



Analysis Report on India's Food Trade From 1986-2022

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1. Introduction

- *Overview of India's food trade*
- *Importance of analyzing food trade data*
- *Objectives of the report*

2. Data Description

- *Source of data: India Food Trade dataset*
- *Description of key variables:*
 - *Partner Countries (195 Countries)*
 - *Item (409 food products)*
 - *Region (5 Continents)*
 - *Element (import/export)*
 - *Unit measurement (1000 USD/Ton)*
 - *Yearly data from 1986 to 2022*

3. Methodology

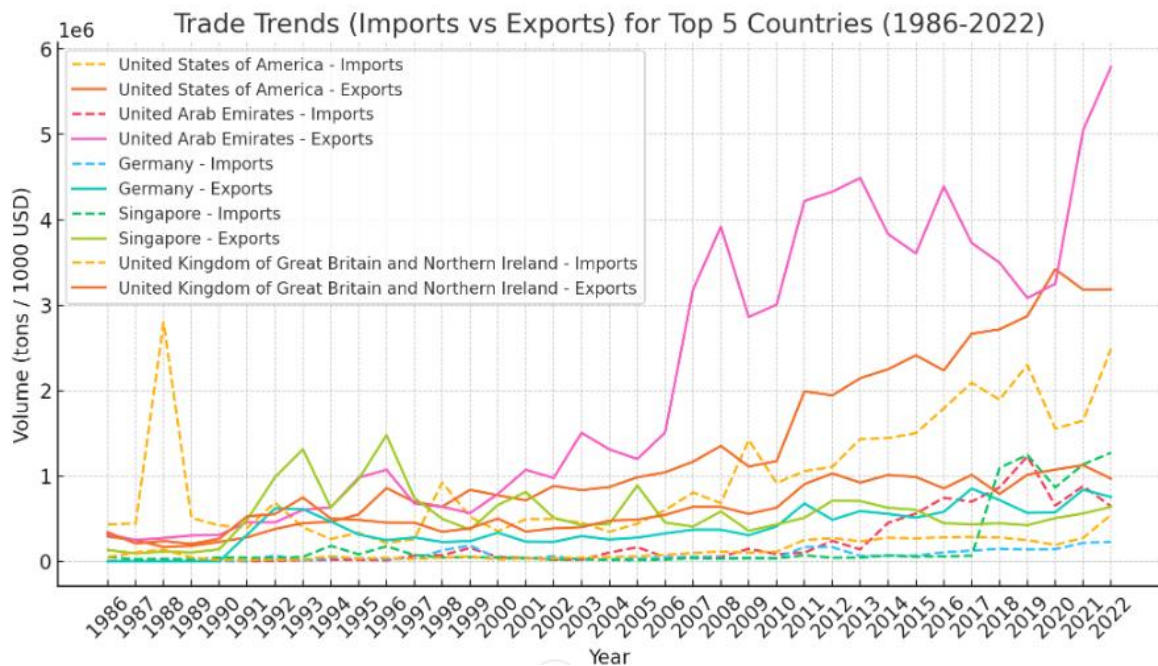
- *Data cleaning and processing steps*
- *Tools used for analysis (e.g., Python, Pandas, Seaborn)*
- *Techniques for visualization (Power BI)*

4. Objectives

- To find order trade analysis
- Trade with top 10 countries
- Import/Export trends
- Changes in amount of items
- Changes in items that are imported or exported
- To find order region wise increased or decreased
- Total volume of imports vs exports over the years

5. Trends in Imports and Exports

- Analysis of total imports vs. exports over the years
- Identification of top imported and exported food items

