Original Research Article

Navigating the honey markets across Europe and Africa

ABSTRACT

India ranks fourth globally in terms of honey export but the Indian honey was mainly exported to American and Asian continent consisting of over 85 per cent of total honey exported by India leaving huge untapped potential in Europe which is second largest importer of honey worldwide as well as Africa. Keeping this in mind an analysis of European and African honey market was done using secondary data and results were interpreted in excel sheet. It was found that European honey production was primarily led by Spain. The continent accounted for approximately 45 per cent of global honey imports, with Germany being the largest importer with imported value of 306674.7 thousand USD (2023). India sharedless than 0.1 per cent of total European honey imports. It was also observed that Africa contributed to 10 per cent of the world's total honey output. The continent's honey import was considerably lower than global imports. In terms of export, Egypt led African honey exports. India shared only 12 per cent of total honey imports to Africa. It was noted that both Europe and Africa presented huge untapped potential for Indian honey. It was suggested to improve post harvest management of honey for maintaining quality standards and government support for increasing exports to the continents.

Keywords: Production, Import, Export, Market share and Untapped potential

1. INTRODUCTION

Honey, a golden-hued, thick, sugary liquid, is crafted by bees and assorted insects from nectar harvested from flowers and stored in their honey sacs. This process, known as beekeeping, involves gathering honey from either untamed bee colonies or managed hives of domestic bees. In India, honey and beekeeping boast a rich historical tradition, with ancient Indian communities dwelling in rock shelters and forests being among the earliest to savor this natural sweetener. India holds immense potential for honey production, owing to its abundant flora comprising over 500 species, both wild and cultivated, that serve as excellent sources of nectar and pollen. Additionally, the country is home to five species of true honey bees namely *Apis dorsata, Apis mellifera, Apis dorsata laboriosa, Apis cerana indica, and Apis florae* along with other varieties of stingless bees. India leads in the number of beehives and ranks sixth globally in terms of production, contributing 3.5 per cent of the total global honey production.

In 2022, the global honey market was valued at USD 8.53 billion, is projected to reach USD 14.91 billion by 2031, indicating a Compound Annual Growth Rate (CAGR) of 5.83% during the forecast period. The Indian honey is mainly exported to American and Asian continent consisting of over 85 per cent of total honey export by India (APEDA Statistics, 2023). This left a huge untapped potential of Indian honey in European which is second largest importer of honey worldwide as well as African continent. Keeping this in mind an analysis of honey market of Europe and Africa was done with objective to get insight about their import and export from world and India, their untapped potential for Indian honey as well as to find reasons for their low import of Indian honey.

2. MATERIALS AND METHODS

The required data was obtained from secondary sources including journals, research papers, articles as well as different government and private websites like APEDA, ITC trade map and World Trade Statistics to know about the import and export of honey in the study area, their total value and untapped potential of Indian honey. The HS code (040900) was used in study to get the required

information regarding honey import and export in Europe and Africa. To fulfil the objective of study the required data was collected for continents as a whole along top countries in production, import and export of honey. Tabular and graphical analysis was done in excel sheet to compute the results.

India's Share in import (%) =
$$\frac{\text{Import from India}}{\text{Total import}} x$$
 100

Untapped potential (%) = 100 - Import share (%)

3. RESULTS AND DISCUSSION

The study was conducted using secondary data to gain knowledge about honey market in European and African continent. The results obtained was computed using ms-excel and discussed in tabular and graphical form as,

3.1 EUROPEAN MARKET OF HONEY

Table 1: Honey market in Europe

| Market size (2028) | USD 4.24 Billion |
|---------------------|---|
| Market size (2022) | USD 3.21 Billion |
| CAGR (2022-2028) | 4.76% |
| Base year | 2022 |
| Forecast year | 2023-2028 |
| Market segments | End Users, Application, And Geography |
| Geographic analysis | Eu-5, Central, Eastern, & Southern Europe, And Nordic Region |
| Key vendors | New Zealand Honey Co., Comvita, Lamex Food Group Limited, Valeo Foods Group, And Langnese Honig |

(Source: Arizton European honey market overview)

Table 1 illustrates that the European honey market, valued at 3.21 billion USD, is projected to grow to 4.24 billion USD, reflecting a Compound Annual Growth Rate of 4.76 percent. European nations produced 60 percent of the honey consumed domestically, with the remainder imported. The market was notably fragmented, with numerous players like New Zealand Honey Co., Comvita, Lamex Food Group, and Valeo Food Group. Given the rising prevalence of diseases such as cancer, diabetes, obesity, and heart disease, there was a heightened preference for nutrient-rich products like vitamins, proteins, and minerals. Major companies were increasingly adopting strategies like mergers, acquisitions, and partnerships, bolstering investments in research and development for honey-based products and escalating competition within the market.

