The European and Swiss market for processed foods from Sri Lanka

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Table of Contents

1. The EU and Swiss market for processed foods

1.1 Requirements

European demand for processed fruits and vegetables is growing, driven by the health trend which stimulates European consumers to place a greater importance on healthy and natural foods and to make more lifestyle-conscious food choices. Growth was hampered in the past years due to supply chain disruptions, the war in Ukraine, and inflation, which have knocked consumer confidence and led to a decrease in spending on exotic products. However, the long-term trend is positive, as consumer confidence in the economy improves and prices begin to fall again, the possibility to export processed fruits and vegetables is set to increase due to the shift to healthy, sustainable, meat-free diets. The most promising markets in Europe for exporting processed fruits and vegetables from Sri Lanka are Germany, the Netherlands, France, Italy, and the United Kingdom.

All processed foods sold on the European market must be safe for consumption. The criteria for safety range from the approval of additives to the banning of harmful contaminants. As the European demand for safe and traceable products increases, private requests from purchasing companies are becoming just as important as mandatory requirements. As a rule, exporters need to monitor changes to EU laws constantly, as the European Food Safety Authority constantly updates, and adds, new requirements.

Switzerland has stringent food safety regulations which are in-line with international and European standards. Although Switzerland implements its own separate legislation, it is in communication with the EU to ensure the equivalence of their respective food safety regulations. This means that products meeting EU standards will also comply with Swiss standards, and vice versa. Both the EU and Switzerland conduct food safety controls, including checks on documentation, quality, labelling, and hygiene practices.

Below is a comprehensive outline of the food safety requirements that are applicable for exporting to Europe as well as Switzerland.

1.1.1 Mandatory requirements for processed foods

Most of the requirements for exporting processed foods to the EU are related to food safety. All companies exporting to the EU must comply with mandatory requirements as outlined in the General Food Law (GFL). The GFL was set up by the European Food Safety Authority as a framework for food controls.

This system is based on the Farm to Fork approach, which explains that all food must be fully traceable along the entire supply chain. This means that each actor in the chain must have a traceability system in place to allow tracing of products one step back in the chain and one step forward in the chain. In addition to the traceability system, food operators must have implemented a Hazard Analysis of Critical Control Points (HACCP).

1.1.2 Tariff barriers for processed foods imported to the European Union

Tariffs impact the ability of an exporter to sell in the European market. Companies outside the EU face varying tariff levels, and this is dependent on the agreement between the importing country and the supplier. A tariff can be imposed in the form of a percentage tax, a quantitative limit (quota), or a combination of the two.

Given that Sri Lanka has been part of the EU Scheme for Preference Plus (GSP+) for over 15 years, Sri Lankan companies are afforded better access to European markets, and must not pay any tariff contributions. This agreement is premised on Sri Lanka delivering better jobs and contributing to sustained human development. The aim of the agreement also covers the commitment of Sri Lanka to diversify its export portfolio, as well as attract new investment opportunities for Sri Lankan businesses.

1.1.3 Tariff barriers for processed foods imported to Switzerland

Switzerland is not in a customs union with the EU, which means it can implement its own standard with respect to third countries. The EU has a free trade agreement with many third countries, but Switzerland and Sri Lanka currently do not have a free trade agreement in place. However, since Switzerland is a member of the European Free Trade Association (EFTA) it benefits from the EFTA's vast network of free trade agreements with many countries. Sri Lanka's status as a GSP+ member means that they can export certain products to Switzerland at zero tariff. Although this is the general case, Sri Lankan exporters must check with local authorities for the most accurate information on tariff exemptions between the two countries.

Switzerland has taken the same approach as the EU when it comes to product rules. This ensures that products imported into Switzerland and the EU have a homogenous quality. For exporters, this means that adherence to rules when exporting to Switzerland and the EU is mostly identical.

Furthermore, Switzerland also has double taxation agreements (DTAs) which prevent companies from being taxed twice. Therefore, if you export to Switzerland, you must ensure that you are not being taxed twice, once in Sri Lanka and again in Switzerland where you derive your income.

1.1.4 Phytosanitary inspection

The EU requires phytosanitary (plant health) certificates, which prove that your plants or plant products have been inspected and are free from dangerous pests and diseases. Once an exporter is issued with this certificate, this confirms that the product is safe for exporting to European markets. As a rule, phytosanitary certificates are not necessary for most processed fruits and vegetables, except for whole dried fruit, vegetables, and in-shell nuts.

