



Navigating the Honey Markets Across Europe and Africa

Ashutosh Kumar ^{a*}, Dilip R. Vahoniya ^b and Alvira Rajwadi ^a

^a International Agri-Business Management Institute, Anand Agricultural University, Anand, Gujarat, India.

^b Department of Agri-Entrepreneurship and Project Management, International Agri-Business Management Institute, Anand Agricultural University, Anand, Gujarat, India.

Authors' contributions

This work was carried out in collaboration among all authors. The study was designed by author AK in consultation with authors DRV and AR. The manuscript was first drafted by author AK. The result and discussion was made in cooperation with authors DRV and AR. The literatures was reviewed by all the authors. All authors read and approved the final manuscript.

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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 shared less 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

*Corresponding author: E-mail: kr.ashutosh4u@gmail.com;

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 [1,2]. 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*, *Apis 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 [3,4].

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 per cent 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 [12]. 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.

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

$$\text{Untapped potential (\%)} = 100 - \text{Import share (\%)}$$

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 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 per cent. European nations produced 60 per cent 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 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:[7]

Table 2. Country-wise honey production in Europe

Production (in tons)	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:[8]

Table 3. Honey import by Europe

Importers	Import value in 2018 (thousand USD)	Import value in 2019 (thousand USD)	Import value in 2020 (thousand USD)	Import value in 2021 (thousand USD)	Import value in 2022 (thousand USD)	Import value in 2023 (thousand USD)
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:[9]

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 [8].

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 [10].

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 [9]. Additionally, Indian honey producers struggled to meet European quality standards [11].

Fig. 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 [12]. The high import is attributed to consumption as substitute of ketchups & jams as well as sugar substitutes [10].

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.

Table 4. Comparison of Europe’s total and Indian honey import

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:[9]

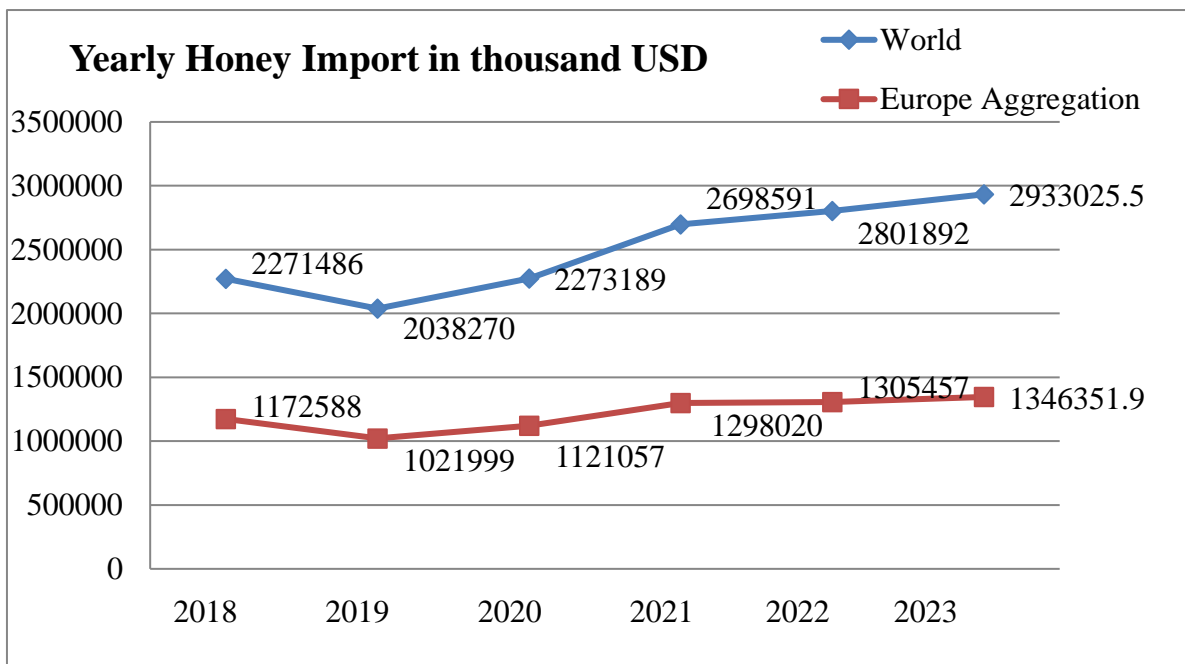


Fig. 1. Comparison of yearly honey imports by world and Europe

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:[9]