Table 2: Country-wise honey production in Europe

| Production (in tonns) | Countries |
|-----------------------|---|
| More than 20 thousand | Spain, Germany, Hungary & Romania |
| 10.1-20 thousand | Poland & Greece |
| 10.1-15 thousand | Portugal, Bulgaria, United Kingdom, Czech Republic & France |

| 5.1-10 thousand | Croatia & Italy |
|----------------------|--|
| 1-5 thousand | Austria, Estonia, Latvia, Sweden, Lithuania. Denmark, Slovakia, Slovenia & Finland |
| Less than 1 thousand | Ireland, Cyprus & Luxembourg |

(Source: European Parliament)

Table 2 outlines the primary honey-producing nations in Europe as Spain, Germany, Hungary, and Romania, each averaged over 20,000 kilograms annually. Poland and Greece follow, produced between 10,000 to 20,000 kilograms yearly. Conversely, countries like Ireland, Cyprus, and Luxembourg exhibited minimal production of less than 1,000 kilograms annually. The high production in country is also due to high honey demand in that country (European Parliament, 2024).

Table 3: Honey import by Europe

| Importers | Importval ue in 2018 (| Import value in 2019 (| Import value in 2020 (| Import value in 2021 (| Import value in 2022 | Import value in 2023 |
|---------------------|------------------------------|------------------------------|------------------------------|------------------------------|----------------------------|----------------------------|
| | thousand USD) | thousand USD) | thousandU SD) | thousandU SD) | (thousandU SD) | (thousandU SD) |
| World | 2271486 | 2038270 | 2273189 | 2698591 | 2801892 | 2933025.5 |
| Europe Aggregate | 1172588 | 1021999 | 1121057 | 1298020 | 1305457 | 1346351.9 |
| Germany | 307096 | 255409 | 279454 | 314760 | 302229 | 306674.7 |
| France | 130133 | 118725 | 129213 | 120906 | 140321 | 134626.7 |
| United Kingdom | 128606 | 111100 | 120556 | 131195 | 127565 | 129208.3 |
| Italy | 100944 | 79846 | 81004 | 107504 | 106151 | 106511.4 |
| Belgium | 73314 | 64297 | 70360 | 85484 | 102498 | 103057.1 |
| Spain | 68549 | 57422 | 66119 | 83422 | 89601 | 93453.8 |
| Poland | 62418 | 61775 | 79039 | 91354 | 71693 | 87694.5 |
| Netherlands | 62656 | 52281 | 56232 | 66958 | 65341 | 66707.7 |
| Switzerland | 39764 | 36089 | 37421 | 43433 | 45836 | 46355 |
| Portugal | 17005 | 15696 | 17133 | 21494 | 30858 | 30488.4 |

(Source: ITC trade map)

Table 3 displays the yearly total honey imports spanning six years from 2018 to 2023. Europe accounted for approximately 45 percent of global imports. Germany led European imports, totalling 306,674 thousand USD, trailed by France and the United Kingdom, each with 134,626 thousand USD and 129,208 thousand USD, respectively. Portugal ranked tenth with imports valued at 30,488 thousand USD. There was a high demand of New Zealand's manuka honey in European market. Also there was a large demand of crystallised honey to be used as substitute of ketchups and jams in breakfast (Vida & Ferenczi, 2023).

Table 4: Comparison of Europe's total and Indian honeyimport

| Product label | Europe's imports from India (thousand USD) | | | | | |
|--|--|-------------|-------------|--|--|--|
| Value in 2020 Value in 2021 Value in 2022 | | | | | | |
| Natural honey | 1103 | 1289 | 2134 | | | |
| Europe's imports from world (thousand USD) | | | | | | |
| Value in 2020 Value in 2021 Value in 2022 | | | | | | |
| Natural honey | 1121057 | 1298020 | 1305457 | | | |
| Percent Share | 0.098389288 | 0.099305095 | 0.163467659 | | | |

| Untapped Potential (%) | 99.90161071 | 99.9006949 | 99.83653234 |
|------------------------|-------------|------------|-------------|
| | | | |

(Source: ITC trade map)

Table 4 illustrates that Europe imported less than 0.1 percent of its honey from India, indicating substantial untapped potential in the European market. This was primarily due to the tariff imposed by European nations, averaging around 17 percent for non-European imports (ITC trade map, 2023). Additionally, Indian honey producers struggled to meet European quality standards (Trade promotion council of India, 2023).

