INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES

Published Online: *16* March 2023 Vol 13, Issue 3, (2023) E-ISSN: 2222-6990

The Competitiveness of Ethiopian Honey in the European Union and the United Kingdom

Bogale, Dawud
The Royal Agricultural University, School of Business and Entrepreneurship, GL7 6JS, United Kingdom

Dr. Magdalena, M. Gonzalez Triay
University of Gloucestershire School of Business GL50 2RH, United Kingdom

Dr. Carol, Y. Zhang
The Royal Agricultural University, School of Business and Entrepreneurship, GL7 6JS, United Kingdom

Dr. Federico, G. Topolansky Barbe
Coventry University, Coventry Business School, CV1 5ED, United Kingdom
Corresponding Author Email: ad3665@coventry.ac.uk

Abstract
In spite of efforts made by the government, to help the private sector, Ethiopia remains one of the poorest countries in Africa. The agri-food sector provides 75% of jobs in Ethiopia (United States Agency for International Development, 2023). However, most agriculture products are sold unprocessed and undifferentiated. Ethiopia is regarded as a country of high potential for honey and beeswax production. Ethiopian honey production is estimated at 45,000 tonnes, however, the country is only exporting 800 tonnes (Alemu & Adesina, 2015). Some of the most promising destinations for Ethiopian honey exports include the European Union (EU) and the United Kingdom (UK). Within this context, this paper aims to critically analyse the competitiveness of the Ethiopian honey value chain in order to identify its challenges and opportunities within the EU and UK market. This study uses a qualitative research approach. Primary data were collected from stakeholders of the Ethiopian honey value chain. The results of this study indicate that Ethiopian honey could be competitive in the specialty and organic niche market. Findings have revealed that the Ethiopian honey value chain needs improvement in terms of quality, food safety, market information management and cooperation among stakeholders. The findings of this research make a contribution to the existing literature by extending current knowledge within this domain and identifying strategies to penetrate a very competitive sector.

Keywords: Competitiveness, Honey, Ethiopia, EU, UK, Qualitative Research Approach

Introduction

Ethiopia is primarily an exporter of agricultural products. The agriculture sector provides employment to almost 75% of the working population, and it contributes 42.8% to the country's GDP (MoFED, 2014). The Ethiopian government has embarked in a project aimed at diversifying and increasing the country's agricultural exports. Honey production is considered as one of the agriculture products that fits within this project (Kaspersen & Rankin, 2021).

Beekeeping is a traditional activity for many rural people in Ethiopia. It is a small-scale industry, used as a source of cash income for peasant farmers. Owing to its varied ecological and climatic conditions, Ethiopia is home to some of the most diverse flora and fauna in Africa, making it highly suitable for sustaining a large number of bee colonies (Giziew & Admas, 2021).

The vast majority of honey is destined to make mead, a traditional honey wine. It is estimated that over 90% of the total honey produced in the country is for market sale and very little is consumed at home. In spite of Ethiopia being the world's 11th largest honey producer only a small proportion of the total honey produced is exported to neighbouring countries and the European market (Nega, 2018). Within this context this paper aims at evaluating the main constraints of the Ethiopian Honey export business and analyse its competitiveness in the EU and the UK honey market. With this understanding, this research aims to help stakeholders across the value chain to understand changes that are needed to improve the competitiveness of honey and in particular to suggest strategies to expand exports to attractive destinations such as the EU and the UK.

An Overview of the Honey Market

There are many types of honey. Honey is categorized by the origin of the nectar as well as the method of processing and presentation. In years with good harvests, worldwide production of honey amounts to around 1.88 million metric tons (Gratzer et al., 2021). Leading producers of natural honey are China, Turkey, Iran and Argentina. The main exporters are New Zealand, China, Argentina and Brazil. The honey market is known for its strict quality standards, especially in Europe.

The leading importers of honey worldwide are the USA and the EU. The EU remains the major importer of honey from developing countries, and accounts for approximately 20-25% of global consumption. Germany is by far the leading EU market for honey followed by the United Kingdom (no longer in the EU), France and Spain (Gratzer et al., 2021).

