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SECTOR STUDY: PROCESSED AVOCADO

1. Avocado Oil

Funded by the European Union

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This document is part of the avocado sector study. This study explores the technical and economic feasibility of different processing and waste valorisation activities. The other chapters are available here: resources.colead

Table of Contents

1 AVOCADO OIL 2

1.1 What is avocado oil? 2

1.2 Avocado oil's competitors 2

2 DEMAND FORECAST 4

2.1 Market trends 4

2.2 Importing countries 5

2.3 Market structure 7

3 REGULATORY AND QUALITY REQUIREMENTS 8

3.1 Product specifications 8

3.2 Food safety and quality management 8

3.3 Sustainability and certifications 8

4 SUPPLY 10

4.1 Supplying markets 10

4.2 Pricing 11

4.3 Seasonality 11

4.4 Variety 11

5 PRODUCTION 12

5.1 Production process 12

5.2 Production technology 13

5.3 Production economics 14

6 PROPOSED OPTIONS FOR MARKETING STRATEGY 16

6.1 Key opportunities and challenges 16

6.2 Ingredients for success 16

6.3 Conclusion 17

1. Avocado oil

1.1 What is avocado oil?

Avocado oil[1] is oil that has been pressed largely from the flesh of avocadoes, although the peel and seeds can also be used; the parts of the avocado that are used will influence the quality of the oil (premium, medium or low).

Avocado oil has a mild taste, is nutritionally rich and has a high smoke point.[2] This makes it an ideal replacement for cooking oils such as sunflower oil, or even for olive oil in salads and sauces. Avocado oil tends to be sold as unrefined oil, which allows it to retain flavour and the mild green colour of avocado.

Avocado oil is also used in the beauty industry, in lotions, cosmetics, hair products, etc. In these applications the oil tends to be bleached and more refined and is pale yellow in colour.

Avocado oil is also sometimes used in the pharmaceutical sector, particularly in recipes for supplements. However, this use is not yet common. As there is currently a popular perception of avocado as a healthy fat, an increasing number of new innovations that use avocado oil are being brought to the market. These come in various formats, such as capsules or powders for smoothie mixes.

Estimates suggest that only a small share of avocado production globally is used to produce oil. This makes it a far smaller market than fresh avocadoes.

Figure 1. Uses of avocado oil

Food products	Cosmetics	Pharmaceuticals

Source: Brand websites: from the left, Hellman's, The Body Shop, Metavo

1.2 Avocado oil's competitors

As avocado oil can be used in foods, cosmetics and pharmaceutical products, there are some direct competitors, from avocado-producing countries, and indirect competitors to consider.

Indirectly, avocado oil also competes more widely with premium oils that are perceived to have health benefits. Olive oil has the largest market share in this segment. Increasingly, however, a wider variety of oils are growing in popularity. Almond, macadamia and coconut oils are

1 Avocado oil can be sold as oil or butter under HS codes 15159091 and 15159099.

2 The temperature at which an oil or fat (especially one used for cooking) begins to emit smoke. Surpassing the smoke point can create undesirable burnt aromas and flavours.

popular in the food and cosmetics sector and are sometimes used in the pharmaceuticals sector for balms, ointments and supplements.

Shea butter is a major competitor in the cosmetics sector, along with premium fruit oils such as citrus and mango, tea tree oil, and floral oils such as magnolia, rose and citronella. In the pharmaceuticals sector, avocado oil competes against fish oils and new plant oils such as moringa, flaxseed and grapeseed.

A wide variety of floral, botanical, fruit and seed oils are being used in the cosmetics industry. As the variety of oils being used in cosmetics is increasing, so is the number of countries that can supply these oils (e.g. European Union countries, Morocco, Egypt, Turkey, etc.).

Figure 2. Example of a cosmetic product using avocado oil

Ingredients list:
Water, Butyrospermum Parkii Butter/Butyrospermum Parkii (Shea) Butter, Theobroma Cacao Seed Butter/Theobroma Cacao (Cocoa) Seed Butter, Stearyl Alcohol, Glycerin, Helianthus Annuus Seed Oil/ Helianthus Annuus (Sunflower) Seed Oil, Bertholletia Excelsa Seed Oil, Cetearyl Alcohol, Cetearyl Glucoside, Triethyl Citrate, Fragrance, **Persea Gratissima Oil/Persea Gratissima (Avocado) Oil,** Dimethicone, Oryza Sativa Bran Wax/Oryza Sativa (Rice) Bran Wax, Phenoxyethanol, Sodium Stearoyl Glutamate, Caprylyl Glycol, Xanthan Gum, Tocopherol, Citric Acid, Caramel, CI 19140/Yellow 5, CI 42090/Blue 1.