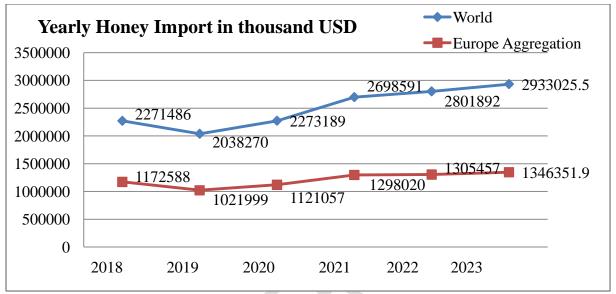


Figure 1: Comparison of yearly honey imports by world and Europe

Figure 1 shows comparative analysis of total world's import of honey and honey imported by European countries. It was observed that honey imported by European countries as well as world has increased over the period of time. It can be further noted that European continent imported almost half of total world's imported honey. About 40 per cent of honey consumed in Europe is imported (myNZTE, 2023). The high import is attributed to consumption as substitute of ketchups & jams as well as sugar substitutes (Vida & Ferenczi, 2023).

Table 5: Honey export by Europe

| Exporters | Exported value in 2018 (thousand USD) | Exported value in 2019 (thousand USD) | Exported value in 2020 (thousand USD) | Exported value in 2021 (thousand USD) | Exported value in 2022 (thousand USD) |
|-----------------------|--|--|---|---------------------------------------|---|
| World | 2264475 | 1989525 | 2326147 | 2718875 | 2690660 |
| Europe Aggregation | 878466 | 813777 | 949395 | 1072363 | 981092 |
| Ukraine | 97985 | 101078 | 138748 | 143482 | 137945 |
| Germany | 141229 | 133016 | 149758 | 148482 | 137274 |
| Spain | 105647 | 88467 | 112438 | 128644 | 117525 |
| Belgium | 78083 | 63191 | 74651 | 83711 | 94215 |
| Hungary | 90622 | 84805 | 95989 | 97122 | 83354 |
| Poland | 42936 | 43158 | 61924 | 63323 | 52995 |
| Romania | 49337 | 43817 | 49259 | 58499 | 52384 |
| Bulgaria | 42129 | 40436 | 39781 | 47879 | 42566 |
| France | 31985 | 30000 | 28643 | 34542 | 36203 |

| Greece 18325 14728 21616 30600 31748 |
|--------------------------------------|
|--------------------------------------|

(Source: ITC trade map)

Table 5 displays the yearly total honey exports over a five-year period from 2018 to 2022. Europe contributed approximately 35 percent of global honey exports. Ukraine led European exports with a value of 137,945 thousand USD, followed by Germany and Spain, each with 137,274 thousand USD and 117,525 thousand USD, respectively. Greece ranked tenth with exports valued at 31,748 thousand USD.

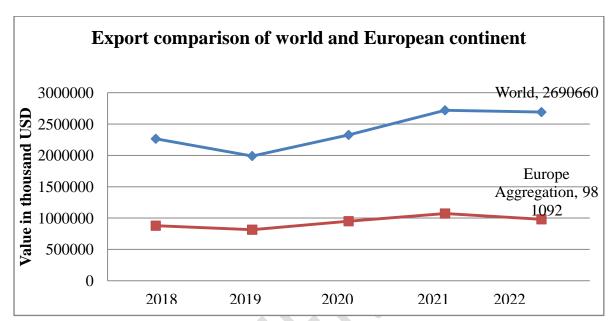


Figure 2: Export comparison of world and Europe

Figure 2 exhibits a comparative analysis of total world's export of honey and honey exported by European countries. It was observed that honey exported by European countries as well as world has increased over the period of time. It was further noted that European continent exported almost 35 per cent of total world's imported honey. This high export is mainly due to their intra continent export of honey (European Commission, 2024)

Table 6: Ranking of European countries in terms of honey import

| Countries | Rank for world | Rank for India |
|----------------|----------------|----------------|
| Germany | 2 | 15 |
| Netherlands | 10 | 18 |
| Belgium | 12 | 19 |
| Spain | 7 | 24 |
| Poland | 8 | 28 |
| United Kingdom | 5 | 34 |
| France | 4 | 62 |
| Ireland | 24 | 70 |

(Source: APEDA and world trade statistics)

The table 6 indicates the ranking of European countries in terms of honey imported globally and specifically from India. European nations emerged as prominent global honey importers but lag significantly in honey imports from India. Factors such as high tariffs, quality standards, and historical trade issues were identified as contributors to this trend (Trade promotion council of India, 2023).