1.1.5 Official border controls

Since the EU makes importers responsible for ensuring food safety of imported products, only a small proportion of products imported to the EU are subject to official border controls that go beyond the checking of documents. The importer will ensure the product is safe before exporting and will make sure that all mandatory requirements are met.

However, it is important to understand that repeated non-compliance with official European food legislation law can impact the border controls on your products. The EU may subject countries with non-compliant exporters to strict import conditions or a ban on exports. More broadly, violating export requirements can significantly impact an exporter's relationship with importers. Therefore, it is critical to ensure all requirements are met before engaging in discussions with importers.

1.1.6 Contaminant control

Contaminants are substances that have not been intentionally added to food. These substances come in physical, biological, and chemical forms, and can occur because of improper procedures in various stages of production, from production, packaging, transport, or holding. Contaminants may also be present in food due to environmental contamination. Since contaminants can negatively impact the quality and safety of foods, the EU is setting increasingly stricter Maximum Residue Levels (MRLs) for contaminants allowed in foods. The most relevant MRLs for processed foods relate to microbiological contamination, mycotoxins, and pesticides.

1.1.7 Controlling physical contaminants

Heavy metals

The EU sets restrictions for lead (fruits, juices, vegetables), cadmium (fruits and vegetables), mercury (supplements), and tin (canned foods and beverages). Traces of heavy metals can be present as residue in food because they are active components in the environment. This occurs naturally as a process during farming, car, and industry fumes, or via contamination during processing and storage.

Particularly in processed fruit and vegetables sector, high levels of lead or cadmium may be found in frozen fruit and vegetables. Higher concentrations of tin used to be found in canned fruit and vegetables due to dissolution of the tin coating. But since tin cans now have a new coating on the inside, the incidence of tin in canned products has dramatically decreased.

In August 2021, the EU set new maximum levels for lead and cadmium in baby foods, supplements, and a range of other food products. Any foods that exceed the maximum levels of cadmium and lead will be banned from the European market.

For the control of other types of physical contaminants such as stone, glass, or earth, detectors can be installed. Additionally, it is always recommended to conduct physical testing and eye-inspections, as detectors can sometimes miss critical contaminants.

Controlling biological contaminants

Microbiological contamination is the main reason for most border rejections related to processed foods. The most dangerous types of microbiological contaminants present in processed foods are salmonella, Escherichia Coli, listeria, and viruses like Hepatitis A. The EU regulation on microbiological criteria for foodstuffs sets strict limits for pathogenic micro-organisms, toxins, and metabolites.

Specifically in the fruit and vegetable processing sector, one of the main sources of microbiological contamination can be dirty water used for irrigation or for cleaning and processing operations. Other less common sources of contamination are related to the utilisation of transport vehicles for completely different purposes. It is critical for suppliers from Sri Lanka to ensure employees implement good hygienic practices and use clean and disinfected processing facilities, vehicles, and packaging for transportation purposes.

There is a rigid procedure that must be followed before exporters wish to distribute their products on the European market. This includes laboratory testing for the presence of microorganisms. Many of these tests can be performed quickly, but others require more time and expertise. When performing microbiological tests, it is important to only use accredited laboratories that are internationally recognized for their capacity to perform the required tests.

Particularly for processed foods, contamination of foreign bodies can present a problem in the form of insects. Insects can be found dead inside the packaging but can also develop and thrive within the product during harvesting and storage. Therefore, it is critical for suppliers from developing countries to implement preventative measures. This includes fumigation and temperature treatment. Some forms of fumigation are prohibited by the EU, such as methyl bromide.

1.1.8 Controlling chemical contaminants

Mycotoxins

Mycotoxins are a group of naturally occurring chemicals produced by certain moulds. They can grow on many crops, including processed fruits, often under warm and humid conditions. Even with treatments like consistent heat treatment, these toxins are very stable and cannot always be destroyed. With regards to processed foods, the most prevalent contaminations are aflatoxins, ochratoxin A, and patulin. During 2022, the Rapid Alert System for Food and Feed reported 110 incidents of mycotoxins in imported fruits and vegetables.