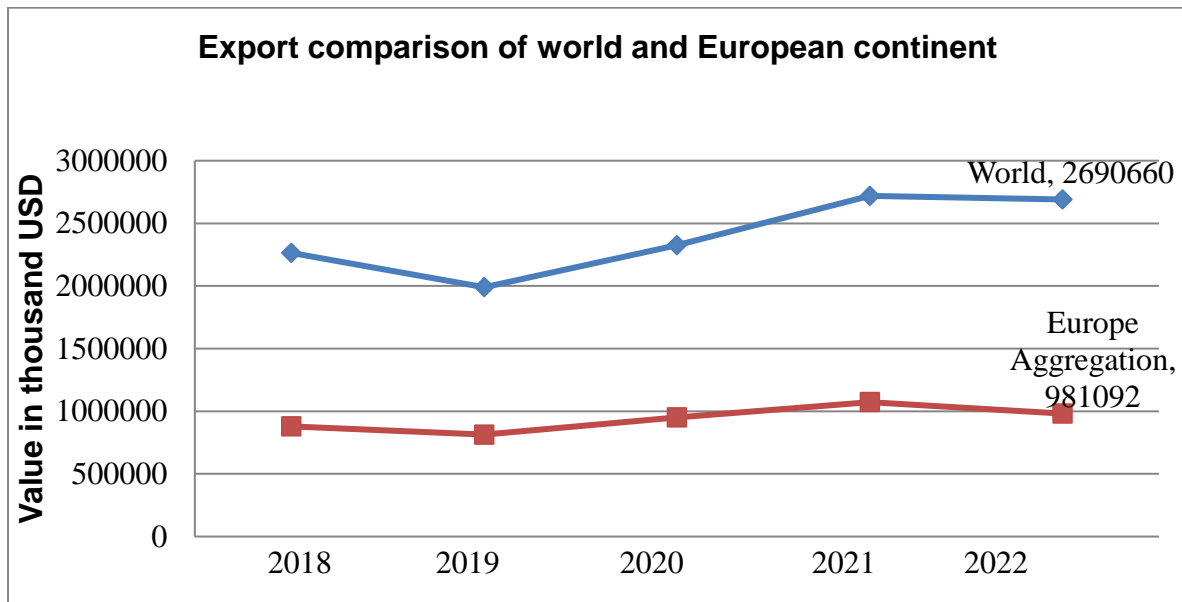


Fig. 2. Export comparison of world and Europe

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: [5,13]

Fig. 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 [14].

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 [15].

3.2 African Market of Honey

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 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.

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:[16-18]

Fig. 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 per cent. This is likely due to African countries' self-sufficiency in honey production, contributing 10 per cent to the world's total honey output.

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 risen 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.

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	28196	28987	35315	39356	43766
Aggregation					
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:[9]

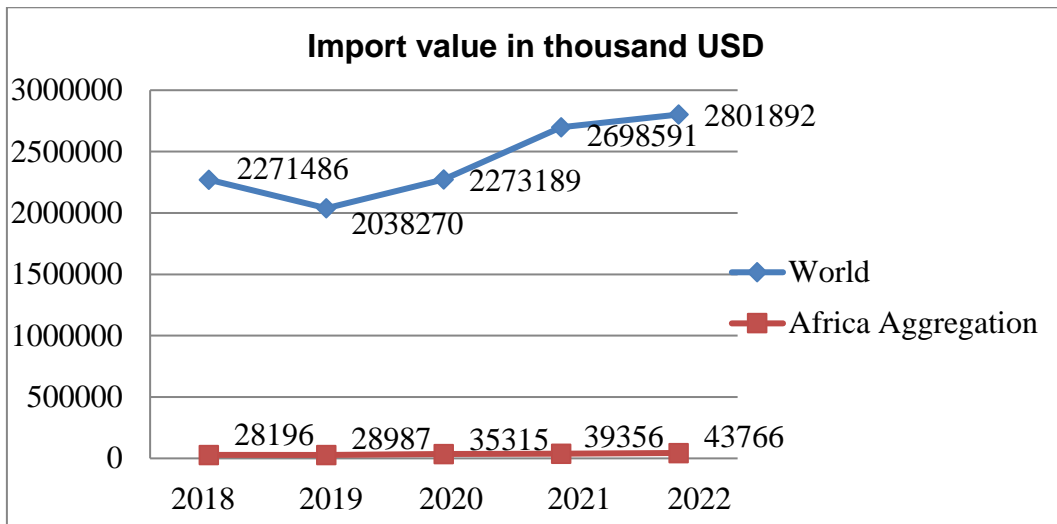


Fig. 3. Comparison of yearly honey imports by world and Africa

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:[9][13]

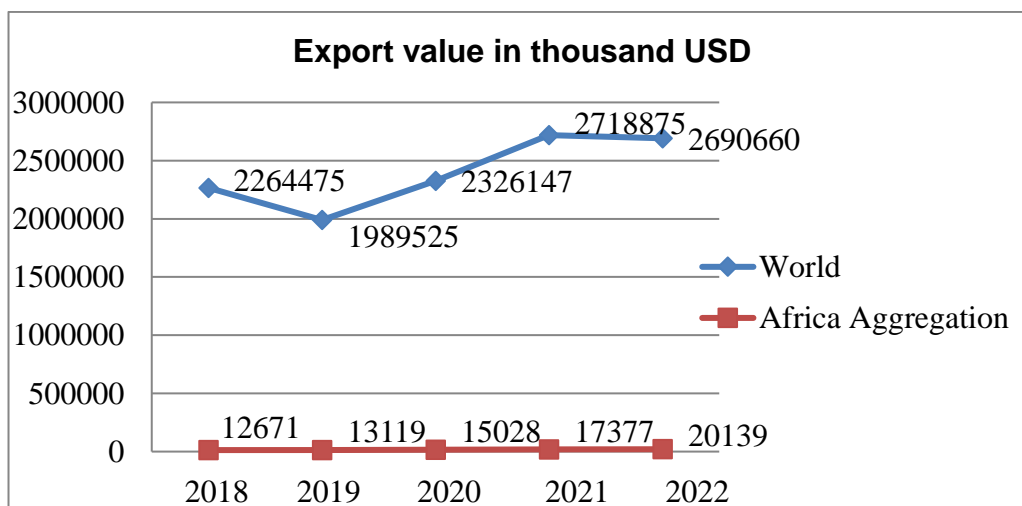


Fig. 4. Comparison of yearly honey exports by world and Africa

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:[9]

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:[1][13]

Fig. 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 [13].

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[1]. 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 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 ranked well 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 postharvest management of honey for maintaining quality standards and government support for increasing exports to the continents.

5. RECOMMENDATION

The European and African honey market provides a huge untapped potential for Indian honey so the government should focus on developing good trade relations with the countries to assist the export of honey to these continents. The postharvest management should be implemented and proper guidance should be given to farmers to maintain good

quality honey to meet required standards of these continents. The continents also provided a good alternative market along with United States market so that exporters get more options and ultimately get more profit.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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