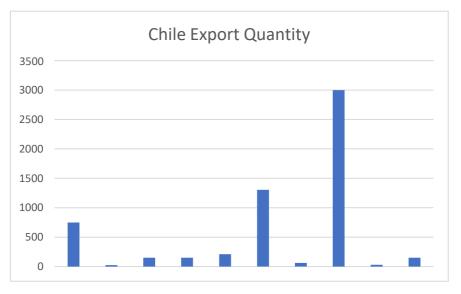


The bulk export quantity data for the Cayman Islands exhibits significant variability, with major peaks around 7,000 and 5,000 kg, indicating multiple large export events contributing to the overall export volume.

Table 3.11
CHILE EXPORT DETAILS FOR 2022-23

Export Quantity	Price (dollar)	Export Value	Currency	Exchange Rate	Export Total Value (USD)
750	76	57000	Chilean peso	851.94	48560580
25	76	1900	Chilean peso	851.94	1618686
150	75	11250	Chilean peso	851.94	9584325
150	77	11550	Chilean peso	851.94	9839907
210	76	15960	Chilean peso	853.85	13627446
1305	70	91350	Chilean peso	853.85	77999197.5
60	70	4200	Chilean peso	853.85	3586170
3000	70	210000	Chilean peso	853.85	179308500
30	70	2100	Chilean peso	853.85	1793085
150	70	10500	Chilean peso	853.85	8965425

Figure 3.11

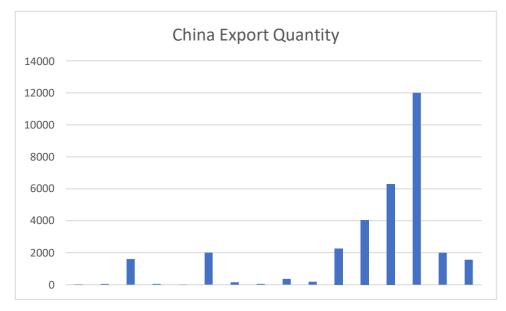


The bulk export quantity data for the Chile exhibits significant variability, with major peaks of 3000 kg, indicating multiple large export events contributing to the overall export volume.

Table 3.12
CHINA EXPORT DETAILS FOR 2022-23

Export Quantity	Price (dollar)	Export Value	Currency	Exchange Rate	Export Total Value (USD)	
25	25	625	Yuan	6.93	4331.25	
50	25	1250	Yuan	6.93	8662.5	
1600	25	40000	Yuan	6.93	277200	
50	25	1250	Yuan	6.93	8662.5	
15	25	375	Yuan	6.93	2598.75	
2000	30	60000	Yuan	6.93	415800	
150	30	4500	Yuan	6.93	31185	
50	30	1500	Yuan	6.93	10395	
360	28	10080	Yuan	6.93	69854.4	
180	28	5040	Yuan	6.93	34927.2	
2250	28	63000	Yuan	6.93	436590	
4050	31	125550	Yuan	6.93	870061.5	
6300	31	195300	Yuan	6.93	1353429	
12000	31	372000	Yuan	6.93	2577960	
2000	31	62000	Yuan	6.93	429660	
1560	31	48360	Yuan	6.93	335134.8	

Figure 3.12

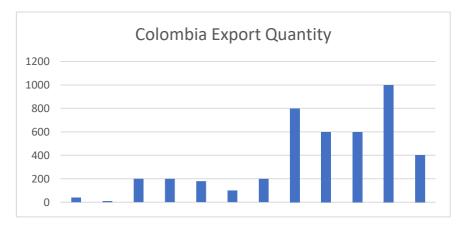


The chart shows that China's export quantities are concentrated heavily in certain categories, with the highest quantities 12000 kg, while other categories have comparatively lower export volumes.

Table 3.13
COLOMBIA EXPORT DETAILS FOR 2022-23

Export Quantity	Price (dollar)	Export Value	Currency	Exchange Rate	Export Total Value (USD)
40	32	1280	Colombian Peso	3839.3	4914240
10	32	320	Colombian Peso	3839.3	1228560
200	32	6400	Colombian Peso	3839.3	24571200
200	32	6400	Colombian Peso	3839.3	24571200
180	32	5760	Colombian Peso	3839.3	22114080
100	32	3200	Colombian Peso	3839.3	12285600
200	32	6400	Colombian Peso	3839.3	24571200
800	32	25600	Colombian Peso	3839.3	98284800
600	32	19200	Colombian Peso	3839.3	73713600
600	32	19200	Colombian Peso	3839.3	73713600
1000	32	32000	Colombian Peso	3839.3	122856000
400	32	12800	Colombian Peso	3839.3	49142400

Figure 3.13

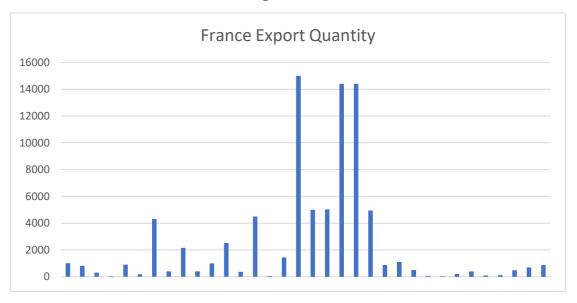


The Colombia's export quantities are more evenly distributed across categories, with higher quantities of 1000, 800 kg, and lower quantities in the earlier trades.

Table 3.14
FRANCE EXPORT DETAILS FOR 2022-23

FRANCE EAPORT DETAILS FOR 2022-25						
Export	Price	Export	Currency	Exchange	Export Total	
Quantity	(dollar)	Value		Rate	Value (USD)	
1005	34	34170	euro	0.92	31436.4	
810	34	27540	euro	0.92	25336.8	
300	34	10200	euro	0.92	9384	
40	34	1360	euro	0.92	1251.2	
900	34	30600	euro	0.92	28152	
180	34	6120	euro	0.92	5630.4	
4320	34	146880	euro	0.92	135129.6	
400	34	13600	euro	0.92	12512	
2160	34	73440	euro	0.92	67564.8	
400	34	13600	euro	0.92	12512	
1000	34	34000	euro	0.92	31280	
2520	34	85680	euro	0.92	78825.6	
360	34	12240	euro	0.92	11260.8	
4500	34	153000	euro	0.92	140760	
50	34	1700	euro	0.92	1564	
1440	34	48960	euro	0.92	45043.2	
15000	34	510000	euro	0.92	469200	
5000	34	170000	euro	0.92	156400	
5040	34	171360	euro	0.92	157651.2	
14400	34	489600	euro	0.92	450432	
14400	34	489600	euro	0.92	450432	
4950	34	168300	euro	0.92	154836	
875	34	29750	euro	0.92	27370	
1100	34	37400	euro	0.92	34408	
510	34	17340	euro	0.92	15952.8	
60	34	2040	euro	0.92	1876.8	
40	34	1360	euro	0.92	1251.2	
210	34	7140	euro	0.92	6568.8	
400	34	13600	euro	0.92	12512	
105	34	3570	euro	0.92	3284.4	
120	34	4080	euro	0.92	3753.6	
486	34	16524	euro	0.92	15202.08	
700	34	23800	euro	0.92	21896	
875	34	29750	euro	0.92	27370	

Figure 3.14

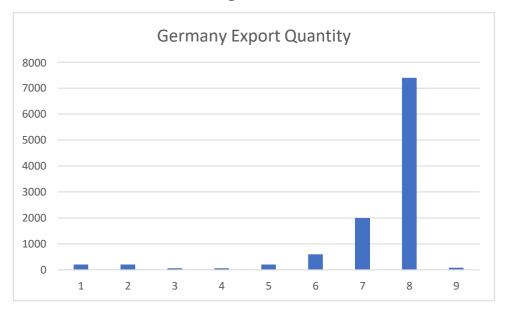


The bulk export quantity data for France shows a significant peak at around 1500 kg, with other export quantities varying considerably, including several smaller peaks around 2000-3000 kg and much lower quantities below 1000kg, indicating a diverse range of export volumes.