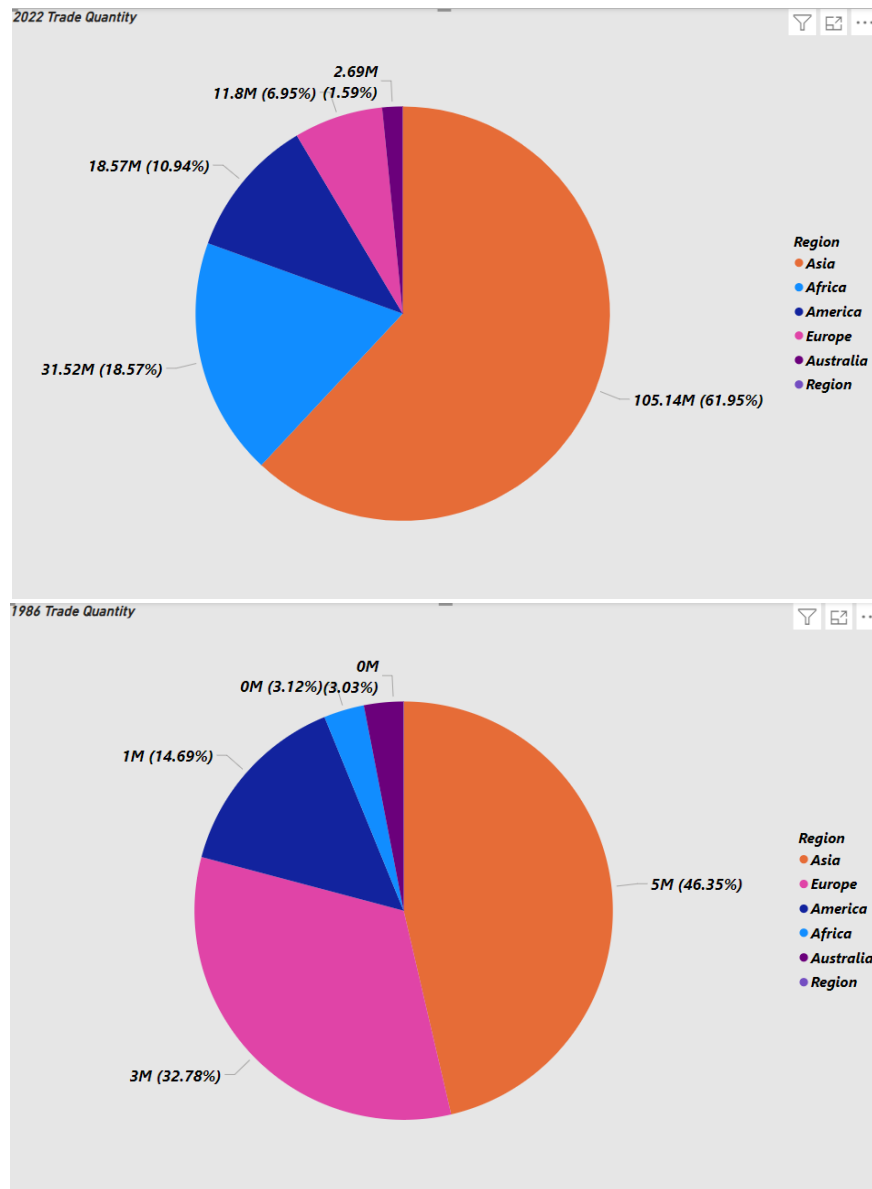


Findings:-

In this graph we can see the trade behaviour for countries like USA, UAE, Germany, Singapore, UK from 1986-2022. We can see how trade pattern has changed over the years regarding to import/export. We can analyse that trade with Germany was not that good in 1986 and is nor in 2022. Whereas we are exporting in good volume to UAE.

5.2 Regional Trade Patterns

- Examination of trade with different partner countries/regions
- Visual representation of trade volume by region