Control of mycotoxins is best managed by good post-harvesting practices, such as accurate harvesting and proper post-harvest handling. Appropriate moisture and temperature conditions during storage and transport, and the detection and removal of contaminated material from the food supply chain are also important control measures.

Pesticides

The Sri Lankan government's attempt to shift to complete organic farming in 2019 highlighted the economic dangers of improper preparation in the transition to organic farming. The EU sets a Maximum Residue Level (MRL) for pesticides in food products. If a product contains residues of illegal pesticides or higher amounts of pesticide than allowed, your product can be taken off the market. Increasingly, government organisations and non-government organisations conduct tests, which lead to public shaming of a company if residues are found.

In 2020, the EU implemented a new set of policies and actions under the European Green Deal, with the goal of making the EU more sustainable and climate neutral by 2050. The plan also includes the ambition to reduce the use of pesticides by 50%, while increasing the share of agricultural land used for organic farming by 25% by 2030. As a result, the Maximum Residue Levels will decrease gradually over the next years.

In 2021, several pesticides were withdrawn from the European market, including beta-cyfluthrin, benalaxyl, bromoxynil, mancozeb, befuraline, chlorpyrifos, chlorpyrifos-methyl and thiacloprid. The banning and block on the export of dangerous pesticides is only set to increase in 2023.

Chlorate and perchlorate

As of June 2020, chlorate is no longer approved as a pesticide, but often encounters food via chlorinated water in processing. The European Food Safety Authority found that chlorate levels in drinking water and foods were too high and could negatively impact the uptake of iodine especially in infants and children. Therefore, processors of fruits and vegetables must control the use of water in their production facilities. Ensuring that the water used in a processing facility is of good quality is part of Good Manufacturing Practices.

Glycidyl Esters

Glycerol-based products are contaminants found in vegetable oils and in some processed foods. The EU frequently publishes maximum levels for glycidyl esters in foods.

Acrylamide

Acrylamide is a contaminant which may form in food during cooking, frying, or baking at temperatures above 120 degrees Celsius. Best practice, mitigation measures and maximum levels of acrylamide can be found by navigating the EU regulation page.

Specific plant toxins

Some toxins may be naturally occurring in fruit or vegetables, or in weeds that contaminate plants in the field. The most common plant toxins to be aware of include tropane, pyrrolizidine, alkaloids, and cyanide. To prevent the contamination of fruits and vegetables, it is recommended that producers follow the principles as established in the integrated pest management (IPM), such as safe planting distance from risk areas and the removal of weeds when they are visible.

1.1.9 Authorised additives.

If a product has undeclared, illegal, or excessive levels of food improvement ingredients, buyers can reject the shipment. It is important to check the legislation for additives, flavourings, and enzymes that list what 'E Numbers' are allowed. If you want to add vitamins to products, you must research which ones are allowed. Additives which have been authorised are listed according to the category of food which they may be added to. In the processed fruit and vegetable sector, problems occur because of undeclared or excessive use of preservatives.

1.1.10 Product authenticity

False claims are sometimes made by suppliers about their products. In the EU, this is considered a criminal activity, and producers may do this to gain profit. Mislabelling food can have grave negative impacts and can cause allergic reactions to unaware consumers. As a result of product fraud, laboratories around Europe are increasing testing to discover fraudulent activity.

Additional requirements of buyers

European buyers have specific requirements depending on their product segment. Common requirements include social and environmental standards, as well as GLOBALG.A.P.

Certification as a guarantee

Given that food safety is the highest priority for in the European food sector, most buyers want extra guarantees from suppliers in the form of certification. All buyers in the supply chain, like traders, food processors and supermarkets require the implementation of a food safety management system based on hazard analysis and critical control points (HACCP).

Food safety management systems

European importers may expect food safety management systems, such as in relation to the handling and processing of fruit and vegetables. The most widely accepted standard for food safety management is FSSC 22000, which is an industry-developed standard produced by the International Organization for Standardization. Alternatively, the BRC Global Standard is a requirement for many large retail chains on the north-western European market, including the UK. In Germany, the IFS is also very common and many retailers will require strict adherence to this.

It is important to remember that compliance with certification schemes will vary depending on country, product, and market situations. For example, buyers can be much stricter during excess supply periods. However, the standards are recommended as an initial starting point, as many buyers will only engage in business once these standards in place.