Table 3.15
GERMANY EXPORT DETAILS FOR 2022-23

Export Quantity	Price (dollar)	Export Value	Currency	Exchange Rate	Export Total Value (USD)
200	38	7600	euro	0.92	6992
200	38	7600	euro	0.92	6992
60	38	2280	euro	0.92	2097.6
60	38	2280	euro	0.92	2097.6
200	38	7600	euro	0.92	6992
600	38	22800	euro	0.92	20976
2000	38	76000	euro	0.92	69920
7400	38	281200	euro	0.92	258704
80	38	3040	euro	0.92	2796.8

Figure 3.15

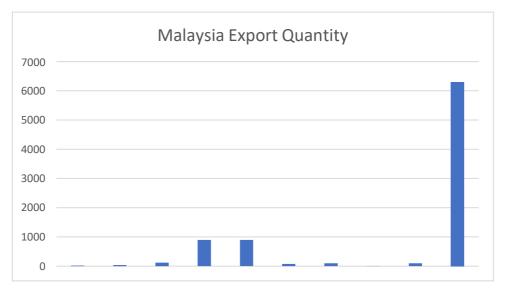


The Germany export quantities are more evenly distributed across categories, with higher quantities of 7400 kg, and lower quantities as 60, 80 kg.

Table 3.16
MALASIYA EXPORT DETAILS FOR 2022-23

Export Quantity	Price (dollar)	Export Value	Currency	Exchange Rate	Export Total Value
20	35	700	Ringgit	4.4	3080
40	35	1400	Ringgit	4.4	6160
120	35	4200	Ringgit	4.4	18480
900	35	31500	Ringgit	4.4	138600
900	35	31500	Ringgit	4.4	138600
75	35	2625	Ringgit	4.4	11550
100	35	3500	Ringgit	4.4	15400
5	35	175	Ringgit	4.4	770
100	35	3500	Ringgit	4.4	15400
6300	35	220500	Ringgit	4.4	970200

Figure 3.16



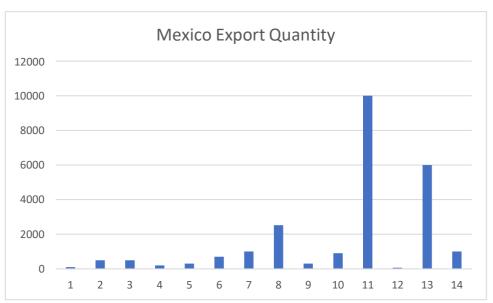
The chart shows that Malaysia's export quantities are concentrated heavily in certain categories, with the highest quantities 6300 kg, while other categories have comparatively lower export volumes as 5, 20, 40.

Table 3.17

MEXICO EXPORT DETAILS FOR 2022-23

Export Quantity	Price (dollar)	Export Value	Currency	Exchange Rate	Export Total Value (USD)
100	75	7500	Mexican peso	16.69	125175
500	75	37500	Mexican peso	16.69	625875
500	75	37500	Mexican peso	16.69	625875
200	75	15000	Mexican peso	16.69	250350
300	75	22500	Mexican peso	16.69	375525
700	75	52500	Mexican peso	16.69	876225
1000	73	73000	Mexican peso	16.69	1218370
2525	73	184325	Mexican peso	16.69	3076384.25
300	73	21900	Mexican peso	16.69	365511
900	73	65700	Mexican peso	16.69	1096533
10000	73	730000	Mexican peso	16.69	12183700
60	73	4380	Mexican peso	16.69	73102.2
6000	73	438000	Mexican peso	16.69	7310220
1000	73	73000	Mexican peso	16.69	1218370

Figure 3.17

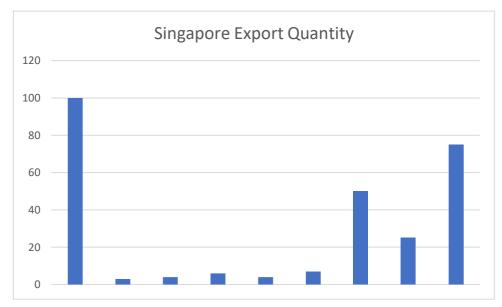


The bulk export quantity data for Mexico shows a significant peak at around 10000kg, with other export quantities varying considerably, including several smaller peaks of 6000, 2000 kg and much lower quantities below 1000kg, indicating a diverse range of export volumes.

Table 3.18
SINGAPORE EXPORT DETAILS FOR 2022-23

Export Quantity	Price (dollar)	Export Value	Currency	Exchange Rate	Export Total Value
100	90	9000	Dollar	1.34	12060
3	90	270	Dollar	1.34	361.8
4	90	360	Dollar	1.34	482.4
6	90	540	Dollar	1.34	723.6
4	90	360	Dollar	1.34	482.4
7	90	630	Dollar	1.34	844.2
50	90	4500	Dollar	1.34	6030
25	90	2250	Dollar	1.34	3015
75	90	6750	Dollar	1.34	9045

Figure 3.18

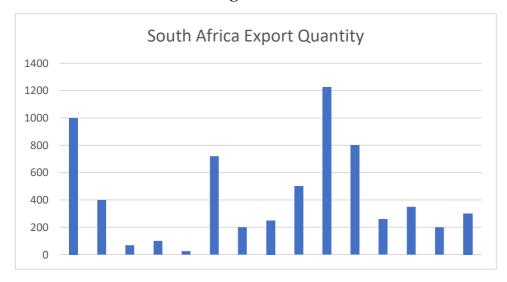


It indicates that the export quantity of Singapore is low compare with other countries, the highest export has done in 100 kg and the lowest export has done in 3 kg.

Table 3.19
SOUTH AFRICA EXPORT DETAILS FOR 2022-23

SOUTH AFRICA EXPORT DETAILS FOR 2022-25									
Export Quantity	Price (dollar)	Export Value	Currency	Exchange Rate	Export Total Value (USD)				
1000	32	32000	South African Rand	17.12	547840				
400	32	12800	South African Rand	17.12	219136				
68	32	2176	South African Rand	17.12	37253.12				
100	32	3200	South African Rand	17.12	54784				
25	32	800	South African Rand	17.12	13696				
720	32	23040	South African Rand	17.12	394444.8				
200	32	6400	South African Rand	17.12	109568				
250	32	8000	South African Rand	17.12	136960				
500	32	16000	South African Rand	17.12	273920				
1225	32	39200	South African Rand	17.12	671104				
800	32	25600	South African Rand	17.12	438272				
260	32	8320	South African Rand	17.12	142438.4				
350	32	11200	South African Rand	17.12	191744				
200	32	6400	South African Rand	17.12	109568				
300	32	9600	South African Rand	17.12	164352				

Figure 3.19

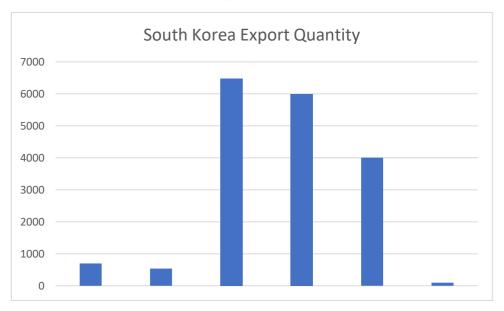


The chart shows that South Africa export quantities are exporting at the average kg the highest quantities are 1225 and 1000 kg, while other categories have comparatively lower export volumes as below 500 kg.