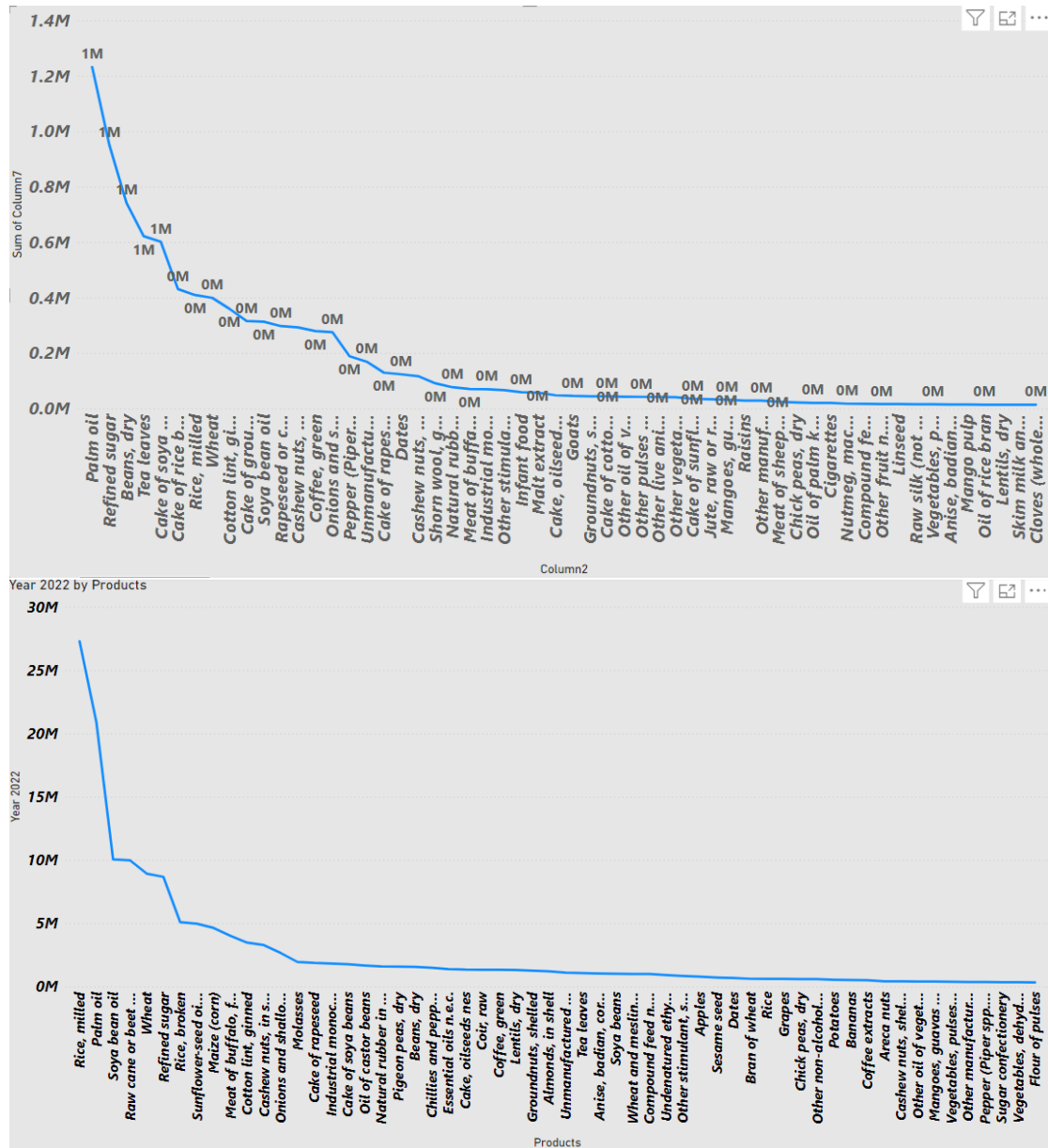
Findings:-

Here in this pie charts we can see trade patterns region wise first pie chart denotes to 1986 whereas second to 2022. We can see that in 1986 import/export trade was good with Europe and Asia whereas in 2022 trade volume was increased in asia.

Also Amount of trade with other regions was increased over years. In 1986 total revenue was 9 million USD whereas in 2022 in increased to almost 170 million USD. Also we can see that in 1986 trade volume was almost less than 50% and in 2022 it was about 60%.

5.3 Price Trends

- Analysis of price changes for key food items over time
- Comparison of price trends between imports and exports



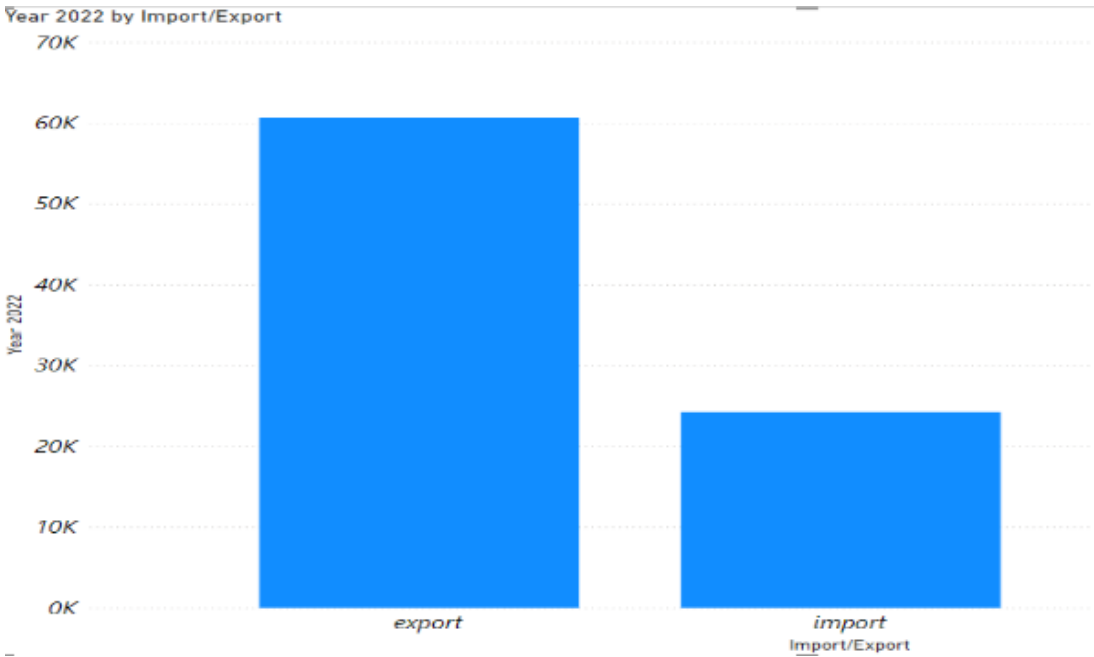
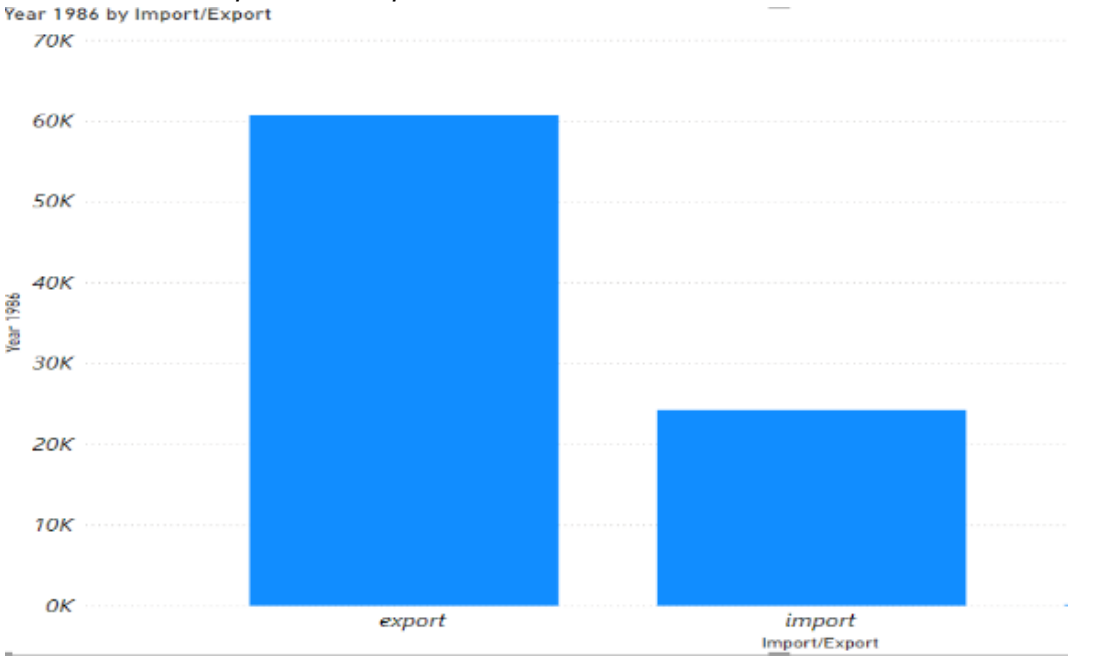
Findings:-