Honey enters the European Union through two main channels, importers and importers/packers (See Figure 1). The market is dominated by several large companies that import, refine, and pack honey. Honey packers supply honey directly to the large retailers. The smaller health-food and specialty shops are supplied by wholesalers (United States Agency for International Development, 2014).

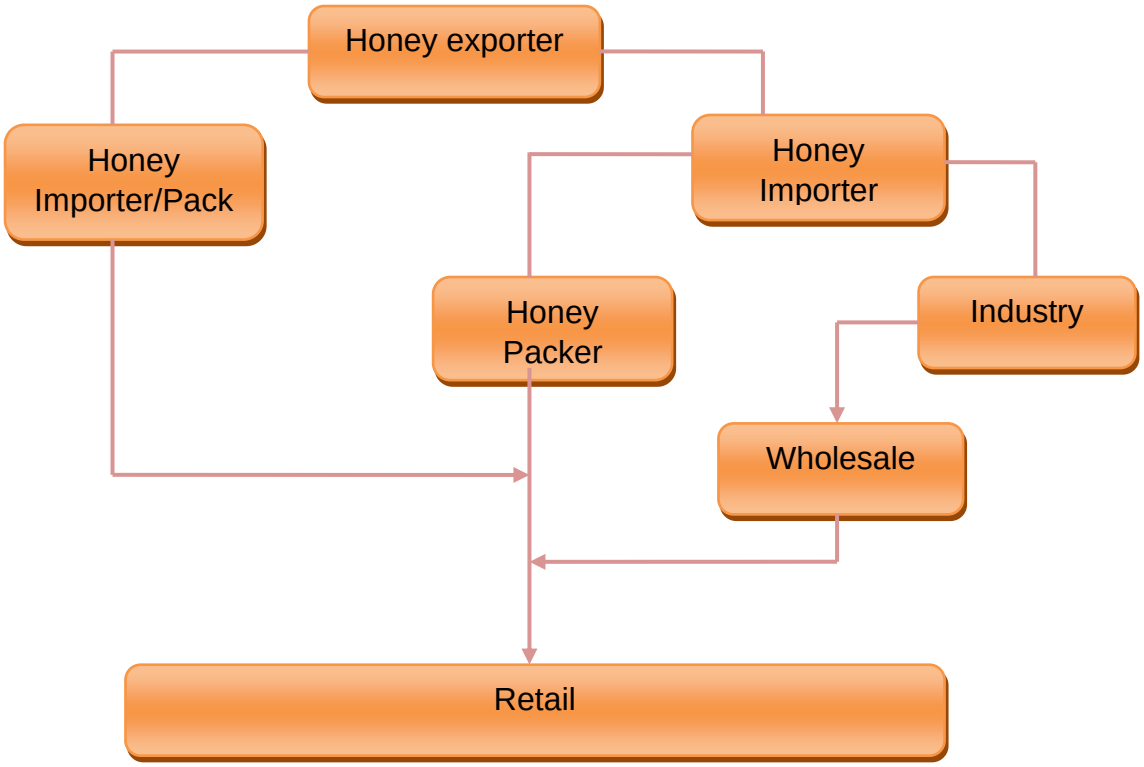

Figure 1. Export Supply channel structure for the honey in the EU
Source: Export opportunities for African organic Honey and beeswax (EPOPA, 2006)

The honey market is segmented into honey for household consumption and honey for industrial use. The majority of honey goes to direct consumption. The market for blend honey in the EU is very stable, however, the demand for mono floral and single-origin and certified products like organic and fair -trade honeys is increasing.

The most important factors affecting the price of honey are: the quality and origin of the product; weather conditions; import bans and bee diseases. Quantitative data indicates that, there is high dependency of EU countries on honey imports. Recent global factors have inflated prices for distributors in the EU. In addition, any disruption of supply from the largest honey exporters causes a price rise in the EU market (CBI, 2009).
Organic honey is more valued than conventional (blend) honey and some consumers are prepared to pay a premium price due to its health benefits and the fact that it is free from chemicals and antibiotics (Parashar et al., 2023). The price of honey also has a strong link with the history of the supplier country with respect to food safety and product adulterations. China supplies the lowest-priced honeys while New Zealand fetches the highest prices in international trade (EPOPA, 2006).
The honey standard (Council Directive 2001/110/EC) defines the characteristics of honey and the requirements for importing it into the EU market. For example, it sets limits for several compositional criteria of honey, including sugar content, moisture content, water-insoluble content, electrical conductivity, free acid content, diastase activity, residue levels and hydroxylmethylfurfural (HMF) content. Of specific interest for tropical honey are HMF and moisture content (EPOPA, 2006).