Table 3.20
SOUTH KOREA EXPORT DETAILS FOR 2022-23

Export Quantity	Price (dollar)	Export Value	Currency	Exchange Rate	Export Total Value (USD)
700	80	56000	South Korean won	1291	72296000
540	80	43200	South Korean won	1291	55771200
6480	80	518400	South Korean won	1291	669254400
6000	80	480000	South Korean won	1291	619680000
4005	80	320400	South Korean won	1291	413636400
100	80	8000	South Korean won	1291	10328000

Figure 3.20



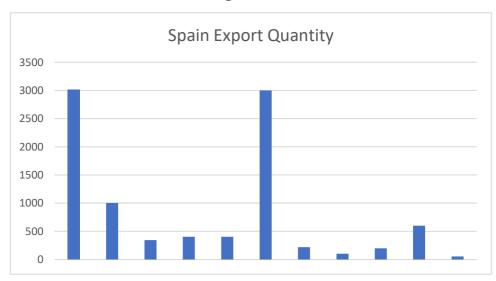
There is moderate export quantity in South Korea with the kg of 6480,6000,4005.

There are no lowest exports are identified.

Table 3.21
SPAIN EXPORT DETAILS FOR 2022-23

Export Quantity	Price (dollar)	Export Value	Currency	Exchange Rate	Export Total Value (USD)
3009	37	111333	Euro	153.88	17131922.04
1003	37	37111	Euro	153.88	5710640.68
345	37	12765	Euro	153.88	1964278.2
405	37	14985	Euro	153.88	2305891.8
405	37	14985	Euro	153.88	2305891.8
3000	37	111000	Euro	153.88	17080680
220	37	8140	Euro	153.88	1252583.2
102	37	3774	Euro	153.88	580743.12
200	37	7400	Euro	153.88	1138712
600	37	22200	Euro	153.88	3416136
54	37	1998	Euro	153.88	307452.24

Figure 3.21

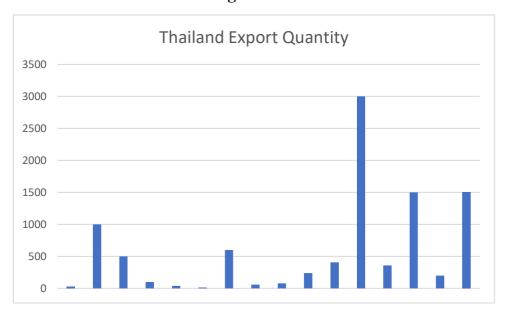


The bulk export quantity data for Spain shows the highest exports kg 3009,3000, with other export quantities and lower quantities below 500 kg, indicating a diverse range of export volumes.

Table 3.22
THAILAND EXPORT DETAILS FOR 2022-23

Export Quantity	Price (dollar)	Export Value	Currency	Exchange Rate	Export Total Value (USD)
25	36	900	Thai Baht	34.802	31321.8
1000	36	36000	Thai Baht	34.802	1252872
500	36	18000	Thai Baht	34.802	626436
100	36	3600	Thai Baht	34.802	125287.2
40	36	1440	Thai Baht	34.802	50114.88
15	36	540	Thai Baht	34.802	18793.08
600	36	21600	Thai Baht	34.802	751723.2
60	36	2160	Thai Baht	34.802	75172.32
80	36	2880	Thai Baht	34.802	100229.76
240	36	8640	Thai Baht	34.802	300689.28
408	36	14688	Thai Baht	34.802	511171.776
3000	36	108000	Thai Baht	34.802	3758616
360	36	12960	Thai Baht	34.802	451033.92
1500	36	54000	Thai Baht	34.802	1879308
200	36	7200	Thai Baht	34.802	250574.4
1500	36	54000	Thai Baht	34.802	1879308

Figure 3.22

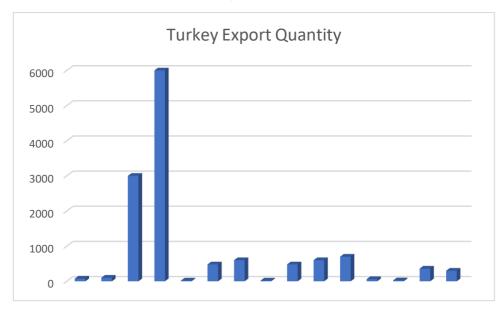


The chart shows that Thailand export quantities are concentrated heavily in certain categories, with the highest quantities $3000 \, \mathrm{kg}$, while other categories have comparatively lower export volumes as less than $100 \, \mathrm{kg}$.

Table 3.23
TURKEY EXPORT DETAILS FOR 2022-23

Export Quantity	Price (dollar)	Export Value	Currency	Exchange Rate	Export Total Value (USD)
75	34	2550	Turkish lira	23.81	60724.68
100	34	3400	Turkish lira	23.81	80966.24
3000	34	102000	Turkish lira	23.81	2428987.2
6000	34	204000	Turkish lira	23.81	4857974.4
20	34	680	Turkish lira	23.81	16193.248
480	34	16320	Turkish lira	23.81	388637.952
600	34	20400	Turkish lira	23.81	485797.44
20	34	680	Turkish lira	23.81	16193.248
480	34	16320	Turkish lira	23.81	388637.952
600	34	20400	Turkish lira	23.81	485797.44
700	34	23800	Turkish lira	23.81	566763.68
60	34	2040	Turkish lira	23.81	48579.744
25	34	850	Turkish lira	23.81	20241.56
360	34	12240	Turkish lira	23.81	291478.464
300	34	10200	Turkish lira	23.81	242898.72

Figure 3.23

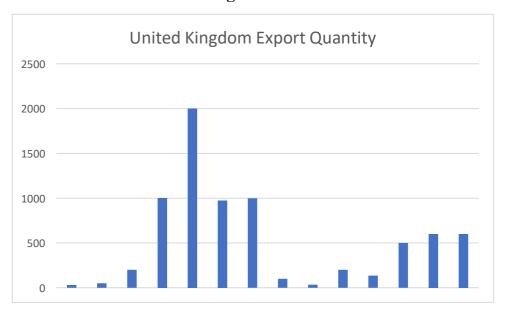


The bulk export quantity data for the Turkey exhibits significant variability, with major peaks of 6000 kg, indicating multiple large export events contributing to the overall export volume.