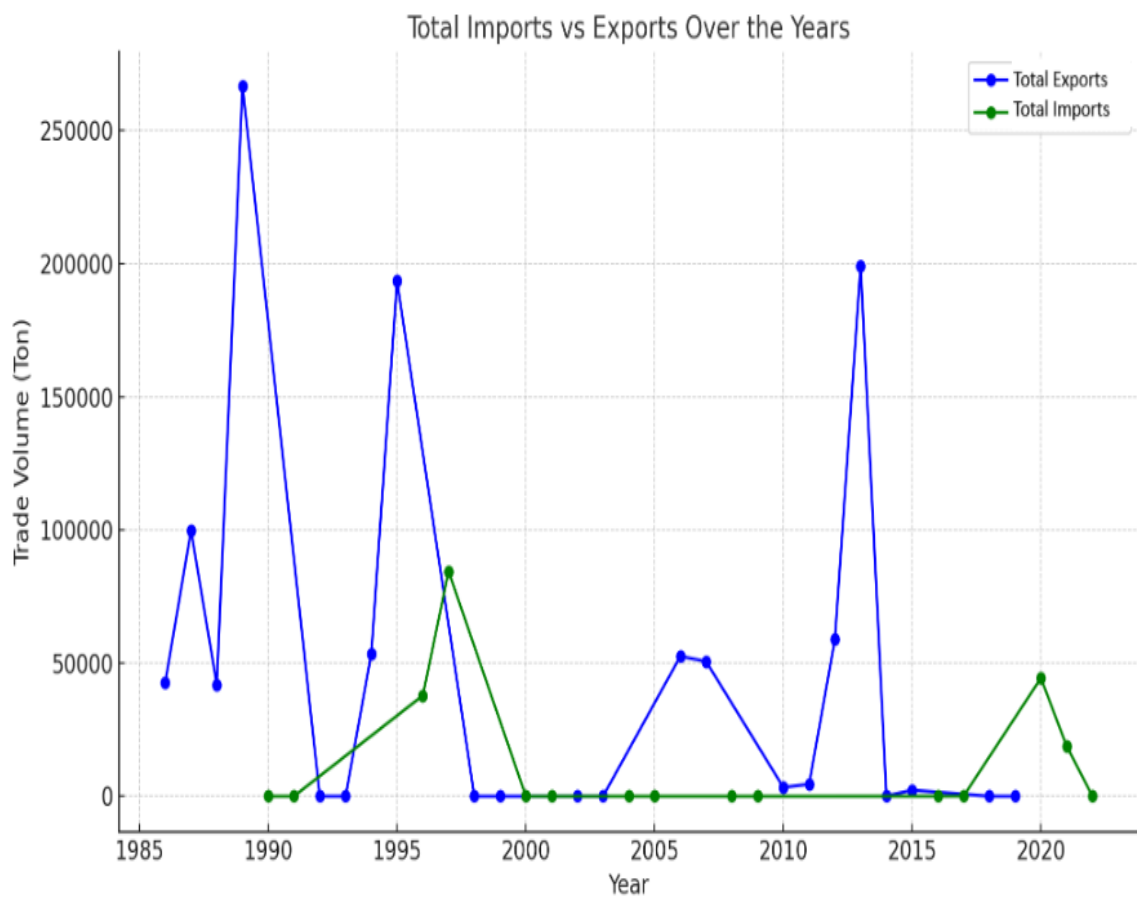
Here we can see that amount of food items have increased over time. Also items price have changed. Items that are imported/exported are also changed over the years.