Source: The Body Shop website

2. Demand forecast

2.1 Market trends

Trends in developed markets, such as the growth in plant-based dietary choices, healthy food concepts and the demand for new products (e.g. low-carb, high-fat burgers), suggest that avocado oil will continue to grow in popularity.

Non-seed oils

Some recent dietary trends (such as the ketogenic diet, "gut health" protocols, etc.) have created a perception that seed oils, such as sunflower and safflower oils, are inflammatory. This has pushed shoppers who follow this way of eating to look for less well-known, non-seed oils. Coconut oil has benefitted greatly from this trend, with global demand skyrocketing over the last decade. More recently, a variety of different non-seed oils – including avocado oil, but also macadamia nut and almond oils – have become available. Traditionally, these oils have been used in salads or as cooking oils. Increasingly, food manufacturers are innovating to bring new products to the market that replace seed oils with non-seed options, such as avocado oil. Popcorn with avocado oil is one such example.

Avocado oil has also been used to replace Medium Chain Triglyceride (MCT) oils such as coconut oil or even butter in drinks such as keto coffee. Keto coffee is a sugar-free coffee that has added butter or MCT oil and is well-loved in the ketogenic diet.

Source: Brand website for Westfalia

Oil infusions

Oil infusions are oils such as olive oil or avocado oil with added herbs, fruits or spices, or added aromas and/or flavours. These give the oil a distinct flavour that can enhance salads, marinades or sauces, for example. The variety of infusions available on the market is growing. Olive oil is now available in a variety of different infusions. Avocado oil, which has a subtler flavour, has followed the trend, with lemon-infused avocado oil amongst the first new product introductions. This development could help to solve a key issue facing avocado oil: a lack of clarity about how it should be used. Avocado oil can also withstand high temperatures and so is well suited to cooking.

Source: Brand website for Westfalia

Plant-based sauces and dressings

Source: Brand website for Better Body Foods

Plant-based eating is growing in popularity. To cater to this trend, many food manufacturers are creating versions of well-loved products that are vegan and contain healthier fats. For example, avocado mayonnaise, sauces and salad dressings have recently been introduced to retail stores in many markets (e.g. AH in the Netherlands, Edeka in Germany; Tesco in the UK, etc.)

Natural oils

Many cosmetics manufacturers are replacing synthetic oils with natural oils. These can include floral, herbal or even nut and fruit butters. Shoppers may perceive these oils as "safer" than synthetic oils, with more authentic ingredients. Avocado oil is used in both professional and consumer products in the cosmetics industry and is prized for its nutrient content, for its performance as a moisturiser and for its value in marketing.

Source: Brand website for Skinfood

Plant-based supplements

Plant-based eating and the growth of veganism has increased interest in natural, plant-based supplements. There are some instances where avocado oil has been marketed as a supplement in capsule form, or even as an oil for smoothies. This is still a relatively small trend; it will be important to monitor developments to better assess the size of the opportunity.