Table 3.24
UNITED KINGDOM EXPORT DETAILS FOR 2022-23

CIVILED IN TODOW EM ON DETMED FOR 2022 25						
Export Quantity	Price (dollar)	Export Value	Currency	Exchange Rate	Export Total Value (USD)	
30	80	2400	GBP	0.82	1968	
50	80	4000	GBP	0.82	3280	
200	80	16000	GBP	0.82	13120	
1000	80	80000	GBP	0.82	65600	
2000	80	160000	GBP	0.82	131200	
975	80	78000	GBP	0.82	63960	
1000	80	80000	GBP	0.82	65600	
100	80	8000	GBP	0.82	6560	
34	80	2720	GBP	0.82	2230.4	
200	80	16000	GBP	0.82	13120	
136	80	10880	GBP	0.82	8921.6	
500	80	40000	GBP	0.82	32800	
600	80	48000	GBP	0.82	39360	
600	80	48000	GBP	0.82	39360	

Figure 3.24

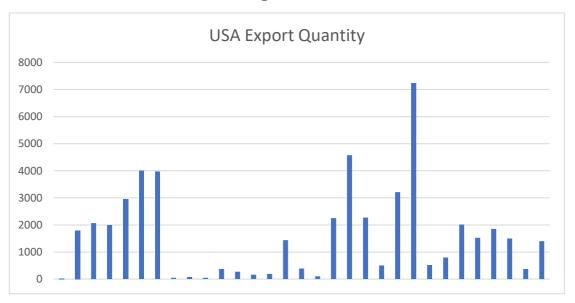


The bulk export quantity data for United Kingdom shows the highest export 2000 kg, with other export quantities varying considerably and much lower quantities below 500 kg, indicating a diverse range of export volumes.

Table 3.25
USA EXPORT DETAILS FOR 2022-23

USA EAPORT DETAILS FOR 2022-25					
Export Quantity	Price (dollar)	Export Value	Currency	Exchange Rate	Export Total Value (USD)
15	29	435	U S Dollar	81	35235
1795	29	52055	U S Dollar	81	4216455
2067	29	59943	U S Dollar	81	4855383
1995	29	57855	U S Dollar	81	4686255
2948	29	85492	U S Dollar	81	6924852
4008	29	116232	U S Dollar	81	9414792
3972	29	115188	U S Dollar	81	9330228
47	29	1363	U S Dollar	81	110403
79	29	2291	U S Dollar	81	185571
50	35	1750	U S Dollar	81	141750
375	35	13125	U S Dollar	81	1063125
270	35	9450	U S Dollar	81	765450
160	35	5600	U S Dollar	81	453600
190	35	6650	U S Dollar	81	538650
1436	35	50260	U S Dollar	81	4071060
389	35	13615	U S Dollar	81	1102815
100	35	3500	U S Dollar	81	283500
2253	35	78855	U S Dollar	81	6387255
4571	35	159985	U S Dollar	81	12958785
2269	32	72608	U S Dollar	81	5881248
500	32	16000	U S Dollar	81	1296000
3206	32	102592	U S Dollar	81	8309952
7237	32	231584	U S Dollar	81	18758304
523	32	16736	U S Dollar	81	1355616
800	32	25600	U S Dollar	81	2073600
2013	32	64416	U S Dollar	81	5217696
1523	32	48736	U S Dollar	81	3947616
1857	32	59424	U S Dollar	81	4813344
1500	32	48000	U S Dollar	81	3888000
374	32	11968	U S Dollar	81	969408
1400	32	44800	U S Dollar	81	3628800

Figure 3.25

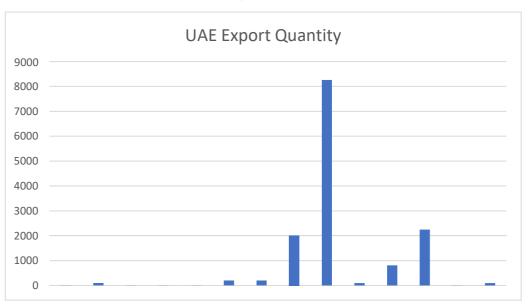


USA has more than 25 numbers of export with the highest quantity of 7237 kg, there are more no of 1000+ unit quantities are exported that indicates there are bulky exports are takes place.

Table 3.26
UNITED ARAB EMIRATES EXPORT DETAILS FOR 2022-23

Export Quantity	Price (dollar)	Export Value	Currency	Exchange Rate	Export Total Value (USD)
5	28	140	AED	3.67	513.8
100	28	2800	AED	3.67	10276
10	28	280	AED	3.67	1027.6
10	28	280	AED	3.67	1027.6
10	28	280	AED	3.67	1027.6
200	32	6400	AED	3.67	23488
200	32	6400	AED	3.67	23488
2006	32	64192	AED	3.67	235584.64
8262	32	264384	AED	3.67	970289.28
100	34	3400	AED	3.67	12478
810	34	27540	AED	3.67	101071.8
2244	34	76296	AED	3.67	280006.32
10	34	340	AED	3.67	1247.8
100	34	3400	AED	3.67	12478

Figure 3.26

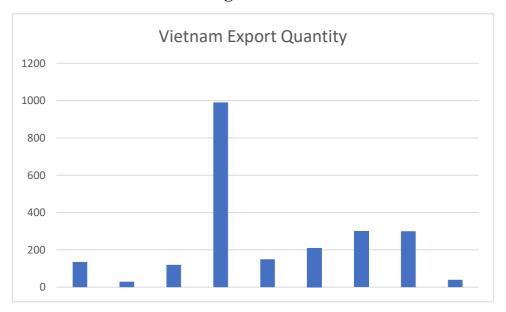


Here we can notice that the number of exports of lowest quantities are high and the highest quantity of export is 8262 kg and the least quantity are 10 kg that has been exported thrice.

Table 3.27
VIETNAM EXPORT DETAILS FOR 2022-23

Export Quantity(kg)	Price (dollar)	Export Value	Currency	Exchange Rate	Export Total Value (USD)
135	36	4860	Vietnamese dong	23,836	115842960
30	36	1080	Vietnamese dong	23,836	25742880
120	36	4320	Vietnamese dong	23,836	102971520
990	36	35640	Vietnamese dong	23,836	849515040
150	37	5550	Vietnamese dong	23,836	132289800
210	37	7770	Vietnamese dong	23,836	185205720
300	37	11100	Vietnamese dong	23,836	264579600
300	37	11100	Vietnamese dong	23,836	264579600
40	37	1480	Vietnamese dong	23,836	35277280

Figure 3.27



It indicates there only less than 1000 kg of exports are done that we cannot consider as bulk export. The highest export is 990 kg and the lowest is 30 kg.

Table 3.28

NUMBER OF TRADERS

NONIDER OF	IRADERS
COUNTRIES	NO OF TRADERS
Algeria	2
Argentina	7
Australia	22
Bangladesh	5
Belgium	4
Brazil	16
Canada	20
Cayman Island	17
Chile	10
China	16
Colombia	12
France	34
Germany	9
Malaysia	10
Mexico	14
Singapore	9
South Africa	15
South Korea	6
Spain	11
Thailand	16
Turkey	15
United Kingdom	14
USA	31
United Arab	
Emirates	14
Vietnam	9

NO OF TRADERS 40 35 30 25 20 15 10 5 0 No of Traders Belgium Canada Chile France Bangladesh Brazil China Malaysia South Korea Spain Turkey Argentina Australia Cayman Island Colombia Germany Mexico Singapore South Africa Thailand United Kingdom United Arab. Country

Figure 3.28

Number of Traders" shows that France and the USA have the highest number of traders, with around 35 each, while Algeria has the lowest, with fewer than 5 traders.