Demands for items have changed as ask for items changes over the years.

6. Visualizations

- **Chart 1: Total Imports vs. Exports Over the Years**

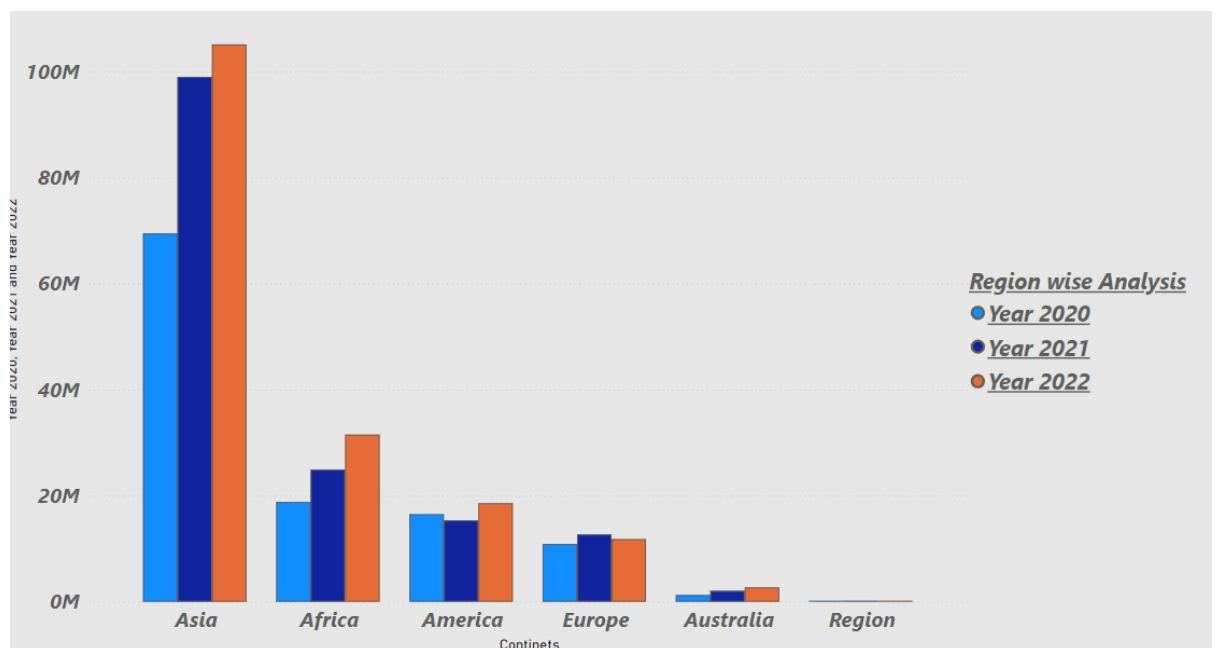
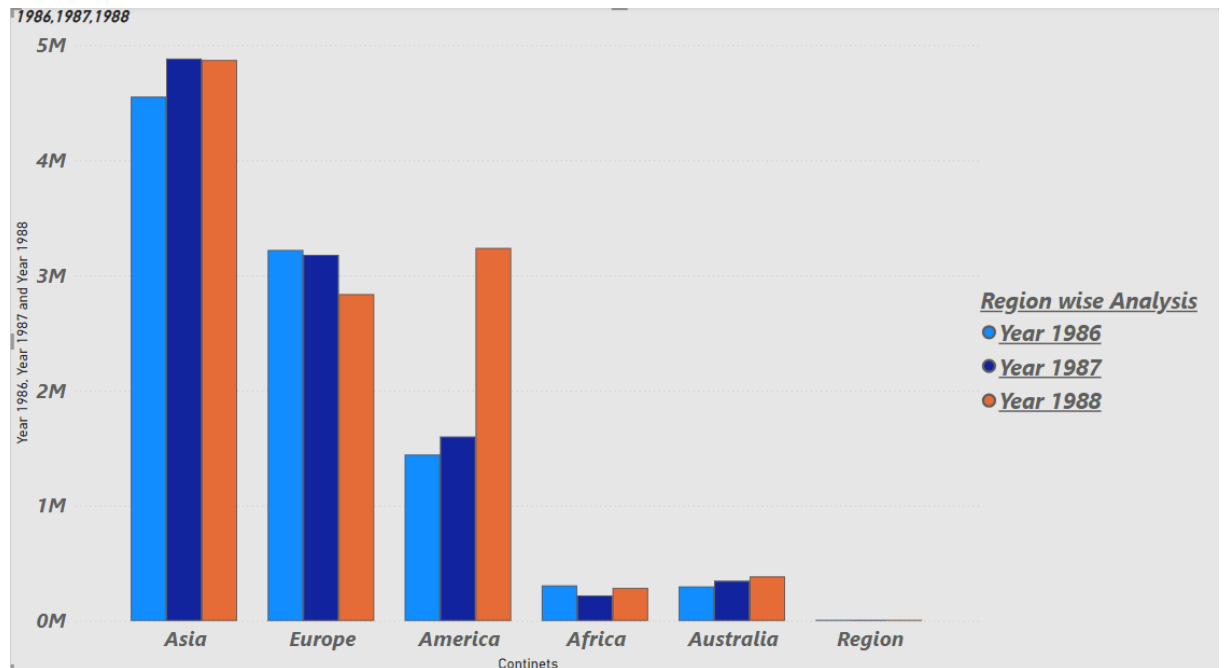