Honey Production in Ethiopia

Ethiopia has increased its honey production in recent years, becoming the largest honey producer within the Sub-Saharan Africa. Nearly all of Ethiopia's agro-ecological zones are suitable for beekeeping and honey production. According to the central statistics agency of Ethiopia (CSA) the number of bee hives is 5.1 million with a total production of 45,000 metric tonnes. Of this, 92 % is produced from traditional hives, 2 % by transitional hives and 6 % by modern hives. The average yield per colony is very low for traditional hives when compared with transitional and modern hives (Alemu & Adesina, 2015).

Production of honey relies on the availability of bee forage. Honey flow follows the rainfall pattern in Ethiopia, and is limited to specific seasons of the year. Much of the production harvest takes place during October-December when most of the plants flower. In the Southern and Southeastern part of the country, a modest production level is harvested during April-June (Nega, 2018). The frequency of honey harvest is showing a steady increase over the last few years. This may indicate that, the introduction of modern beehives and other bee-keeping technologies are gaining ground (Gratzer et al., 2021).

Large-scale beekeeping is at its infant stage. In rural Ethiopia, on a typical market day, farmers are seen carrying a kilogram of honey to the market. There is a lack of business acumen and most farmers sell honey to solve a specific financial (Gratzer et al., 2021).

Ethiopian honey is considered to be organic as the bee forages within large forests and plants and the industry uses a very limited amount of chemicals. In addition, Ethiopian honey is good in quality at the source. It is only after the harvest that quality starts to deteriorate, largely because of mishandling. Tests made by the Holeta bee research centre suggest that the composition of Ethiopian honey generally meets the international quality standard known for short as the codex quality standard (Gratzer et al., 2021).

Table 1
Ethiopian Honey quality

Parameters	Ethiopian honey mean test results	Ethiopian standards	World Honey standards
Moisture content % by mass	20.6	17.5 - 21	18-23
Mineral content % by mass	0.23	< 0.6	0.25 – 1.0
Total reducing sugars % by mass	65.6	> 65	60 -70
Sucrose % by mass	3.6	< 5	< 5
Acidity milli. equiv. mg/kg	39.9	< 40	< 50
Hydroxy methyl furfural mg/kg	32.4	< 40	< 80

Source: Honey and beeswax value chain of BOAM program, establishment of apiculture database Ethiopia (Kassaye, 2008).

The price of honey in the local market largely depends on: the quality of the honey, color, taste, seasonality of production and distance and availability of road links with major consuming centers. Price is generally lower in rural areas than in urban areas. During the

harvest season, supply tends to exceed the demand and consequently price tends to fall. The opposite holds during the off-season (Gratzer et al., 2021).

There are fifteen registered honey and beeswax exporting companies in Ethiopia, however, most of them are inactive, limiting themselves to local markets or exporting crude honey to the neighbouring countries such as Sudan, Yemen and Saudi Arabia. These markets have loose food safety and quality standards. From the logistic point of view these are very attractive markets. After Ethiopia received EU third country listing for honey in 2008 few companies have been able to export to the UK and Norway (Gratzer et al., 2021).

Honey Value Chain Analysis

Value chain analysis is the process of breaking a chain into its constituent parts to understand its structure and functioning. The analysis consists of identifying chain actors at each stage and discerning their functions and relationships; determining the chain governance, to facilitate chain formation and strengthening through understanding value adding activities in the chain (Alemu & Adesina, 2015).