CHAPTER 4 FINDINGS, RECOMMENDATIONS & SUMMARY

4.1 FINDINGS

- The highest export values were recorded for the USA and France, indicating these countries as primary export destinations. In contrast, exports to other countries such as Algeria, Singapore, and New Zealand were significantly lower. This disparity highlights a concentrated export market with substantial reliance on a few key countries.
- ❖ The bar chart reveals that Asia and North America had the highest export amounts for the year 2022-23, each exceeding 30,000,000 kg. This suggests strong trade relations and demand in these regions. Conversely, Africa recorded the lowest export amount, indicating comparatively weaker market penetration or demand. The significant difference in export quantities underscores the varying levels of trade activity across different continents.
- ❖ For Algeria, the data indicates that increasing the export quantity from 2 kg to 300 kg dramatically raises the export total value in Dinar from 14,680.81 to 2,202,121.08. This underscores the significant financial impact of larger bulk export quantities.
- ❖ In the case of Argentina, the chart shows that the bulk of the export quantity is concentrated primarily in the fourth category, followed by the fifth and sixth categories, with significantly lower quantities in the other categories. The data table further reveals that Argentina's bulk export quantities vary widely, with the largest export quantities being 4005, 2700, and 2010 kg, indicating that a few high-quantity exports contribute significantly to the overall export value.
- ❖ The data table indicates that the country's bulk exports include both small and large quantities, with the largest export quantity being 1425 kg. This significantly impacts the overall export value when compared to smaller quantities of 15, 60, and 150 kg.

- ❖ The bulk export quantities of 4, 36, and 30 kg each at a consistent price of \$34 reflect significant export activities. When converted from Belgium Francs to dollars using the exchange rate of 37.81, the substantial total export values are 5142.16, 46279.44, and 38566.2 respectively, indicating robust trade transactions.
- ❖ The bulk export quantity data for Brazil shows a significant peak at around 6000 kg, with other export quantities varying considerably. This includes several smaller peaks around 2000-3000 kg and much lower quantities below 500 kg, indicating a diverse range of export volumes.
- ❖ The bulk export quantity data for Canada shows a dominant peak at around 20,000 kg. The rest of the export quantities are significantly lower and relatively evenly distributed, indicating one major export event or item contributing to the majority of the export volume.
- ❖ Argentina, Brazil, France, the Cayman Islands, China, South Korea, and the United States lead the way in high-volume exports, displaying their strong industrial and agricultural sectors. These countries have established themselves as major players in the global economy by persistent exports of significant amounts of commodities. Their excellent export success shows their economic strength and competitive advantage across several industries.
- Singapore, Vietnam, and Bangladesh are now among the lowest in terms of bulk export volumes internationally, concentrating on high-value, low-volume items. These nations have established niches in industries such as electronics, textiles, and specialized manufacturing, where the focus is on product quality and value rather than quantity. This strategic emphasis enables them to compete effectively in the global market, despite decreased total export quantities.
- ❖ The "Number of Traders" data reveals that France and the USA have the highest number of traders, each with around 35, indicating a diverse and active trading environment. In contrast, Algeria has the lowest number of traders, with fewer than 5, suggesting limited participation in the trading market.

4.2 RECOMMENDATIONS

- ➤ Reduce reliance on primary export destinations like the USA and France by exploring and penetrating new markets to mitigate risks and enhance trade resilience.
- ➤ Develop targeted marketing and trade initiatives to increase export volumes to Africa, addressing the region's specific demand and logistical challenges.
- ➤ Implement policies and incentives that encourage exporters to increase bulk quantities, particularly in Algeria, to maximize financial returns.
- Focus on increasing exports in the fourth, fifth, and sixth categories where Argentina already has substantial export volumes, while also exploring opportunities to boost lower-volume categories.
- ➤ Provide tailored support and resources for both small and large exporters to ensure balanced growth and maximize overall export value.
- ➤ Encourage exporters to maintain consistent pricing strategies, as seen with Belgium Francs conversions, to ensure predictability and trust in international markets.
- ➤ Develop strategies to balance the export volume peaks and ensure a more consistent export pattern, reducing dependency on a few high-quantity exports.
- ➤ Identify and analyze the factors behind the dominant peak export event in Canada to replicate its success and encourage more such high-volume exports.
- ➤ Invest in infrastructure and technologies that support high-volume exports in leading countries like Argentina, Brazil, and the USA to maintain their competitive edge.
- ➤ For countries like Singapore, Vietnam, and Bangladesh, continue to invest in high-value, low-volume industries, ensuring quality and innovation remain priorities.
- ➤ Increase the number of active traders in countries with low participation, such as Algeria, through training programs, incentives, and trade facilitation measures.
- ➤ Negotiate and sign new trade agreements with emerging markets to expand export opportunities and reduce barriers to entry.

4.3 SUMMARY

The export data highlights significant disparities among countries in terms of both export volumes and values. The USA and France emerge as primary export destinations, showcasing high export values, while countries like Algeria, Singapore, and New Zealand record significantly lower values, underscoring a concentrated export market reliant on key nations. Additionally, the bar chart for 2022-23 shows that Asia and North America lead in export amounts, each exceeding 30,000,000 kg, whereas Africa lags with the lowest export amounts, indicating varied levels of trade activity across continents.

Detailed country-specific findings further illustrate these differences. In Algeria, a dramatic increase in export value from 14,680.81 to 2,202,121.08 Dinar is observed when export quantities rise from 2 kg to 300 kg, emphasizing the financial impact of bulk exports. Argentina's export quantities show significant concentration in specific categories, with high-volume exports such as 4005, 2700, and 2010 kg making substantial contributions to the overall export value. Brazil's export data reveals a notable peak at 6000 kg, along with diverse export volumes, while Canada's data shows a dominant peak at 20,000 kg, indicating one major export event or item.

The analysis also highlights leading nations in high-volume exports, including Argentina, Brazil, France, the Cayman Islands, China, South Korea, and the USA, which demonstrate robust industrial and agricultural sectors. Conversely, Singapore, Vietnam, and Bangladesh focus on high-value, low-volume exports, leveraging their niches in electronics, textiles, and specialized manufacturing. Finally, the "Number of Traders" data points to a more active trading environment in France and the USA, with around 35 traders each, compared to Algeria's fewer than 5 traders, reflecting varied levels of market participation and trade engagement.

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APPENDIX

Country	Quantity in kg	Value	Exchange Rate	Amount in based currency
Algeria	2	108	134.26	14500.08
Algeria	300	9600	134.26	1288896
Argentina	40	1480	915.5	1354940
Argentina	500	18500	915.5	16936750
Argentina	1,620	55080	915.5	50425740
Argentina	8,100	275400	915.5	252128700
Argentina	6,660	226440	915.5	207305820
Argentina	4,000	120000	915.5	109860000
Argentina	500	24500	915.5	22429750
Australia	75	6375	1.48	9435
Australia	40	320	1.48	473.6
Australia	40	320	1.48	473.6
Australia	20	160	1.48	236.8
Australia	10	250	1.48	370
Australia	500	19000	1.48	28120
Australia	30	900	1.48	1332
Australia	310	11470	1.48	16975.6
Australia	120	5160	1.48	7636.8
Australia	144	6192	1.48	9164.16
Australia	2,010	68340	1.48	101143.2
Australia	2,700	91800	1.48	135864
Australia	4,005	136170	1.48	201531.6
Australia	60	1800	1.48	2664
Australia	45	1350	1.48	1998
Australia	90	810	1.48	1198.8
Australia	40	360	1.48	532.8
Australia	30	270	1.48	399.6
Australia	150	5100	1.48	7548
Australia	100	3600	1.48	5328
Australia	100	3600	1.48	5328
Australia	20	440	1.48	651.2
Australia	20	440	1.48	651.2
Australia	50	1700	1.48	2516
Australia	50	1700	1.48	2516
Australia	50	2000	1.48	2960
Australia	50	2000	1.48	2960
Australia	25	1000	1.48	1480
Australia	25	1000	1.48	1480
Australia	100	3500	1.48	5180
Australia	150	13500	1.48	19980