Social and environmental compliance

In recent years, there has been growing awareness of the social and environmental standards in producing countries. Now, most European buyers have developed their own code of conduct, with which they expect producers to comply with.

The importance of Corporate Social Responsibility (CSR) will vary depending on which countries in Europe you are dealing with. For example, countries in eastern Europe place less emphasis on social compliance. In comparison, multinational buyers from western Europe have their own social and environmental compliance systems. An example of this includes the French retailer Carrefour, which has its own ''Carrefour Responsible Agriculture'' program that sets standards for suppliers in areas such as animal welfare, pesticide use, and water use.

As an exporter it is critical to implement European demanded standards, especially when dealing with buyers who supply directly to retail chains. Climate-smart agriculture is also becoming more important, and standards such as Rainforest Alliance are gaining traction amongst importers and retailers. However, Fairtrade labels are not as popular as they used to be because of the complex requirements and high cost for producers. In the future, new standards such as Fair Wild will be introduced, and producers must be aware of these if they want to access European markets.

1.2 Trade relations between Sri Lanka and the European Union

Sri Lanka is part of the EU Scheme for Preference Plus (GSP+) and this allows Sri Lankan companies better access to European markets due to the removal of tariff barriers. This agreement is based on Sri Lanka delivering better jobs and contributing to sustained human development efforts. The aim of this agreement is also to contribute to diversifying exports as well as attracting new investment opportunities for Sri Lankan companies.

The EU's support to the Sri Lankan economy focuses on providing technical assistance but this has now evolved to supporting the government in regulatory reform and helping local companies become more competitive. Going forward, the EU aims to support the Sri Lankan economy in green economic development and hopes to continue supporting local efforts to more peaceful and inclusive development.

It is critical to be aware of the differences in doing business between Sri Lanka, the European Union, and Switzerland. In general, the commercial attitudes between Europeans and Sri Lankans are quite different. Therefore, it is advised to clearly understand how best to approach European buyers before you begin engaging in serious business conversations with them. European companies are extremely focused on building up a strong business relationship with suppliers that can extend over an extended period. For this reason, the initial contact and business with European buyers may be slow, as they place great value on learning about their suppliers, what they can offer, and whether it is possible to collaborate constructively with suppliers. European companies follow a meticulous process of selecting their suppliers and do their research thoroughly before contacting a supplier. Often, they already know a lot about the supplier before they begin negotiations with them.

Naturally, becoming informed on European commercial behaviour takes time, experience, and patience. Sri Lankan exporters can build their knowledge on European business culture by visiting European trade fairs like SIAL, ANUGA, BIOFACH, Fruit Logistica and other trade fairs, networking via LinkedIn, or by personally visiting customers on a continuous basis to build a solid rapport. This can be invaluable for exporters who want to build a network, and if done well it can oftentimes lead to further business for you via word of mouth.

1.2.1 Trade relationship between Switzerland and Sri Lanka

Recent data shows that trade between Sri Lanka and Switzerland has increased in the last 6 years. According to the International Trade Centre, Sri Lanka's exports to Switzerland were valued at € 92 million in 2015, while Sri Lanka's imports from Switzerland stood at € 34 million. By 2020, Sri Lankan exports to Switzerland had increased by approximately 55%, reaching € 143 million. However, Sri Lankan imports from Switzerland decreased to € 22 million. During this period, Sri Lankan exports to Switzerland were mostly in textiles, tea, and rubber.

Since the onset of the COVID-19 pandemic, the Swiss government and businesses have geared their investments in the Sri Lankan economy within the agri-food sector.. The Swiss cooperation strategy for 2016-2020 aimed to support Sri Lanka's reform and reconciliation process based on strengthened bilateral trade in specific sectors. Two other sectors with a high potential for growth are the infrastructure and tourism sectors.

Despite the disruption in global supply chains and trade as a result of the COVID-19 pandemic, the long-term trend between Sri Lanka and Switzerland is positive. In the coming years, co-operation between the two countries is expected to improve. Swiss companies will be well positioned to invest in Sri Lanka and can support the expansion and growth of Sri Lanka businesses through technical training, financial support, and market access to European and Swiss markets.