Value chain analysis also reveals the dynamic flow of economic, organizational and coercive activities involving actors within different sectors. It shows that power relations are crucial to understanding how entry barriers are created, and how gain and risks are distributed. It analyses competitiveness in a global perspective. Value chain analysis is a useful analytical tool that helps to understand overall trends of market reorganization and identify change agents and leverage points for policy and technical interventions (Webber & Labaste, 2010).

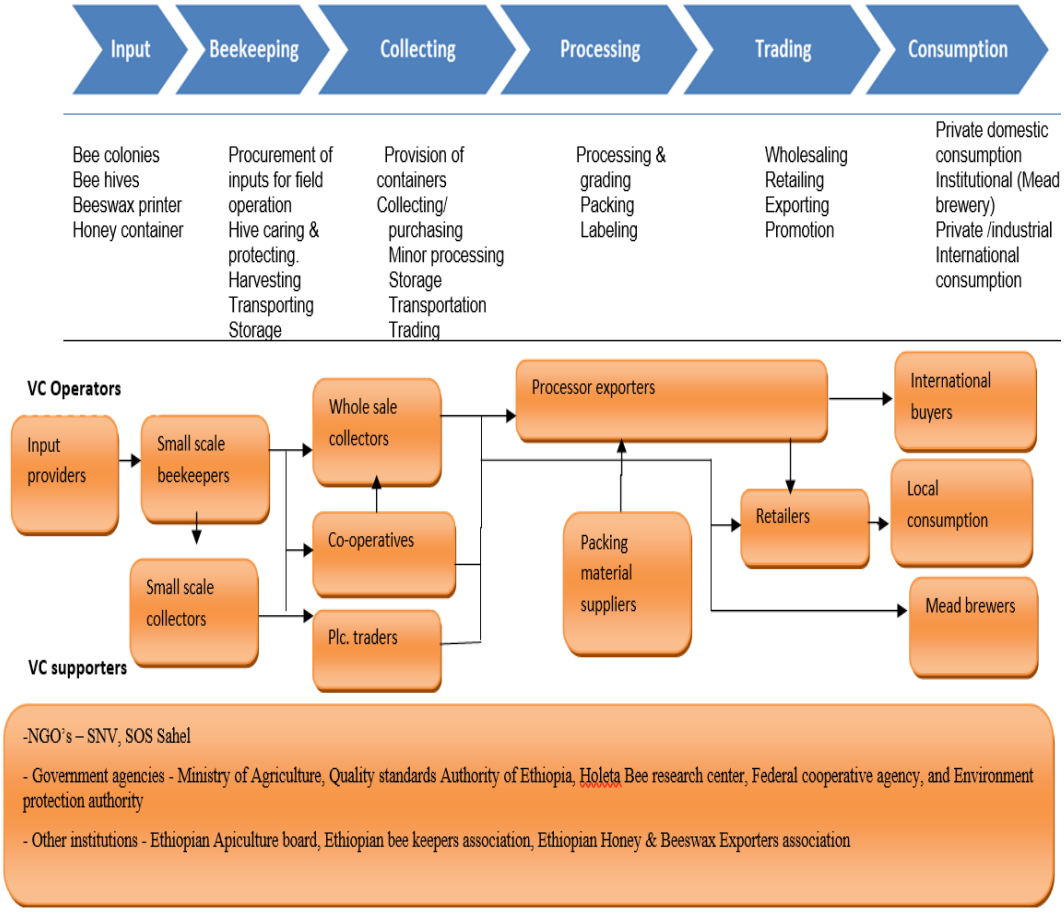

Figure 2. Ethiopian Honey Value Chain Map
Source: Honey and beeswax value chain of BOAM program, Establishment of apiculture

According to Porter (1999) value chain activities are divided into two major groups comprising primary and secondary. Understanding all of the primary and secondary activities in the honey export sector provides a clear picture of how activities in the chain are interlinked with each other to provide the best possible value for those involved.

Primary Activities

In the honey export business inbound logistics includes, receiving and storing of raw honey purchased by procurement officers. Production managers are involved in the procurement process to avoid the incoming of adulterated honey. Reception of packing drums for bulk shipment is also considered as inbound logistics.

Raw honey received from the supplier goes through a process of separation and filtration to separate the wax, remove any form of foreign physical particles, and reduce the moisture content (by blending and /or dehydration). In-process testing is performed in accordance with the buyer's specifications. The final product is then packed and labelled according to the importing country's regulations.