5	450	1.48	666
400	36000	1.48	53280
15	+	117.53	74043.9
15	-		74043.9
		117.53	7034170.5
			440737.5
	0.00		
60	1920	117.53	225657.6
4	136	0.92	125.12
36	1224	0.92	1126.08
30	1020	0.92	938.4
30	1020	0.92	938.4
20	680	5.46	3712.8
10	1050	5.46	5733
200	8000	5.46	43680
600	22800	5.46	124488
600	22800	5.46	124488
600	22800	5.46	124488
500	19000	5.46	103740
		5.46	8599.5
			62790
			251160
			251160
			251160
			24133.2
			24133.2
	+		2402.4
			6006
			3003
	+		6006
			39858
			1965.6
15	720		3931.2
10	+		2620.8
	+		753480
,			1130220
-			1130220
			1130220
,			2260440
•	+		31668
100	5800		31668
	+		31668
			360360
			1801800
	+		36036
			1801800
	400 15 15 1,425 150 60 4 36 30 30 20 10 200 600 600 600 600 500 75 500 2,000 2,000 2,000 2,000 68 68 8 20 10 20 100 10 10 15 10 2,000 3,000 3,000 3,000 3,000 100	400 36000 15 630 1,425 59850 150 3750 60 1920 4 136 36 1224 30 1020 20 680 10 1050 200 8000 600 22800 600 22800 600 22800 500 19000 75 1575 500 11500 2,000 46000 2,000 46000 2,000 46000 2,000 46000 2,000 1100 10 550 20 1100 10 550 20 1100 10 360 15 720 10 480 2,000 3,000 2,000 138000 3,000 207000 3,000 207000 3,000 207000 3,000 2070	400 36000 1.48 15 630 117.53 15 630 117.53 1,425 59850 117.53 150 3750 117.53 60 1920 117.53 4 136 0.92 36 1224 0.92 30 1020 0.92 30 1020 0.92 20 680 5.46 200 8000 5.46 600 22800 5.46 600 22800 5.46 600 22800 5.46 600 22800 5.46 500 19000 5.46 500 19000 5.46 2,000 46000 5.46 2,000 46000 5.46 2,000 46000 5.46 8 4420 5.46 8 4420 5.46 8 4420 5.46 <

Brazil	3,000	330000	5.46	1801800
Canada	408	13056	1.36	17756.16
Canada	170	6800	1.36	9248
Canada	119	4760	1.36	6473.6
Canada	18	504	1.36	685.44
Canada	40	3160	1.36	4297.6
Canada	360	9360	1.36	12729.6
Canada	360	9360	1.36	12729.6
Canada	20,000	1940000	1.36	2638400
Canada	400	23600	1.36	32096
Canada	600	35400	1.36	48144
Canada	300	17700	1.36	24072
Canada	77	3311	1.36	4502.96
Canada	40	1600	1.36	2176
Canada	300	12000	1.36	16320
Canada	200	8400	1.36	11424
Canada	170	7140	1.36	9710.4
Canada	324	13608	1.36	18506.88
Canada	468	19656	1.36	26732.16
Canada	200	8400	1.36	11424
Canada	1,080	45360	1.36	61689.6
Canada	160	4640	1.36	6310.4
Canada	170	4930	1.36	6704.8
Canada	153	4437	1.36	6034.32
Canada	240	6960	1.36	9465.6
Canada	85	2465	1.36	3352.4
Canada	20	600	1.36	816
Canada	340	11560	1.36	15721.6
Canada	162	5508	1.36	7490.88
Canada	476	16184	1.36	22010.24
Canada	612	20808	1.36	28298.88
Canada	612	20808	1.36	28298.88
Canada	1,530	52020	1.36	70747.2
Canada	120	4440	1.36	6038.4
Canada	510	53550	1.36	72828
Canada	1,615	169575	1.36	230622
Canada	170	17850	1.36	24276
Canada	170	17850	1.36	24276
Canada	100	10500	1.36	14280
Canada	1,500	157500	1.36	214200
Cayman Islands	3,047.52	131043.4	0.83	108765.9888
Cayman Islands	761.88	32760.84	0.83	27191.4972
Cayman Islands	1,523.76	65521.68	0.83	54382.9944
Cayman Islands	4,952.22	287228.8	0.83	238399.8708
Cayman Islands	7,618.80	525697.2	0.83	436328.676

Cayman Islands	2,902.40	200265.6	0.83	166220.448
Cayman Islands	2,285.64	157709.2	0.83	130898.6028
Cayman Islands	7,618.80	525697.2	0.83	436328.676
Cayman Islands	60	3480	0.83	2888.4
Cayman Islands	40	2320	0.83	1925.6
Cayman Islands	190.47	7047.39	0.83	5849.3337
Cayman Islands	1,632.60	50610.6	0.83	42006.798
Cayman Islands	2,539.60	78727.6	0.83	65343.908
Cayman Islands	5,079.20	157455.2	0.83	130687.816
Cayman Islands	761.88	23618.28	0.83	19603.1724
Cayman Islands	4,320	133920	0.83	111153.6
Cayman Islands	14,512	449872	0.83	373393.76
Cayman Islands	3,628	112468	0.83	93348.44
Cayman Islands	2,176.80	215503.2	0.83	178867.656
Cayman Islands	435.36	43100.64	0.83	35773.5312
Cayman Islands	870.72	86201.28	0.83	71547.0624
Cayman Islands	2,612.16	258603.8	0.83	214641.1872
Cayman Islands	2,176.80	215503.2	0.83	178867.656
Cayman Islands	399.08	39508.92	0.83	32792.4036
Cayman Islands	36.28	3591.72	0.83	2981.1276
Cayman islands	30.20	3331.72	0.00	2301.1270
Chile	750	57000	935.63	53330910
Chile	25	1875	935.63	1754306.25
Chile	150	11250	935.63	10525837.5
Chile	150	11250	935.63	10525837.5
Chile	210	7140	935.63	6680398.2
Chile	1,305	45675	935.63	42734900.25
Chile	60	2100	935.63	1964823
Chile	3,000	105000	935.63	98241150
Chile	4.5	94.5	935.63	88417.035
Chile	15	315	935.63	294723.45
Chile	15	315	935.63	294723.45
Chile	150	4200	935.63	3929646
China	25	625	7.27	4543.75
China	50	1250	7.27	9087.5
China	1,600	49600	7.27	360592
China	200	15800	7.27	114866
China	5	390	7.27	2835.3
China	50	3900	7.27	28353
China	15	315	7.27	2290.05
China	5	150	7.27	1090.5
China	10	300	7.27	2181
China	15	480	7.27	3489.6
China	2,000	64000	7.27	465280
China	15	480	7.27	3489.6
China	50	1700	7.27	12359