Findings:-

- *Here we can clearly see that amount of export was always more than that of import. It means India was never dependent importing elements. And the amount has remained same over the year's.*
- *Imported items were 24,236 and Exported items were 60,654 over all these years.*

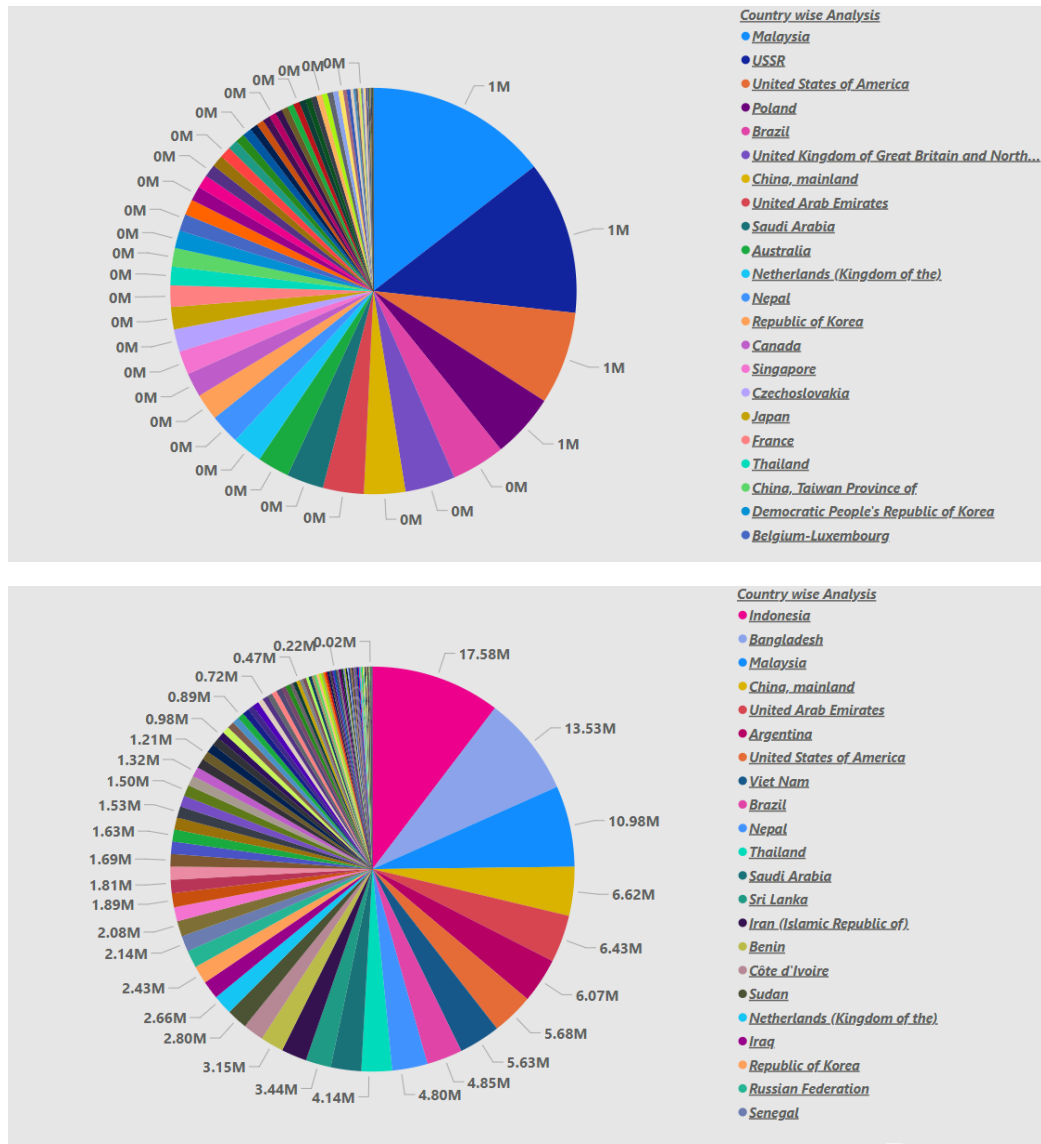
Chart 2: Top Imported Countinents (Bar Chart)



Findings:-

Here we can see that we have always imported items from Asia itself more than other region. This is 3 years data from 1986-1988 and 2020-2022.