Honey is stored in a warehouse until the documentation is finalized for its discharge to its final destination. The honey is loaded into a container and transported to the port of Djibouti to be shipped by sea to the importer country. Honey exports from developing countries are mostly in its bulk form.

In order to increase the competitiveness of Ethiopian honey; some NGOs are engaged in providing financial and technical assistance to honey exporters. The support includes HACCP/ISO certification for exporter companies, organic certification for some honey-producing regions, and training of bee keepers on harvesting and post-harvest technology.

Support Activities

Most honey exporters are located near major cities where good public infrastructure is available. The hygiene and quarantine service in the Ministry of Agriculture provides testing services for exporters, but a residual testing facility is not available. Usually samples are sent to Uganda where such a service is available.

Procurement in the honey sector includes beekeeping equipment, raw honey, and packaging drums specified by the importers. Honey exporters use simple processing technology mainly imported from India and China. A Dutch NGO, SNV is currently working with the Selam technical and vocational training centre and the Addisu Molla metal workshop to develop locally produced beekeeping and honey processing equipment.

Human resource management activities in honey exporting are related to the recruitment of casual employees and providing training in relation to food safety and hygiene.

Methodology

In this study, the commodity-based approach supported by value chain analysis, helped to unveil the organizational structures and strategies adopted by the different stakeholders engaged in the Ethiopian honey sector. This approach was founded to be a good fit to address the objectives of this research.

Non-probability purposive sampling has been used to select individuals, institutions and companies on the basis of their relevance to the research questions. In-depth interviews were carried out with two companies that have export experience to the EU market. Based on information obtained from EHBPEA, eight semi-structured interviews were conducted with company owners and managers. Face-to-face interviews were undertaken with two experts from the Ministry of Agriculture, two representatives from NGO's and the Secretary of the EHBPEA.

Unstructured group interviews were targeted toward two actors, individual beekeepers and wholesalers. The unstructured interview was chosen for these stakeholders because:

1. Their poor academic background;
2. They did not volunteer to be recorded;
3. They are important actors in the value chain to be left out of the research and their views needed to be collected.

Thematic analysis was used to analyse qualitative data.

Research Findings

The majority of Ethiopian beekeepers are small-scale producers. For them, beekeeping is a supplementary income-generating activity. Commercial bee farms are non-existent or they are at an emergent stage. According to the MoA expert, "*improvements in the production of honey have been made in recent years*". However, honey production has continued at a subsistence level and is considered as an off-farm activity. The respondent also added that, "*the government has increased funding to the Holeta bee research centre to boost the dissemination of modern beekeeping techniques…*".

Beekeepers who had received improved beehives from the SOS Sahel project stated that, they welcomed any support aimed at increasing honey production. They were able to produce 30-40 kg of honey from improved hives per season as compared to a maximum of 12 kg from traditional hives.

An interviewee, from a honey processing company, claimed that the government should consider the honey processors' needs. "*To be competitive, we need availability of high volumes of honey with better quality and an extended harvest season. This should be considered within the government program"*. The respondent added that, "*infrastructure needs to improve to reduce logistical challenges related to honey collection"*.

In small towns and villages mead brewers buy their supply from small-scale collectors and individual beekeepers. Mead brewers have developed long-term business relationships, trust and personal connections with beekeepers. Small beekeepers sell to the small local dealers who, in turn, sell to medium-sized dealers. Then medium-sized dealers sell to the large dealers. Processors believe this market structure prevents them from accessing the required volumes from a few suppliers.

Supply Chain and Logistics

The majority of respondents, from the government and NGOs, are interested in beekeepers' cooperatives taking the control of honey collection and marketing. This would address the issues of quality deterioration and price destabilization. The SOS enterprise development programme is providing financial and technical assistance to individual beekeepers to encourage them to form business cooperatives.

One of the themes repeatedly raised by honey processors is the difficulty of acquiring the right quantity of honey with the right quality and within a reasonable time. A honey processor company owner stated the following: "*When we started our honey processing company, we underestimated the challenge of acquiring the right volume, quality and variety of honey to run the processing plant efficiently. We have struggled to get enough honey to satisfy export contracts*".