China	150	5100	7.27	37077
China	50	1700	7.27	12359
China	15	360	7.27	2617.2
China	20	480	7.27	3489.6
China	360	15840	7.27	115156.8
China	180	7920	7.27	57578.4
China	2,250	103500	7.27	752445
China	4,050	186300	7.27	1354401
China	6,300	289800	7.27	2106846
China	3	138	7.27	1003.26
China	12,000	1356000	7.27	9858120
China	1,560	176280	7.27	1281555.6
China	2,000	226000	7.27	1643020
China	1,000	113000	7.27	821510
China	1,000	113000	7.27	821510
Colombia	40	1280	4096.44	5243443.2
Colombia	10	380	4096.44	1556647.2
Colombia	200	6600	4096.44	27036504
Colombia	200	6600	4096.44	27036504
Colombia	180	6300	4096.44	25807572
Colombia	100	3100	4096.44	12698964
Colombia	200	6200	4096.44	25397928
Colombia	800	28000	4096.44	114700320
Colombia	600	21000	4096.44	86025240
Colombia	600	21000	4096.44	86025240
Colombia	1,000	26000	4096.44	106507440
Colombia	400	10400	4096.44	42602976
France	100	4000	0.92	3680
France	1,005	34170	0.92	31436.4
France	400	17600	0.92	16192
France	500	22000	0.92	20240
France	10.4	322.4	0.92	296.608
France	810	25110	0.92	23101.2
France	105	2940	0.92	2704.8
France	300	8400	0.92	7728
France	10	270	0.92	248.4
France	60	1620	0.92	1490.4
France	60	1740	0.92	1600.8
France	40	960	0.92	883.2
France	4	112	0.92	103.04
France	27	756	0.92	695.52
France	900	31500	0.92	28980
France	180	6300	0.92	5796
France	4,320	116640	0.92	107308.8
France	4,320	116640	0.92	107308.8

France	10	300	0.92	276
France	400	12800	0.92	11776
France	400	12800	0.92	11776
France	5	185	0.92	170.2
France	510	18870	0.92	17360.4
France	210	7560	0.92	6955.2
France	100	3600	0.92	3312
France	2,160	77760	0.92	71539.2
France	25	850	0.92	782
France	400	11200	0.92	10304
France	1,000	28000	0.92	25760
France	1,100	41800	0.92	38456
France	120	6960	0.92	6403.2
France	120	6960	0.92	6403.2
France	25	1450	0.92	1334
France	360	16200	0.92	14904
France	5,760	460800	0.92	423936
France	15,000	690000	0.92	634800
France	5,000	230000	0.92	211600
France	100	5200	0.92	4784
France	30	1560	0.92	1435.2
France	180	5220	0.92	4802.4
France	10	240	0.92	220.8
France	17.5	350	0.92	322
France	486	9720	0.92	8942.4
France	700	37800	0.92	34776
France	4,500	166500	0.92	153180
France	1	37	0.92	34.04
France	875	36750	0.92	33810
France	875	36750	0.92	33810
France	25	800	0.92	736
			0.0_	
France	25	800	0.92	736
Germany	200	6800	0.92	6256
Germany	200	6000	0.92	5520
Germany	60	1800	0.92	1656
Germany	60	1800	0.92	1656
Germany	200	10000	0.92	9200
Germany	600	31800	0.92	29256
Germany	2,000	106000	0.92	97520
Germany	7,400	392200	0.92	360824
Germany	80	3440	0.92	3164.8
		1	3.32	3200
Malaysia	20	600	4.7105	2826.3
, 514		000	, 100	_0_0.0

Malaysia	120	3960	4.7105	18653.58
Malaysia	900	72000	4.7105	339156
Malaysia	900	72000	4.7105	339156
Malaysia	75	2025	4.7105	9538.7625
Malaysia	100	2700	4.7105	12718.35
Malaysia	5	85	4.7105	400.3925
Malaysia	100	3600	4.7105	16957.8
Malaysia	6,300	226800	4.7105	4096008
Mexico	100	7500	18.06	135450
Mexico	500	19000	18.06	343140
Mexico	500	19000	18.06	343140
Mexico	200	8400	18.06	151704
Mexico	200	8400	18.06	151704
Mexico	300	12600	18.06	227556
Mexico	50	2300	18.06	41538
Mexico	700	26600	18.06	480396
Mexico	100	3300	18.06	59598
Mexico	200	8800	18.06	158928
Mexico	1,000	38000	18.06	686280
Mexico	20	760	18.06	13725.6
Mexico	2525	95950	18.06	1732857
Mexico	300	11400	18.06	205884
Mexico	900	34200	18.06	617652
Mexico	10000	380000	18.06	6862800
Mexico	60	2880	18.06	52012.8
Mexico	60	2880	18.06	52012.8
Mexico	6,000	222000	18.06	4009320
Mexico	4,000	148000	18.06	2672880
Mexico	1,000	36000	18.06	650160
Mexico	1,500	54000	18.06	975240
- IVICAIGO	1,500	3.000	10.00	3732.10
New Zealand	900	38700	1.63	63081
New Zealand	168	3864	1.63	6298.32
New Zealand	120	2760	1.63	4498.8
New Zealand	240	5520	1.63	8997.6
Singapore	100	9000	1.35	12150
Singapore	3	81	1.35	109.35
Singapore	4	108	1.35	145.8
Singapore	6	162	1.35	218.7
Singapore	3.4	115.6	1.35	156.06
Singapore	6.8	231.2	1.35	312.12
Singapore	50	1850	1.35	2497.5
Singapore	25	775	1.35	1046.25
Singapore	75	2550	1.35	3442.5
South Africa	1,000	27000	18.15	490050

South Africa	400	13200	18.15	239580
South Africa	68	2448	18.15	44431.2
South Africa	100	4800	18.15	87120
South Africa	25	900	18.15	16335
South Africa	3	186	18.15	3375.9
South Africa	720	30960	18.15	561924
South Africa	200	8600	18.15	156090
South Africa	250	10750	18.15	195112.5
South Africa	500	21500	18.15	390225
South Africa	1,225	42875	18.15	778181.25
South Africa	800	73600	18.15	1335840
South Africa	260	23920	18.15	434148
South Africa	175	6300	18.15	114345
South Africa	350	12600	18.15	228690
South Africa	200	8600	18.15	156090
South Africa	300	12900	18.15	234135
South Korea	700	57400	1384.24	79455376
South Korea	540	18360	1384.24	25414646.4
South Korea	6,480	291600	1384.24	403644384
South Korea	6,000	234000	1384.24	323912160
South Korea	4,005	156195	1384.24	216211366.8
South Korea	100	2700	1384.24	3737448
Spain	3,009	105315	0.92	96889.8
Spain	1,003	35105	0.92	32296.6
'	,			
Spain	345	7590	0.92	6982.8
Spain	405	8910	0.92	8197.2
Spain	405	8910	0.92	8197.2
Spain	3,000	162000	0.92	149040
Spain	220	7920	0.92	7286.4
Spain	102	3774	0.92	3472.08
Spain	200	7600	0.92	6992
Spain	600	22800	0.92	20976
Spain	54	1998	0.92	1838.16
Thailand	25	850	36.49	31016.5
Thailand	1,000	48000	36.49	1751520
Thailand	500	24000	36.49	875760
Thailand	700	33600	36.49	1226064
Thailand	100	8500	36.49	310165
Thailand	100	8500	36.49	310165
Thailand	40	1720	36.49	62762.8
Thailand	10	380	36.49	13866.2
Thailand	20	540	36.49	19704.6
Thailand	15	735	36.49	26820.15
Thailand	60	2940	36.49	107280.6
Thailand	600	16800	36.49	613032