Source: Brand website for Swanson

2.2 Importing countries

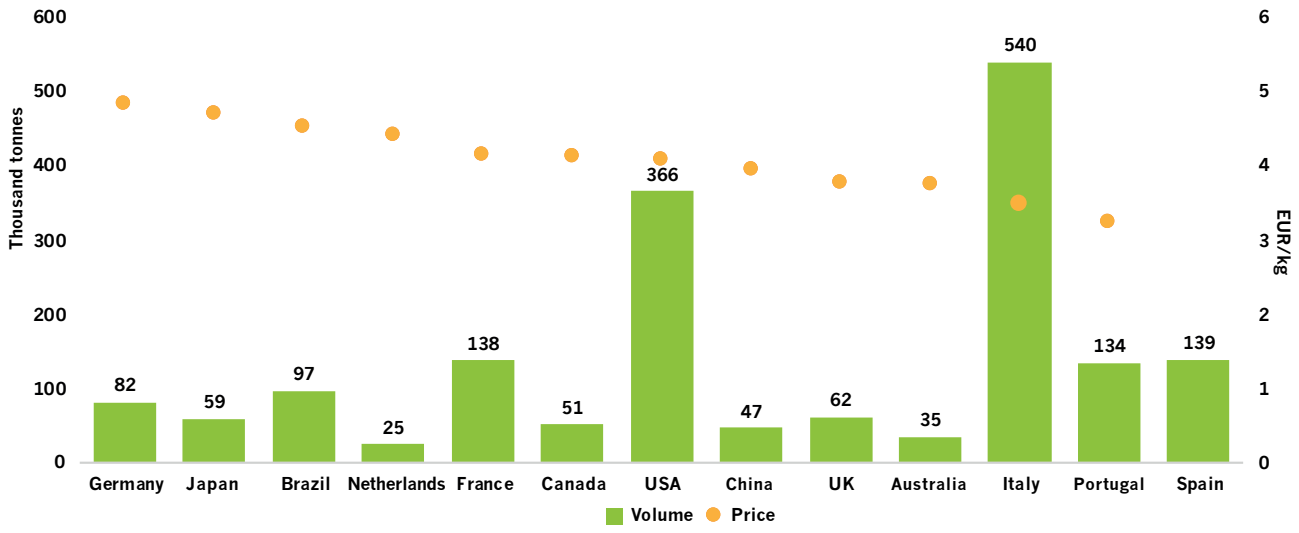
Premium oils (foods)

Avocado oil export statistics are difficult to find. However, it is possible to draw some conclusions from assessing the demand for olive oil and avocadoes. This data is more readily available and gives a sense of the potential demand in the market.

Figure 3 shows the average price per kilogram of olive oil paid by the 13 largest olive oil-importing nations, in order of the price paid per kilogram. Together, these countries are responsible for 90% of total olive oil imports. Within the EU, Germany, the Netherlands and France are large, premium olive-importing countries: they import large volumes of olive oil and pay a price that is higher than the global average, which is roughly €4,000 per ton. The Netherlands is a net importer of olive oil, meaning that it is also a large consumer. These countries could also be large, premium markets for suppliers of healthy oils such as cold pressed avocado oil.

Italy and Spain have large olive oil markets. However, as avocado consumption is low in these countries there could be challenges in supplying avocado oil to these markets.

Figure 3. Olive oil imports and prices in 2021



Source: ITC Trade Map, https://intracen.org/resources/tools/trade-map

Countries with high demand for avocadoes

Another interesting opportunity for avocado oil suppliers is in converting a high demand for avocadoes into a demand for healthy avocado oil. Figure 4 shows the 10 countries that are responsible for 80% of avocado imports globally, by volume of avocado imports and price paid per kilogram.

The global average price for avocadoes is €2,646 per ton, which is greatly affected by the USA, the largest importer globally. Germany, France, Japan, the United Kingdom and the Netherlands all pay above the global average price for avocadoes. These are thus both large and premium markets for avocadoes and therefore could also be potential markets for avocado oil.

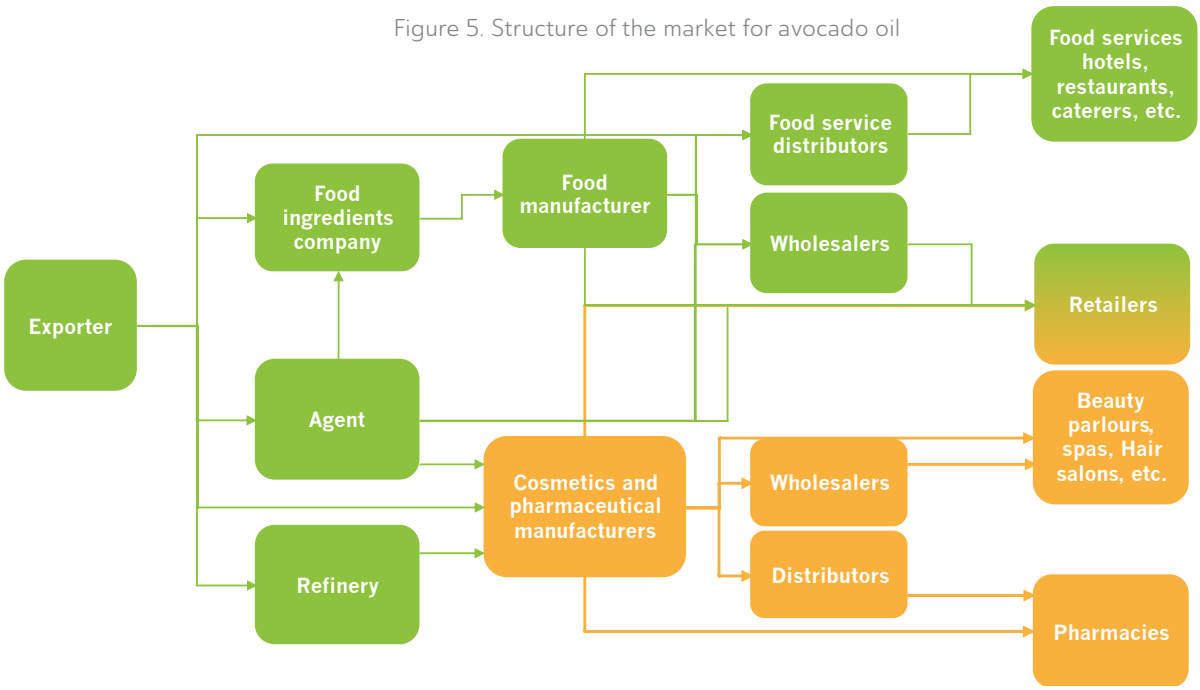
Figure 4. Avocado imports and prices in 2021