Another challenge mentioned by interviewees from honey processing companies is the cost of transportation. Places known for their high-quality organic honey tend to have limited road access. Therefore, honey passes through a number of value chain actors before reaching the main market. As a result, the honey is exposed to quality deterioration, adulteration and at most, it could lose its traceability which is the most important criterion for organic honey exports. Honey is also transported together with other products, which could lead to contamination with other foreign materials.

Export Markets and Regulations

Nearly all exporters agreed that the interest in Ethiopian honey was growing, partly as a result of honey shortages in the global market and partly because of the positive experience from companies that had imported Ethiopian honey.

The EU honey market is known for its strict regulations towards food product imports. A residue test certificate from an accredited laboratory should accompany each honey shipment which needs to pass a food safety test at the entry port of the importer country. The owner of Beza Mar agro-industry plc claimed: "*we have to send our honey sample to Uganda, where an EU accredited laboratory is available… this increases our costs and causes delays for our exports*".

It has been observed that honey processors do not have up-to-date market information on the global honey market and those factors that affect its price. As pointed out by one of the exporters and his operating manager, they made price quotations based on previous experience or by comparing prices offered by different importers.

Honey processors also stated that either organic or fair -trade has helped to penetrate the EU honey market. One of the interviewees mentioned that: "…*our company uses a European certifier for its organic honey, and the certification proved to be successful in receiving repeated export contracts and at a good price*".

Honey Price and Quality

Qualitative data indicates that, the understanding of honey quality differs among beekeepers, wholesalers and processors. For processors, quality is related to international standards. However, beekeepers' and wholesalers' have an understanding of quality based on visual and sensory perception like color and taste. The EHBPEA secretary claimed: "*we are working to convince the government on the enforcement of a honey standard developed by the Ethiopian quality standard agency. However, the situation does not support the EHBPEA's position; because the market is so fragmented and therefore, it would be difficult to implement effective enforcement of the standard*". The interviewee also mentioned that honey quality varies from region to region and depends on the way it is handled before it reaches the processors.

The findings revealed that harvesting and handling of crude honey by individual beekeepers is poor in many parts of the country. As a result, it is common to find a big quantity of impurities, which influences the quality, natural taste and flavor of the honey.

The color of the honey has an impact on the price. A honey processing company manager who operates in the Northern Province said that, "*the price of light coloured honey (commonly called white honey) which was preferred by European importers was very high in the local market".* All companies that replied to the questionnaires had the same view on this issue, they insisted that the farm gate price of honey was expensive as when compared with some other African countries.

Individual beekeepers like to sell their honey to small scale collectors or wholesalers in their local market rather than processors, because they believed they would get a better price for their product. "*I separated the wax and other impurities using clean white clothe and sunlight, but the price difference did not compensate the lost honey during the process, as a result I prefer to sell my honey in its crude form to the local dealer whom I trust*".

Interviewees from the MoA and SOS Sahel project noted that processed honey remained very low compared with total production. Honey continued to be sold and consumed in crude forms mixed with beeswax, pollen, dead bees and other debris. Mead brewers bought much of the honey produced and set the floor price for the overall honey in the market, thus any incentive for producing high quality honey was reduced.

According to this study, the demand for processed honey is very low and limited to Addis Ababa and few major towns. Families bought honey for its alleged medicinal benefits rather than food and preferred to buy raw honey in the main harvest season when the honey harvested at this time it is believed to have a medicinal value.

Financial Issues

One issue raised by all honey processors and beekeepers interviewees, was the lack of financial resources and support. Honey processors' concern was related to their inability to retain enough stocks of raw honey, during the main harvest season, due to the lack of credit facilities. This has a negative impact on the possibility of accepting orders from potential buyers.

The EHBPEA Secretary argued that this was because of a lack of understanding of the sector's export potential and a lack of commitment from the government. Another obstacle he mentioned was the lack of cooperation among members of the association to make their cases toward banks or regional governments.