1.3 Trends in the European and Swiss markets

1.3.1 Consumers pay more attention to sustainability.

Consumers are opting for more sustainable purchasing behaviour. This is caused by an increased awareness about the climate crisis. Consumers have started to take a more critical view of the endless stream of new products coming to market, questioning how their consumption behaviour might be damaging to the environment in the long run. Many people are resisting the push to consume more, realizing that the rate at which resources are being used, and waste is mounting up, is simply storing up problems for later. Consumers are becoming more critical on the way they spend their money and the effect their purchase has on producers and the environment. Consumers increasingly want something good is done with the money they spend.

Hence, European consumers demand more from suppliers with regards to sustainability. The EU is responding to the concerns of consumers in Europe with the Green Deal. In particular, the Green Deal's Farm to Fork strategy is a comprehensive plan aimed at transforming the food system in Europe to make it more sustainable, healthy, and resilient. Its aim is to make food systems fair, healthy, and environmentally friendly. The goal will be to address sustainable food production processes while reducing packaging and food waste. The EU has already implemented some trade agreements with various countries, and these include rules on trade and sustainable development. For suppliers of processed foods, a keen eye on the developments can be beneficial as it will increase your competitiveness when new standards and requirements become the norm.

As part of the European Green Deal, the Corporate Sustainability Reporting Directive (CSRD) will come into action. As of January 2024, all companies with more than 500 employees will have to report their activities information in a dedicated section of their company management reports, usually included in their annual report. Reports must cover environmental matters including climate risk related reporting, social matters and treatment of employees, respect for human rights, anti-corruption, and bribery as well as diversity on company boards. Companies will need to provide information that is qualitative and quantitative, both forward and retrospective-looking and based on short, medium, and long-term. Most large companies are already reporting on a number of these issues to increase transparency. CSRD will set stricter requirements for the content of these reports. Del Monte is one of the world's major producers of fresh and dried fruits and publishes their sustainability reports on their website.

The CSRD regulations will take place in four stages:

- 1 January 2024 – for companies already reporting in line with NFRD (reporting in 2025 on 2024 data).
- 1 January 2025 – for large companies that are not currently subject to NFRD (reporting in 2026 on 2025 data).
- 1 January 2026 – for listed SMEs, small and non-complex credit institutions, and captive insurance undertakings (reporting in 2027 on 2026 data).
- 1 January 2028 - reporting in 2029 on the financial year 2028 for third-country undertakings with net turnover above 150 million in the EU if they have at least one subsidiary or branch in the EU exceeding certain thresholds.

TIP: Over time, all European companies will have to comply with the new CSRD regulations. If you can provide your buyers a complete and transparent list of all your partners and suppliers, this information will help your buyer in complying with their CSRD regulations. The more information you can provide, the more interesting of a business partner you could become.

Examples of different sustainability schemes relevant for the sector include certification schemes focusing on:

- Reducing CO2 emission – Verified Carbon Standard, MyClimate, ICT Carbon Footprint Certification. Those certification schemes usually follow standards for measuring greenhouse gas emissions such as ISO 14067.
- The preservation of forest resources - Rainforest Alliance, FSC, PEFC. The latter two certification schemes are important for packaging materials.
- Biobased and recyclable packaging – OK biobased, DIN-Geprüft biobased, OK compost, RSB, Recycled Content Certification.
- Social and ethical impact (Monitoring and auditing) - FairTrade, SMETA, Ethical Trading Initiative, amfori BSCI, BCorp, and Fair for Life.
- A wider range of environmental aspects – Cradle to Cradle, Planet Proof, ISO 14000. Those include private schemes of European retailers such as ProPlanet (REWE) or Edeka Panda (Edeka).

- Organic and pesticide free food – EU organic, KRAV, Naturland, Demeter, AB France, Soil Association, SCS Pesticide Free, Zerya.

Which of the above certification scheme is most suitable for you, depends on several factors including needs of buyers in your specific market segment and your business strategy and operations. Note that certification is a strategic choice to improve competitiveness of your company and will often not result directly in higher prices for your products.

1.3.2 Demand for organic products

According to a report by the Research Institute of Organic Agriculture (FiBL), the European organic market was valued at 45 billion euros in 2019, making it the largest organic market in the world. The same report states that the market has been growing steadily over the past decade, with an average annual growth rate of 7.8% between 2010 and 2019.