Source: ITC Trade Map, https://intracen.org/resources/tools/trade-map

This analysis also shows that a few EU-based countries – Germany, France and the Netherlands – are large premium markets for both olive oil and avocadoes. This suggests that these countries represent a good opportunity for suppliers of avocado oil.

2.3 Market structure

Figure 5. Structure of the market for avocado oil



The many potential end markets for avocado oil mean that there are many actors in the chain. There is also a variety of routes that the product can follow to market (Figure 5).

It is possible for an exporter to trade directly with food manufacturers and with cosmetic and pharmaceutical companies. This is more likely for premium oils rather than crude oil, which needs to be refined.

European manufacturers increasingly prefer to partner with ingredients companies or agents based in Europe. These partner companies tend to be specialists importing and distributing natural ingredients. Some specialist importers of avocado oil in the EU are De Lange, Gustav Hees and SanaBio (cosmetics).[3]

Some European manufacturers are able to use refined oils in their final products. This is most common in the cosmetics sector, with companies sourcing refined avocado oil from specialist oil refineries in the EU. Companies in the Netherlands, Italy and Germany play an important role in sourcing crude oil and then refining these oils for cosmetics.

In the food sector, Westfalia plays an important role in importing and distributing their own branded and bottled avocado oil into the EU and the UK. Westfalia is therefore a hybrid actor that is both an exporter and a food ingredients company, marketing both avocado products and dried mango. This hybrid structure allows a good distribution network for the Westfalia avocado oil brand, especially in the UK and in British supermarkets abroad (e.g. Spinneys in Dubai).

Manufacturers producing foods, cosmetics or pharmaceutical products bottle and package the oils or use them as ingredients in new products such as salad dressings, or in cosmetics and supplements. The finished products then follow existing distribution routes to households. In the case of foods, this might be via retail stores, while cosmetic and pharmaceutical manufacturers rely on retail and pharmacies to distribute their products to households. Finally, products that have been designed for professional beauty services such as spas and hair salons reach the market through specialist distributors.

3 Sourced from Confederation of British Industry (CBI) (2021) Entering the European Market for Avocado Oil. https://www.cbi.eu/market-information/natural-ingredients-cosmetics/avocado-oil/market-entry

3. Regulatory and quality requirements

3.1 Product specifications

Table 1. Product specifications for avocado oil

Item	Specification
Appearance	Pale green, thick
Flavour	Subtle hints of avocado
Shelf life	12–19 months
Storage conditions	Store at room temperature, out of direct sunlight and control exposure to oxygen.
Variety	Hass avocadoes are preferred for extra virgin oil Crude oil can be produced using other varieties
Acidity	This is especially important. Requirements are set by buyers of extra virgin oil.
Packaging	Bulk oil: 210 litre drums

3.2 Food safety and quality management

Mould and yeast control

Warmth creates good conditions for mould and yeasts to grow in ripening avocadoes. Processors need to be mindful of this and take steps to control mould and yeast in the ripening room and should screen fruit entering the processing steps.

Quality management standards: cosmetics and pharmaceuticals

Cosmetic and pharmaceutical product manufacturers expect suppliers to have very high quality standards. This assists them in creating safe products, which is especially important for cosmetics, medicines and supplements.