Thailand	5	210	36.49	7662.9
Thailand	3,000	117000	36.49	4269330
Thailand	500	19500	36.49	711555
Thailand	360	16200	36.49	591138
Thailand	5	115	36.49	4196.35
Thailand	1,500	144000	36.49	5254560
Thailand	40	3840	36.49	140121.6
Thailand	200	19200	36.49	700608
Thailand	100	9600	36.49	350304
Thailand	1,500	144000	36.49	5254560
Thailand	100	5900	36.49	215291
Turkey	75	2400	32.7	78480
Turkey	100	3200	32.7	104640
Turkey	3,000	114000	32.7	3727800
Turkey	6,000	228000	32.7	7455600
Turkey	20	860	32.7	28122
Turkey	480	20640	32.7	674928
Turkey	600	21600	32.7	706320
Turkey	700	25200	32.7	824040
Turkey	60	2160	32.7	70632
Turkey	10	330	32.7	10791
Turkey	25	825	32.7	26977.5
Turkey	360	32400	32.7	1059480
Turkey	300	27000	32.7	882900
United	20	2610	0.70	2025.0
Kingdom	30	2610	0.78	2035.8
United	30	2610	0.78	2035.8
Kingdom	30	2010	0.76	2033.0
United	50	2100	0.78	1638
Kingdom				
United Kingdom	200	4800	0.78	3744
United				
Kingdom	10	240	0.78	187.2
United				
Kingdom	2,000	76000	0.78	59280
United	1 000	20000	0.70	29640
Kingdom	1,000	38000	0.78	29640
United	975	37050	0.78	28899
Kingdom	3,3	37030	0.70	20033
United	1,000	38000	0.78	29640
Kingdom	,			
United Kingdom	100	4300	0.78	3354
United				
Kingdom	34	1292	0.78	1007.76
Kingdom				

United Kingdom	200	6800	0.78	5304
United Kingdom	136	5168	0.78	4031.04
United Kingdom	500	19000	0.78	14820
United Kingdom	600	22800	0.78	17784
United Kingdom	600	22800	0.78	17784
USA	15	255	83.49	21289.95
USA	1,795.86	68242.68	83.49	5697581.353
USA	2,067.96	80650.44	83.49	6733505.236
USA	1,995.40	77820.6	83.49	6497241.894
USA	2,948.20	114979.8	83.49	9599663.502
USA	4,008.94	156348.7	83.49	13053549.62
USA	3,972.66	154933.7	83.49	12935417.95
USA	47.618	1904.72	83.49	159025.0728
USA	79.363	3174.52	83.49	265040.6748
USA	50	4250	83.49	354832.5
USA	375	12750	83.49	1064497.5
USA	375	12750	83.49	1064497.5
USA	270	9720	83.49	811522.8
USA	270	9720	83.49	811522.8
USA	18	576	83.49	48090.24
USA	2	64	83.49	5343.36
USA	6	192	83.49	16030.08
USA	160	4800	83.49	400752
USA	180	5400	83.49	450846
USA	63.49	1904.7	83.49	159023.403
USA	190.47	5714.1	83.49	477070.209
USA	1,436.69	35917.25	83.49	2998731.203
USA	389.103	9727.575	83.49	812155.2368
USA	285.705	9142.56	83.49	763312.3344
USA	100.677	3926.403	83.49	327815.3865
USA	100.677	3926.403	83.49	327815.3865
USA	201.354	7852.806	83.49	655630.7729
USA	805.416	31411.22	83.49	2622523.092
USA	2,013.54	78528.06	83.49	6556307.729
USA	100	3900	83.49	325611
USA	100	39	83.49	3256.11
USA	300	+		
		11700	83.49	976833
USA	1,523.76	59426.64	83.49	4961530.174
USA	100	3900	83.49	325611
USA	492.048	47236.61	83.49	3943784.402
USA	1,857.08	178279.7	83.49	14884570.48

USA	47.618	4571.328	83.49	381660.1747
USA	1,500	39000	83.49	3256110
USA	450	12150	83.49	1014403.5
USA	150	4050	83.49	338134.5
USA	374.138	16087.93	83.49	1343181.61
USA	600	25800	83.49	2154042
USA	1,400	37800	83.49	3155922
USA	453.5	17686.5	83.49	1476645.885
USA	435.36	41794.56	83.49	3489427.814
USA	725.6	69657.6	83.49	5815713.024
USA	145.12	13931.52	83.49	1163142.605
USA	870.72	83589.12	83.49	6978855.629
USA	1,741.44	167178.2	83.49	13957711.26
USA	9,070	870720	83.49	72696412.8
USA	217.68	20897.28	83.49	1744713.907
USA	100	9600	83.49	801504
USA	100	9600	83.49	801504
USA	870.72	83589.12	83.49	6978855.629
USA	108.84	10448.64	83.49	872356.9536
USA	10,448.64	1003069	83.49	83746267.55
USA	907	87072	83.49	7269641.28
USA	181.4	17414.4	83.49	1453928.256
USA	36.28	3482.88	83.49	290785.6512
USA	2,176.80	208972.8	83.49	17447139.07
USA	435.36	41794.56	83.49	3489427.814
USA	888.86	85330.56	83.49	7124248.454
USA	7,782.06	747077.8	83.49	62373522.18
USA	1,215.38	116676.5	83.49	9741319.315
USA	80	7680	83.49	641203.2
USA	471.64	45277.44	83.49	3780213.466
USA	200	19200	83.49	1603008
USA	20	1920	83.49	160300.8
USA	160	15360	83.49	1282406.4
USA	160	15360	83.49	1282406.4
USA	463.931	25052.27	83.49	2091614.356
USA	538.758	29092.93	83.49	2428968.893
USA	448.965	24244.11	83.49	2024140.744
USA	538.758	29092.93	83.49	2428968.893
USA	63.49	2349.13	83.49	196128.8637
USA	95.235	3523.695	83.49	294193.2956
USA	47.618	1761.866	83.49	147098.1923
USA	60	2220	83.49	185347.8
USA	330	12210	83.49	1019412.9
USA	75	2775	83.49	231684.75
USA	63.49	2349.13	83.49	196128.8637

135	4995	83.49	417032.55
5	140	3.67	513.8
100	3900	3.67	14313
10	430	3.67	1578.1
10	430	3.67	1578.1
10	430	3.67	1578.1
200	7400	3.67	27158
200	7400	3.67	27158
2,006	74222	3.67	272394.74
8,262	305694	3.67	1121896.98
100	4800	3.67	17616
810	31590	3.67	115935.3
2,244	87516	3.67	321183.72
10	980	3.67	3596.6
100	9800	3.67	35966
135	4860	25420	123541200
30	1080	25420	27453600
120	4200	25420	106764000
990	34650	25420	880803000
150	5550	25420	141081000
210	7770	25420	197513400
300	11100	25420	282162000
300	11100	25420	282162000
40	1280	25420	32537600
	5 100 10 10 200 200 2,006 8,262 100 810 2,244 10 100 135 30 120 990 150 210 300 300	5 140 100 3900 10 430 10 430 10 430 200 7400 200 7400 2,006 74222 8,262 305694 100 4800 810 31590 2,244 87516 10 980 100 9800 135 4860 30 1080 120 4200 990 34650 150 5550 210 7770 300 11100 300 11100	5 140 3.67 100 3900 3.67 10 430 3.67 10 430 3.67 10 430 3.67 200 7400 3.67 200 7400 3.67 2,006 74222 3.67 8,262 305694 3.67 100 4800 3.67 810 31590 3.67 2,244 87516 3.67 10 980 3.67 100 9800 3.67 135 4860 25420 30 1080 25420 120 4200 25420 990 34650 25420 210 7770 25420 300 11100 25420 300 11100 25420