Chart 3: Trade Volume by Countries (Pie Chart)



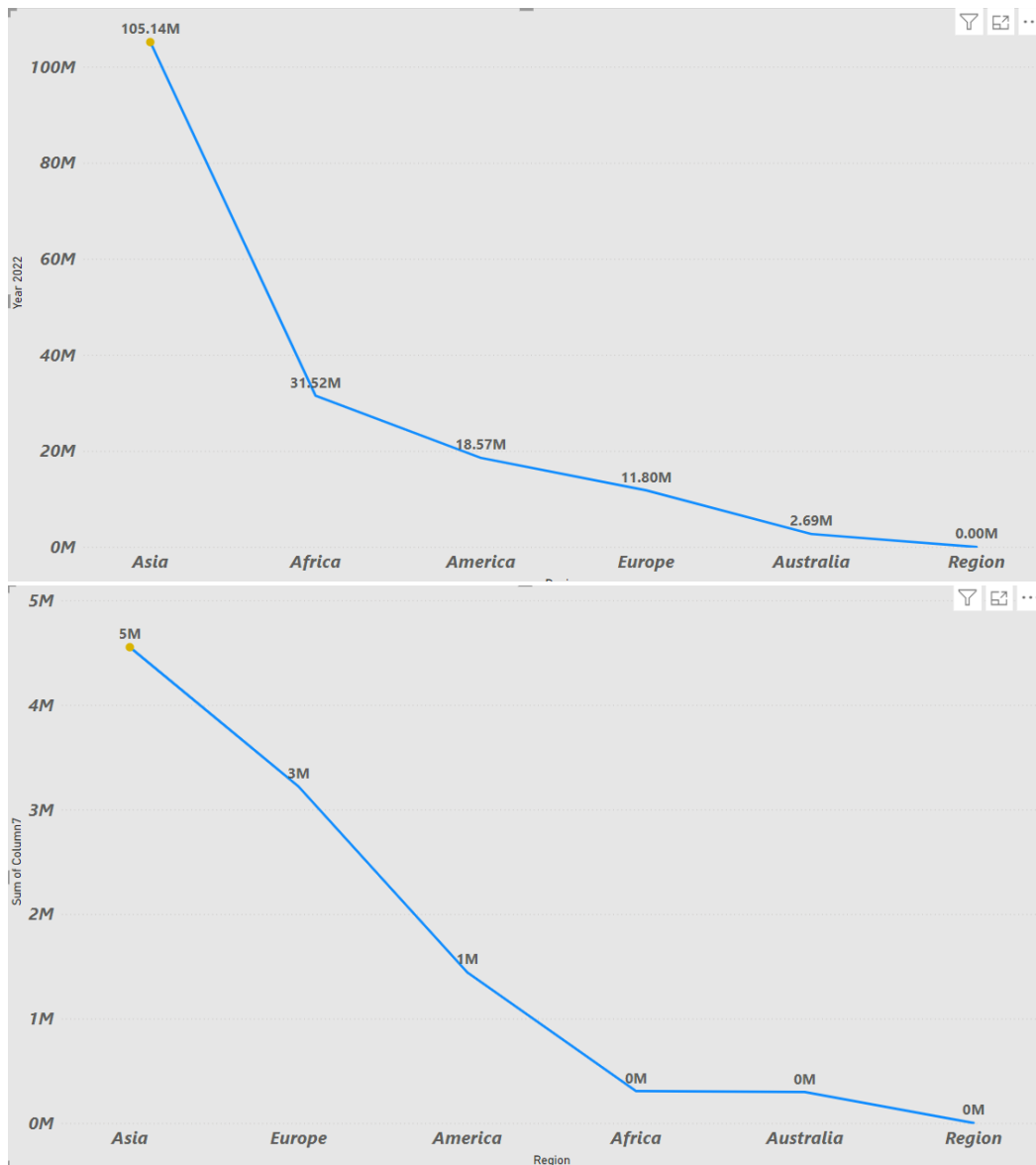
Findings:-

Here we can see that these are the countries from where we are importing/exporting elements. Compared between 1986 and 2022 importing/exporting elements trends have changed over these years.

In 1986 importing/exporting elements transportation was not that easy as compared to 2022. Whereas volume has also increased so much.

In 1986 importing/exporting elements costed around 8 million USD whereas in 2022 it increased to almost more than 170 million USD.