3.3 Sustainability and certifications

Organic certification

Organic certification is generally a benefit for products that are ready to eat, such as salad dressing. Buyers are thus willing to pay a slight premium for the organic certification.

Buyers who are sourcing raw materials for processed food products such as sauces and dressings are unlikely to be looking for and willing to pay a premium for an organic certification.

Quality management certification

Having good quality management standards in place indicates to buyers that a supplier is reliable and professional. Some useful standards to consider are:

- Good Agricultural Collection Practices (GACP)
- Good Manufacturing Practices (GMP)
- ISO 22000, ISO 9001:2015 from the International Organisation for Standardisation (ISO)
- Food Safety System Certification (FSSC 22000)
- Hazard Analysis and Critical; Control Points system (HACCP)
- British Retail Consortium (BRC) for those trading with buyers in the UK

Sustainability and environmental certification

Sustainable production and especially environmental sustainability is a growing concern for buyers of avocadoes and avocado products, particularly branded avocado products such as avocado oil or individually quick frozen (IQF) products that are sold as packaged goods to shoppers. When avocado oil, IQF and pulp are used as raw materials to make packaged foods, cosmetics or pharmaceuticals, the avocado content is less visible and so sustainability or environmental claims may be less important to buyers. The end use of the product and the role it will ultimately play in finished products is an important distinction for sellers to make when considering sustainability or environmental certification.

Nevertheless, applying sustainable production practices can have some value even where sellers process and market IQF, pulp and oil for further processing. It communicates to buyers that the processor is organised, professional and strategic. These are important signals for importers who are increasingly looking to focus their attention on fewer, more reliable, better integrated suppliers. However, it is important to recognise that using more sustainable production practices might not guarantee that sellers will be able to earn a higher price on the market, but it may help new regions or suppliers to differentiate themselves in the global marketplace. This is especially true if new suppliers are able to claim better sustainability credentials, such as lower water usage or a smaller impact on potable water availability.

4. Supply

4.1 Supplying markets

South American supply

Mexico and Peru are large suppliers of both fresh avocado and avocado oil. They are well organised, competitive countries in avocado oil production and sales. As most Mexican avocadoes are shipped to the USA, this is likely the focus of their export efforts for avocado oil. Peru, on the other hand, is a leading supplier of avocadoes to the EU.

Colombia and Chile are also developing as suppliers of avocado oil, albeit on a smaller and less organised scale than Mexico, Peru and the leading suppliers from Africa, South Africa and Kenya.

In general, South American suppliers, perhaps with the exception of Colombia, face several sustainability challenges that pose risks for buyers in the EU. All of the countries face water scarcity in the avocado production areas. Farmers need access to large quantities of water to produce avocadoes, but the areas where these trees grow tend to be relatively dry. Climate change is only worsening the challenge. In Mexico, for example, several recent avocado harvests have been poor due to insufficient rainfall.

African supply

South Africa and Kenya are well integrated into the global supply chains for both fresh avocadoes and avocado oil. A study carried out by Confederation of British Industry (CBI)[4] suggested that nearly 10% of South African avocadoes were processed into avocado oil in 2018. The study also suggested that most buyers are satisfied with the supply and general reputation of South African and Kenyan avocado oil. Tanzania is a smaller, newer supplier.

Other

New Zealand, Australia and the USA also have established avocado oil businesses.

Indirect competitors: food, cosmetics and pharmaceuticals

Spain, Italy, Portugal, Greece and Tunisia are responsible for 90% of global exports of olive oil. These countries are organised and have very active trade promotion agencies that market olive oil from their respective countries. The manufacturers in these countries are actively innovating. They have introduced a variety of blends and oil infusions to the market in order to remain relevant and to maintain their status in the industry. These countries are formidable competitors.

4 CBI (2023). The European market potential for avocadoes. https://www.cbi.eu/market-information/fresh-fruit-vegetables/avocados/market-potential#:~:text=The%20supply%20of%20avocados%20is,strong%20consumer%20demand%20for%20avocados.

4.2 Pricing

Avocado oil prices are quite variable, depending on the grade and the level of quality. Crude oil prices are in the region of €5 to €5.50 per kg at Free on Board (FOB). However, some industry stakeholders and reports suggest that pricing for extra virgin oil and refined cosmetics grade oil can be as high as €30 per kg FOB.[5]

4.3 Seasonality

Avocado oil has a relatively short shelf life (18 months) when compared to IQF and high pressure pasteurised and frozen pulp. When avocado oil is stored, it oxidises. This causes the product to increase in acidity, which is not favourable for food or premium usage. The product is still sellable, but as time moves on from harvest it continue to lose value.