3.2 AFRICAN MARKET OF HONEY

Table 7: Country-wise honey production in Africa

| Countries | Honey production in MT (2022) |
|-----------|-------------------------------|
| Ethiopia | 50,000 |
| Tanzania | 31345 |
| Kenya | 25000 |
| Sudan | 8000 |
| Uganda | 5000 |

(Source: FAOSTAT, KIPPRA & KNOEMA)

Table 7 exhibits yearly production of honey in African countries for year 2022. It was found that Ethiopia led the production with annual production of 50000 MT followed by Tanzania and Kenya with 31345 and 25000 MT respectively. Uganda was having yearly production of only 5000 MT.

Table 8: Honey import by Africa

| Importers | Imported value in 2018 (thousand USD) | Imported value in 2019 (thousand USD) | Imported value in 2020 (thousand USD) | Imported value in 2021 (thousand USD) | Imported value in 2022 (thousand USD) |
|-----------------------|--|--|--|--|--|
| World | 2271486 | 2038270 | 2273189 | 2698591 | 2801892 |
| Africa Aggregation | 28196 | 28987 | 35315 | 39356 | 43766 |
| Nigeria | 156 | 148 | 902 | 2557 | 14267 |
| Morocco | 7052 | 5124 | 9446 | 10619 | 8429 |
| Libya | 3234 | 1751 | 1513 | 2474 | 3396 |
| South Africa | 6662 | 7928 | 9598 | 7991 | 3114 |
| Mauritius | 1785 | 1657 | 1658 | 1736 | 2898 |
| Tunisia | 895 | 1426 | 1305 | 1367 | 2122 |
| Rwanda | 1182 | 1396 | 1120 | 1089 | 1307 |
| Somalia | 1281 | 1230 | 948 | 1936 | 1271 |
| Botswana | 750 | 720 | 1191 | 1588 | 1125 |
| Equatorial Guinea | 66 | 105 | 159 | 139 | 772 |

(Source: ITC trade map)

Table 8 exhibits the honey import values in thousand USD over a five-year span from 2018 to 2022. Import trends in African countries showed growth from 28,196 thousand USD in 2018 to 43,766 thousand USD in 2022, albeit significantly lower than global imports. In 2022, Nigeria led with imports valued at 14,267 USD, followed by Morocco and Libya with 8,429 thousand USD and 3,396 thousand USD respectively. Equatorial Guinea imported natural honey worth 772 thousand USD.

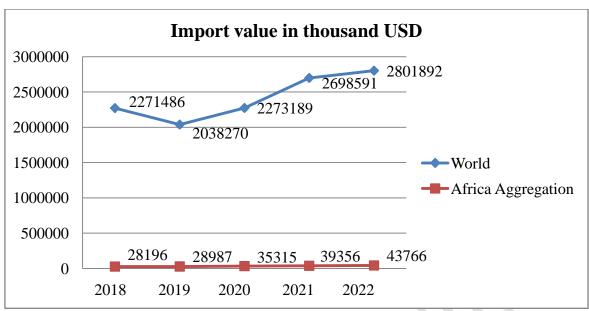


Figure 3: Comparison of yearly honey imports by world and Africa

Figure 3 depicts the comparison between African honey imports and the global total. Despite annual increases in African honey imports, its overall contribution to global imports remained marginal, comprising less than 0.1 percent. This is likely due to African countries' self-sufficiency in honey production, contributing 10 percent to the world's total honey output.

Table 9: Honey export by Africa

| Exporters | Exported value in 2018 (thousand USD) | Exported value in 2019 (thousand USD) | Exported value in 2020 (thousand USD) | Exported value in 2021 (thousand USD) | Exported value in 2022 (thousand USD) |
|-----------------------|--|--|--|--|--|
| World | 2264475 | 1989525 | 2326147 | 2718875 | 2690660 |
| Africa Aggregation | 12671 | 13119 | 15028 | 17377 | 20139 |
| Egypt | 4682 | 5630 | 7031 | 7341 | 7741 |
| Zambia | 3215 | 2297 | 2385 | 3062 | 6108 |
| South Africa | 2428 | 2425 | 2695 | 3288 | 2180 |
| Tanzania | 318 | 478 | 509 | 1283 | 1401 |
| Rwanda | 50 | 15 | 37 | 18 | 897 |
| Kenya | 238 | 920 | 496 | 649 | 533 |
| Morocco | 274 | 273 | 239 | 147 | 222 |
| Ethiopia | 526 | 466 | 373 | 174 | 220 |