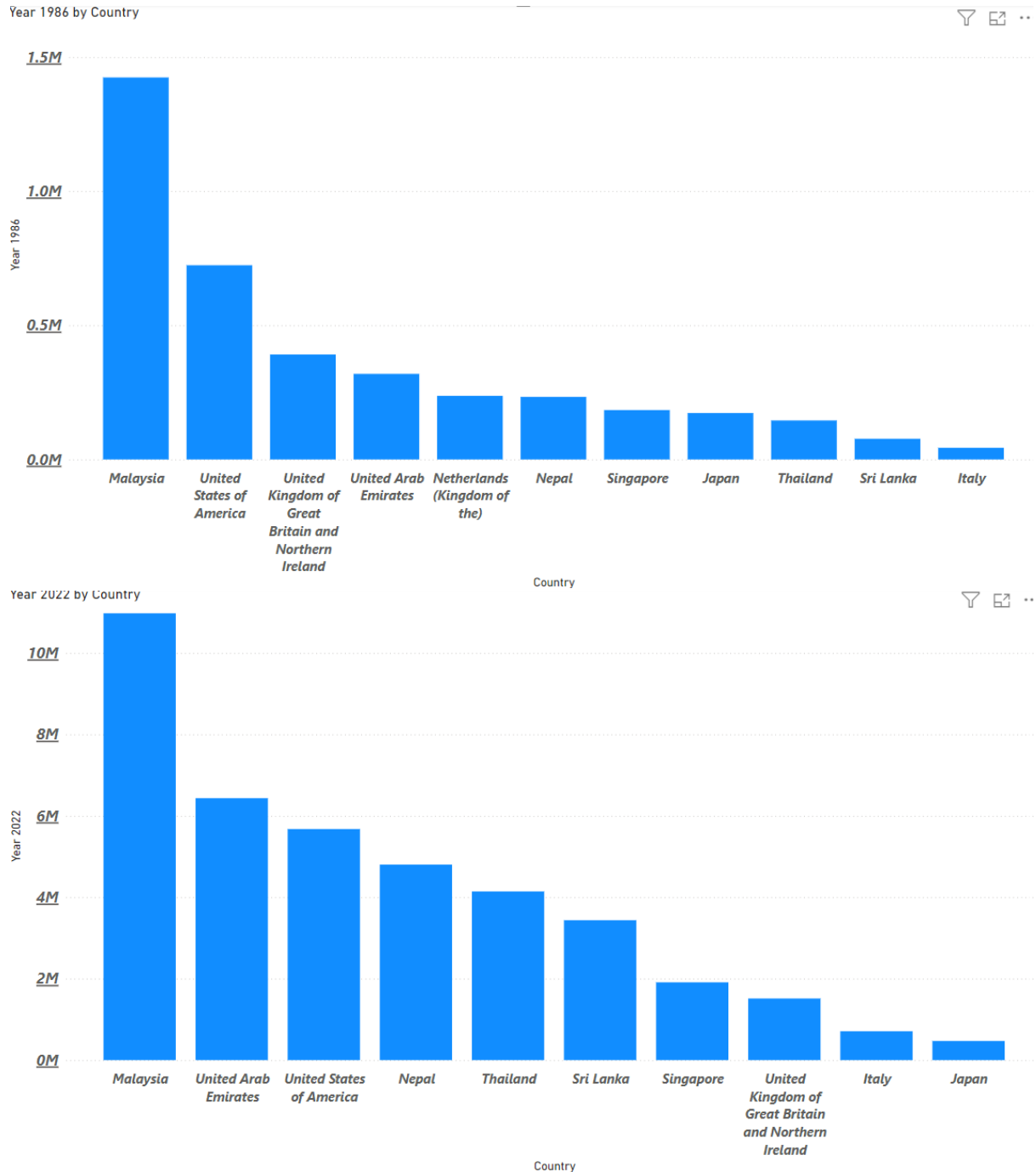
- **Chart 4: Price Trends Region wise (Line Graph)**



Findings:-

Here we can see that How price trends have changed over the years. Price is counted 1000 USD/Ton. We can see that in 1986 maximum trade done was in asia itself and was around 5 million USD whereas in 2022 max was in asia but costed around 105 million USD.

- *Top 10 Countries Year wise For Import/Export*



Findings:-

These are the top 10 countries in year 1986 and 2022 where importing/exporting of elements was done. All of them are almost same. It means that we are quite dependent on few the countries for trade which is not a good sign.

7. Discussion

- *Analysis based on the report that is it good or bad.*
- *Trade trends with neighbouring countries over the year.*
- *Dependency on almost same countries for trade over the years.*
- *Volume of import and export over the years are same is it a concern or not.*
- *Trade with Australia is almost null compared to other regions is it a concern or not.*
- *Export volume was always more than that of import.*

8. Conclusion

- *We can see that trade has increased over the years by 1788% (In 1986 total trade amount was about 9 Million USD that increased to almost 170 Million USD). This amount is only about food products actual trade amount between 1986-2022 including all products, shipments is around 124.91 Billion USD.*
- *Amount per products have also changed over the years by almost 230% (Example Palm oil price was 714 USD/Ton in 1986 that increased to 2398 USD/Ton).*
- *Product requirement has changed over the years.*
- *Import volume was less than that of Export.*
- *Imported items were 24,236 and Exported items were 60,654 over all these years.*

9. References

India food trade 1986-2022 dataset.