As a result, seasonality is important, especially if a company intends to market a premium grade avocado oil. Firstly, to maximise shelf life, buyers tend to source avocado oil from those countries in production or at the end of their season. They are therefore more likely to seek to source oil from South Africa, Peru, Kenya and Mexico during the EU summer months (Figure 6).

Figure 6. Global sourcing chart for fresh avocadoes

	J	F	M	A	M	J	J	A	S	O	N	D
Peru												
South Africa												
Kenya												
Chile												
Mexico												
Colombia												

Note: Green shading indicates avocado production months.

4.4 Variety

There is no specific variety strictly required for avocado oil production. However, premium virgin avocado oil requires a variety with a low pH. Hass avocadoes produce a good quality oil that is suitable for this market.

Local varieties can be used to make avocado oil. However, these tend to have a higher pH, which is not suitable for the virgin avocado oil market. Avocado oil with a higher pH can be sold to refiners, but prices are lower.

5 Based on authors' interviews with suppliers and importers.

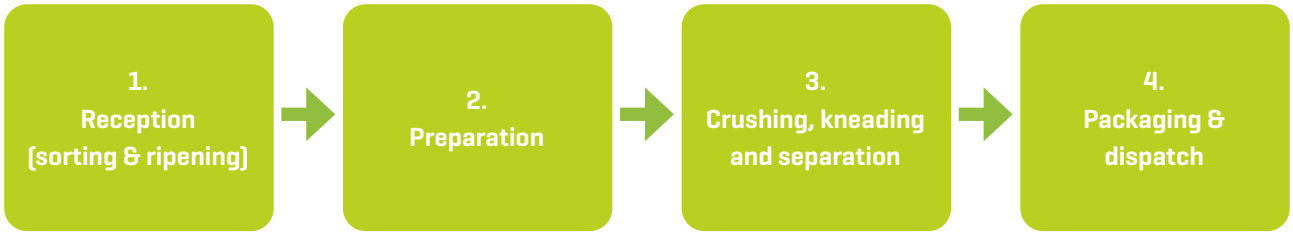
5. Production

5.1 Production process

There are three different methods for oil extraction from avocadoes: chemical extraction, mechanical extraction and cold-pressed. The cold-pressed method is the newest and the most in-demand. Cold pressing preserves the flavours and colour of the product, which is preferred in the food market as it compares to olive oil. It is also cheaper, simpler and better for the environment.

The production process shown in Figure 7 reflects cold-pressed production.

Figure 7. Production process



In ***step 1, reception***, avocadoes are received at the factory and sorted to ensure that the quality standards set for the product are met. Ideally, the avocadoes will be ripened after reception. A ripening room would be used and the process might include the use of ethylene.

In ***step 2, preparation***, the avocadoes are now ripe. They are washed to remove any potential contaminants, dirt or residues that could get into the final product. Once clean, any remaining stems are removed, the avocadoes are partially peeled and the seed, or pit, is scooped out. Some peel, typically 10%, is allowed to remain on the flesh as it contains oils and adds to the slightly green colour and the flavour that customers expect from cold pressed avocado oil.

In ***step 3, crushing, kneading and separation***, the avocadoes are mechanically crushed and kneaded to create a smooth paste. Water is added to the paste and it is then spun in a centrifuge to separate the solids from the liquids. Small strategically placed holes in the centrifuge allow the liquids to be removed and collected in a separate container. The solids remaining in the centrifuge, from the pulp and the skin, are then discarded. The liquid contains the oil and the water, which naturally separate to allow the oil to be skimmed off the top.

In ***step 4, packaging and dispatch***, the avocado oil is packed into bulk packaging. Typically this is 210 litre (191 kg) bulk drums. Alternately, if a branded consumer-ready product is being sold, the oil is bottled. This can be done manually, but in most commercial cases is mechanised. The product is now ready for dispatch.

5.2 Production technology

Avocado oil can be cold pressed using four to five pieces of equipment. Table 2 gives the estimated costs of the production line.

Step 1: Destoner or crusher: In the production of extra virgin oil, a destoner is used to cut the avocado in half and remove the pit. The fruit is then ready for scooping out, or removal of the flesh from the skin, which tends to be done manually to preserve the quality of the fruit. In the production of crude oil, a crusher is used instead. This allows the entire fruit to be crushed with skin and pit. It creates a lower grade of oil that is sold to refineries.