The MoA expert's and NGOs' view on this issue was very different. They insisted that the government did pay enough attention and provided support to the honey sector. It was mentioned that the government has paid the money required for the renewal of EU third country listing and facilitated the participation of exporters in a trade show held in Dubai.

For the beekeepers, financial issues were related to the availability of improved hives. Beekeepers claimed that the cost of improved hives was very expensive, however, they mentioned that would like to buy them on a long- term loan basis facilitated by the government, exporters or NGOs.

Discussion and Recommendations

Traditional hives produce the majority of honey in Ethiopia. They are scattered all over the country and the quantity they produce is very low when compared with honey productivity in major producer countries that have commercial bee farms. This study has revealed that such a production structure will continue for some time in the future. Collection and consolidation of the honey continue to involve a number of value chain players before it

reaches the processors. The large number of players involved in transportation and processing has a negative impact on the quality of the honey.

Lack of funding prevents many honey processors from developing their own commercial bee farms. However, processors could try to develop their own out-growers by providing a market price guarantee for beekeepers who had organized themselves into cooperatives. These would allow processors to create a direct supply link with beekeepers which will enable them to reduce the cost of transactions commonly created by non-value-adding activities of small scale collectors and consolidators.

The analysis of data suggests that the Government and NGOs, remain focused on increasing productivity at the individual beekeeper level. This approach does not help to address some of the challenges faced by the sector such as poor infrastructure.

Limited production capacity was identified as a factor that reduces the competitiveness of the sector. Interestingly, there is no evidence of inter-firm cooperation to develop and meet potential orders from buyers. Some processors have managed to open up markets by focusing on the niche market of organic honey certified by European organizations. Providing the quality and food safety standards are met, there are opportunities to increase exports to the EU and the UK.

Honey is considered an agricultural commodity with little differentiation. However, quality and reputation based on attractive value propositions which combined several value aspects such as taste and appearance, botanical origin, production methods (organic/fair trade) and service delivery play a significant role on price determination and continuity of the business relationship with importers. Manuka honey, from New Zealand, is a good example of differentiation. Moreover, companies and honey producers should take advantage of emerging trends. For instance, research has demonstrated that consumers are becoming more health-conscious, and aware of the impact that food may have on their health (Parashar et al., 2023). Many consumers perceive honey as a 'healthy' alternative to sugar, which represents an interesting opportunity for honey producers to further develop the market based on perceived health benefits. The perceived health benefits of honey should be clearly communicated and emphasized in any marketing communication campaigns to encourage honey consumption.

Similarly, the organic-certified honey market offers significant growth potential. The global organic food market has seen continuous growth (7% year-on-year) since 2017 (FiBL, 2019), and it is expected to grow more sharply (14% year-on-year) by 2025 (Willer et al., 2020). Research also shows that health and sustainability are important criteria influencing organic food choices (Deloitte, 2023). As a result, the consumption of organic honey could be driven by the perceived health benefits of unadulterated, 'pure' honey produced without the reliance on synthetic chemicals. Honey is considered a natural product, and the prospect of substituting it with other products is unlikely as long as consumers are able to buy it at a competitive price. The challenges for companies focusing on organic honey would be to meet the high cost of certification and the difficulty in accessing distribution channels (IFOAM, 2023). However, the organic-certified honey market offers a promising prospect for Ethiopian honey producers and is in line with the latest consumer trends.

Buyer concentration is expected to rise as a result of increased demand from the retail chains. Importers/Packers have to meet retailers' expectations by obtaining larger supplies of consistent quality and by blending larger amounts of honey from different sources. This poses

a challenge for Ethiopian exporters which are relatively small and have limited financial capacity to stock a big supply to satisfy a high volume of demand from importers. In addition, the cooperation among exporters is too weak to arrange joint export shipments.

Conclusions

One of the main challenges, faced by the sector, is the fragmented nature of the industry and its reliance on small-scale beekeeping. In addition, too low productivity, food safety and post-harvest quality problems remain as potential barriers to Ethiopian honey exports. Improving the value chain for quality and safety requires a coordinated effort among all stakeholders across the value chain.