(Source: World trade statistics & ITC trade map)

Table 9 delineates the exported value of honey in thousand USD for 5 year period from 2018 to 2022. The honey export from African nations has rised from 12,671 thousand USD in 2018 to 20,139 thousand USD in 2022, though still considerably lower than global exports. Egypt led in 2022 with exports valued at 7,741 USD, followed by Zambia and South Africa with 6,108 thousand USD and 2,180 thousand USD respectively. Ethiopia exported natural honey worth 220 thousand USD.

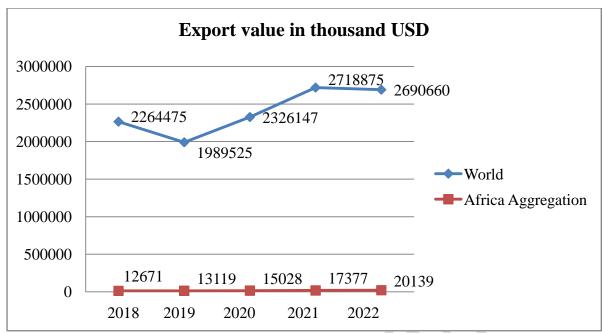


Figure 4: Comparison of yearly honey exports by world and Africa

Figure 4 illustrates the comparison between African honey exports and the global total. Despite annual increases in African honey exports, its overall contribution to global exports remained marginal, comprising less than 0.1 percent. Reasons highlighted in the Global African Summit include low honey standards, food safety concerns, and packaging and labelling issues (Norton Rose Fulbright).

Table 10: Comparison of Africa's total and Indian honey import

| Product label | Africa's imports from India (thousand USD) | | |
|------------------------|--|----------------|---------------|
| | Value in 2020 | Value in 2021 | Value in 2022 |
| Natural honey | 4142 | 4578 | 5430 |
| Africa | 's imports from world (| (thousand USD) | |
| | Value in 2020 | Value in 2021 | Value in 2022 |
| | 35315 | 39356 | 43766 |
| Percent share | 11.72873 | 11.63228 | 12.40689 |
| Untapped Potential (%) | 88.27127 | 88.36772 | 87.59311 |

(Source: ITC trade map)

Table 10 shows the comparison between Africa's total honey imports to honey imported from India for the period of three years from 2020 to 2022. It was found that India occupied nearly 12 per cent share of total honey imported by Africa. This shows the huge untapped potential (88%) of Indian honey in African countries. This huge untapped potential was primarily due to high honey export to USA by India nearly accounting for about 75 per cent of total export (APEDA, 2023). But over dependency on USA can cause trouble if they impose tariff or anti-dumping duties. In such case Africa can be a good alternative given good trade relations of India and Africa.

Table 11: Ranking of African countries in terms of honey import

| Countries | Rank for world | Rank for India |
|-----------|----------------|----------------|
| Morocco | 36 | 5 |
| Mauritius | 49 | 11 |

| Nigeria | 29 | 23 |
|----------|----|----|
| Kenya | 85 | 27 |
| Botswana | 68 | 30 |

(Source: APEDA & World trade statistics)

Table 11 displays the rank of countries regarding import of honey from world and from India. It was found that majority of the African countries lagged in terms of honey import from the world but rankedwell in case of import of honey from India. The reason for this was good trade relation between India and various countries of Africa.

4. CONCLUSION

The study revealed that European honey production was primarily led by Spain, Germany, Hungary, and Romania. The continent accounted for approximately 45 per cent of global honey imports, with Germany being the largest importer with imported value of 306674.7 thousand USD. However honey imports from India to Europe were minimal, representing less than 0.1 per cent of total European honey imports. It was also observed that African countries like Ethiopia, Tanzania, and Kenya were significant producers of honey, contributing to 10 per cent of the world's total honey output. African honey imports had seen growth over the years, still considerably lower than global imports. In terms of export, Egypt led African honey exports with exported value of 7741 thousand USD followed by Zambia and South Africa. India held a share of only 12 per cent of total honey imports to Africa. It was noted that both Europe and Africa presented high untapped potential for India in the honey market. It was suggested to improve post harvest management of honey for maintaining quality standards and government support for increasing exports to the continents.

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