Step 2: A heat exchanger is often used to increase the temperature of the fruit and prepare it for mixing.

Step 3: Mixing group: This equipment is used for mechanical mixing Of the avocado to produce a smooth paste.

Step 4: Decanter: This machine spins the avocado paste allowing the oil to separate out. The waste water and solids are left behind. It is also possible to use a three-phase decanter to separate the waste water from the solids.

Step 5: Separator (Figure 8): In this final step, the oil is spun to remove any possible remaining water. This ensures a clear, consistent product. This is especially important for extra virgin avocado oil.

Table 2. Estimated costs of an avocado oil production line sourced from Italy

Capacity	Cost
3 tons per hour	€300,000
12 tons per hour	€600,000

Figure 8. Separator from Italian equipment supplier

Source: Images sourced from supplier Amenduni

5.3 Production economics

The variety of the fruit and the time in the season affects the amount of oil that can be extracted from each ton of fresh fruit. Hass avocadoes are the benchmark as they have more flesh than other varieties and are high in oil. On average, Hass avocadoes provide oil equivalent to 10% of the initial fresh fruit weight, including the pit and skin (see Table 3).

It is important to note that the oil content of the fruit varies throughout the season. Early in the season the oil content can be lower than 10%. Later in the season this rises and more oil can be extracted. Nevertheless, over the course of the season most processing plants extract 10% oil from the fresh fruit. This equates to 100 kg of oil for every ton of fresh fruit selected for processing.

Local varieties[6] tend to have bigger pits or are lower in oil. Experience in producing avocado oil commercially from local varieties suggests that less oil can be extracted, typically in the range of 5–8% oil. This means that for every ton of fresh fruit, 50–80 kg of oil can be extracted.

Table 3. Comparison of oil extracted for different varieties, per ton of fresh fruit

	Fresh Fruit (tonnes)	Oil extraction rate from whole fruit	Oil extracted from 1 tonne of fresh fruit (kg)
Hass	1	10%	100
Local variety (high estimate)	1	8%	80
Local variety (low estimate)	1	5%	50

Fruit quality, ripeness and variety

While it is possible to use blemished fruit for avocado oil production, a good quality oil requires a better quality fruit. The more damaged the fruit, the lower the quality of the oil and so the lower the price. Premium sellers must ensure that the fruit they use is a good quality.

The ripeness of the fruit also matters. Firstly, fruit should be ripe but not overly ripe, which can result in damaged fruit. Ripeness also affects the amount of oil that can be pressed from the flesh. Earlier in the season processors are able to extract less oil than later in the season.

Scale of sourcing

Large processors of oils tend to export in bulk. The product is then shipped in a 20-foot container, which can carry about 20 tons of finished oil. To achieve this scale, a typical avocado processing plant that uses Hass avocadoes would need to source approximately 200,000 tons of fresh fruit (Table 4).

For local varieties, which tend to have a lower oil content, even more fruit would need to be sourced. Based on an estimated oil content of about 5–8% of the fresh fruit for these varieties, factories would need to process up to 400,000 tons of fresh fruit to fill a container. Many countries do not produce enough fruit to achieve this volume.

6 There are many varieties of avocado that are not suitable for export, e.g., Kienyeji in Kenya. Also, in many countries there are varieties that do not have a specific name as they are not generally commercially grown. The pH, pit size and oil content are generally unknown.

Table 4. Fresh fruit requirements to produce enough oil to fill one container

	Fresh fruit (kg)	Oil extraction rate from whole fruit	Oil extracted (kg)
Hass	200,000	10%	20,000
Local variety (high estimate)	250,000	8%	20,000
Local variety (low estimate)	400,000	5%	20,000

Sourcing these volumes of fruit can be a challenge even in countries where the fresh logistics are well organised. In these markets, waste is low and there is strong competition for fresh fruit. For example, if waste is 10% (which is very likely), then collectively the country would need to be exporting 2 million tons of fresh fruit to be able to produce and ship a container of avocado oil made purely from waste. This is highly unlikely for smaller countries. The challenge also is even greater in countries with a local fresh market, which can absorb lower grade fruit.

The bulk market, which is open to lower product quality and could be open to oils produced from local avocado varieties, is thus not a likely market for most processors in Africa, as they are unlikely to be able to access the volume of fruit needed to trade.