The EU and the UK honey market is expected to continue as the largest and most attractive honey market for exporters. The premium price paid and the growing market for credence honey is expect to attract more new entrants to put a downward pressure on price. However, this market segment provides an opportunity for the Ethiopian exporters to establish a sustainable competitive advantage, in so far as they continue to prove themselves as reliable suppliers.

References

Alemu, A., & Adesina, J. (2015). Market or Hybrid? Determinants of Agribusiness Actors' Decision Behavior in the Agrifood Supply Chain. Journal of Commerce, 7(1), 23-41.

CBI market survey. (2009). *The honey and bee products market in the EU.* Retrieved February 13th, 2023, from: file:///C:/Users/ad3665/Downloads/Despre%20miere%20(1).pdf

Deloitte LLP. (2023). *The conscious consumer – connecting with health and sustainability priorities*. Retrieved February 2nd, 2023, from: https://www2.deloitte.com/uk/en/pages/consumer-business/articles/the-conscious-consumer-connecting-with-health-and-sustainability-priorities.html

EPOPA. (2006). *Export Opportunities for African Organic Honey and Beeswax.* Retrieved November 12th, 2022, from:http://www.grolink.se/epopa/Publications/Market-studies/EPOPA_marketsurveyhoney-Jan06-web.pdf

FiBL. (2019). *Global organic area reaches another all-time high*. Retrieved April 5th, 2022, from: https://www.organicag.co.nz/uploads/fibl-press-release-world-2019-02-13-english.pdf

Giziew, A., & Admas, A. (2021). Analysis of farmers' participation decision and its level in honey marketing in Ethiopia. GeoJournal, 86(6), 2521-2537.

Gratzer, K., Wakjira, K., Fiedler, S., & Brodschneider, R. (2021). Challenges and perspectives for beekeeping in Ethiopia. A review. Agronomy for Sustainable Development, 41(4), 46.

IFOAM. (2023). *The African Organic Network: Steering Organic on the continent*. Retrieved April 6th, 2022, from https://www.organicwithoutboundaries.bio/2023/01/18/the-african-organic-network-steering-organic-on-the-continent/

Kaspersen, L., & Rankin, M. (2021). *Investment planning for supply to agro-industrial parks: Lessons from sub-Saharan Africa*. FAO Investment Centre Investment Brief. Rome, FAO.

Kassaye, A. (2008). *Honey and Beeswax Value Chain of BOAM Programme. Establishment of Apiculture Data Base in Ethiopia*. SNV Netherlands Development Organization. Addis Ababa, Ethiopia.

MoFED. (2014). *Ethiopia: An Assessment of Macroeconomic Developments (1992-2012)*. Addis Ababa, Ethiopia.

Nega, T. (2018). Review of Ethiopia's Global Position in Honey and Other Bee Products Production and Marketing: Analysis of Sectoral Opportunities and Limitations. Biomedical Journal of Scientific & Technical Research, 10 (3), 7879-7883.

Parashar, S., Singh, S., & Sood, G. (2023). Examining the role of health consciousness, environmental awareness and intention on purchase of organic food: A moderated model of attitude. Journal of Cleaner Production, 386, 135553.

Porter, E. M. (1990). *Competitive Advantage Creating and Sustaining Superior Performance* .The free press.

United States Agency for International Development. (2023). *Agriculture and Food Security*. Retrieved February 10th, 2023, from: https://www.usaid.gov/ethiopia/agriculture-and-food-security

United States Agency for International Development. (2014). *Trade hub and African partners networks. Value chain assessment report: honey and beeswax*. Retrieved June 7th, 2022, from: https://pdf.usaid.gov/pdf_docs/PA00KMTK.pdf

Webber, C. M., & Labaste, P. (2010). *Building Competitiveness in Africa's Agriculture: A guide to value chain concepts and applications.* The World Bank. Washington DC.

Willer, H., Schlatter, B., Trávníček, J., Kemper, L., & Lernoud, J. (2020). *The world of organic agriculture statistics and emerging trends 2019. Research Institute of Organic Agriculture (FiBL) and IFOAM – Organics International.* Retrieved February 7th, 2023, from: https://ciaorganico.net/documypublic/486_2020-organic-world-2019.pdf