If a processor can produce a premium oil from Hass avocadoes, they may be able to market their product to niche buyers who are looking for smaller volumes of avocado oil. These buyers could be cosmetics companies or even food manufacturers who are looking to make claims around the origin, flavour, quality or social and environmental responsibility of the product. If a processor can only source local avocado varieties, they should consider producing avocado oil for the local market. In local markets, the smaller production volumes, the lower quality and shorter shelf life are not likely to be major disadvantages.

6. Proposed options for marketing strategy

6.1 Key opportunities and challenges

Table 5. Opportunities and challenges

Opportunities	Challenges
▪ Increasing use in food products and cosmetics ▪ Steady growth in demand for all avocado products, including oils ▪ Demand in premium markets: Germany, Netherlands, France ▪ Many positive market trends supporting growth ▪ Relatively simple production process ▪ Comparably more affordable production technology ▪ Opportunities for sale of low-grade crude oil and premium high quality extra virgin oil ▪ Local varieties can be processed	▪ Many alternatives to avocado oil ▪ Strong, organised olive oil competitors ▪ Competition from affordable seed oils ▪ Cosmetics market is trend driven and uncertain ▪ Small percentage of avocado oil used in cosmetic formulations ▪ Short shelf life compared to alternative oils due to oxidation ▪ Requires careful quality management for a premium product ▪ Sustainability challenges for avocado production pose a risk to oils ▪ Established, large avocado oil producer competitors that can meet supply requirements ▪ Difficult to source large quantities of fresh fruit required for a container of product

6.2 Ingredients for success

Match quality to the right market

Companies have several options in the choice of the end market they will supply. It is even possible for companies to start by producing a low-grade, low-cost crude oil and then graduate to producing a high quality, extra virgin oil. Producing different grades of oil at different times of the year is also possible. It is important that companies are aware of the quality standards required for each market and that they work towards meeting the quality and pricing standards in those markets. Companies with access to quality Hass avocadoes should consider whether the quality standards needed to produce extra virgin oil are attainable for their factory. If not, is supplying crude oil a more workable model? However, for companies producing IQF avocado and avocado pulp, a high-quality avocado oil may be more achievable as the quality management system needed to produce a low acidity, high-quality avocado oil will already be in place.

Scale (bulk market)

The most significant barrier to succeeding in producing and marketing avocado oil for export is sourcing a large enough volume of fresh fruit. This requires skills in finding and securing fruit from growers or from fresh packhouses. It may require sourcing from other regions in

the country, looking to neighbouring countries, or even exploring the feasibility of using local varieties. Some companies might consider working with other producers of avocado oil so that they can meet the volume requirements. These could be local or even regional suppliers (e.g. Kenya and Tanzania).

Niche, premium strategy (export)

As most new producing countries are currently unlikely to achieve the volumes to sell to bulk buyers, they could be a better match for premium niche markets. In this case, focusing on premium buyers who are looking for a high quality, extra virgin product could be sensible. The marketing strategy would be first and foremost one of mastering sourcing, production and marketing of a premium product. This includes looking for differentiating marketing stories that can attract premium buyers, such as, for example, community sourcing stories, environmental factors that enable a reliably premium, nutritious product, niche certifications and endorsements. This strategy may be interesting to premium cosmetics houses as well as to premium oil and salad dressing companies.

Local markets

In markets without sufficient fresh fruit to produce bulk oil in containers, companies can consider the local market. This would require finding partners who are interested in bottling the oil, or in processing it to produce products such as margarine, sauces or beauty products. Companies looking to develop their own bottled oil brands should be aware that developing a brand, while developing the market for avocado oil, requires patience and skills in marketing. It is also important to assess whether local varieties of avocado oil will be acceptable to the market, whether this is the local, international crude or extra virgin oil market.

6.3 Conclusion

The avocado oil market provides opportunities for companies in many different contexts, with different grades of fruit available and for those who are interested in local or international markets. The growth in the market and the growth in innovations suggest that there is potential in both the food and cosmetics sectors.

Making a success of an avocado oil business requires companies to be very aware of the grade of product they wish to produce and then to proactively take steps to achieve the grade and pricing. This can allow companies to explore the impact of using local varieties on demand for their products.

Sourcing sufficient fresh fruit is a key area of focus for any company looking to build an avocado oil business. Without scale, companies must ask whether the export market is achievable.

SECTOR STUDY: PROCESSED AVOCADO

1. Avocado Oil
2. Frozen Avocado (IQF)
3. Avocado Pulp

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