However, a slower growth occurred in 2021, and there is expected to be lower growth in 2022. Market conditions changed this year. The Ukrainian conflict has led to food inflation and weakening economic conditions, especially in Europe. This is having a negative impact on the organic food market, according to FIBL.

In terms of individual countries, Germany has the largest organic market in Europe, with a value of 13.6 billion euros in 2019. France and Italy follow closely behind, with organic markets valued at 12.9 billion euros and 3.5 billion euros, respectively. Other countries with significant organic markets include the United Kingdom, Switzerland, and the Netherlands.

The organic food and beverage sector accounts for most of the organic market in Europe, with sales of organic fruits and vegetables, dairy products, and meat and poultry products being particularly strong. The organic cosmetics and personal care market is also growing rapidly in Europe, with consumers showing increasing interest in natural and organic beauty products.

Within the organic market there is a small but increasing demand for regenerative agriculture. Regenerative agriculture is a conservation and rehabilitation approach to food and farming systems. It focuses on topsoil regeneration, increasing biodiversity, improving the water cycle, enhancing ecosystem services, increasing resilience to climate change, and strengthening the health and vitality of farm soil. The Regenerative Agriculture Foundation gives more information on this farming concept. Although an increase in regenerative agriculture is expected, it is important to note that regenerative agriculture remains niche within the organic niche market.

TIP: Research the feasibility of getting your production organic certified. This is an investment, and might demand a change in business operation, but it could increase the sales price or demand for your product.

1.3.3 Shift to plant-based foods

One of the most significant changes in recent years in European food consumption has been the rise of plant-based diets. Many consumers are now choosing to eat less meat and dairy, partly because of concerns about the environmental impact of meat production and partly for health reasons. Meat production not only requires many more resources than plant production, but it is also a major source of greenhouse gas emissions. As a result of growing consumer awareness, there has been a surge in demand for plant-based alternatives, such as vegan meat substitutes.

As consumers become more informed and conscious of their choices, it is likely that we will see a continued shift towards plant-based diets, locally sourced and organic foods, and sustainable and circular food systems.

Part of the climate change concerns are related to the transport of foods to the market. A growing group of consumers prefers locally produced foods and/or refrains from buying products that are transported by airplanes and have a large carbon footprint, such as many fresh fruits and vegetables. This is an opportunity for processed fruits and vegetables which are transported by ships instead of airplanes and therefore have a much smaller carbon footprint.

TIP: Inform your customer on the impact your product has on the environment and how your company contributes to tackling climate change. State concrete examples to inform consumers on the actions you take. These actions can for example be linked to reducing emissions, higher efficiency, or usage of environmentally friendly inputs.

1.3.4 Healthy processed foods

Consumers prefer unprocessed or minimal processed foods over highly processed foods.
Consumers are becoming increasingly interested in healthy foods, both processed and unprocessed. Particularly minimally processed fruits and vegetables, which still contain many of the nutrients after processing. To illustrate, gentle drying process at low temperatures preserve many nutrients in fruits. By measuring the nutrients, you can provide evidence to consumers that shows how your processing technology results in healthier products. It is however important to be aware of the EU's regulations on nutrition claims, as these can be strict and specific. Read more via the following Link.

TIP: Try to be selective in the processing technology you use, minimal processing can help cater to a new market and might create possibilities for health claims.

1.3.5 Preserved fruits and vegetables reduce food waste.

The market for dried fruits is expected to grow in the coming years, with consumers searching for healthier products and wanting to contribute to reduced food loss.

In line with sustainability, consumers are becoming more aware of reducing waste and food loss. In that, dried fruits can be a sustainable alternative to fresh fruits in reducing food waste. Unlike fresh fruits, which have a shorter shelf life and can quickly spoil, dried fruits have a longer shelf life and can be stored for extended periods without going bad. This makes it easier to manage and reduces the likelihood of them going to waste. Additionally, dried fruits are often made from surplus or imperfect fruits that may have otherwise been discarded, contributing to a more sustainable food system by utilizing more of the food we produce.

Another sustainable benefit of dried fruit compared to fresh is the reduction of CO2 emission in transport. According to FAO, banana contains 70% water and pineapple 80 to 85%. When reducing the water content of these fruits, transportation is much more efficient. As dried fruits take much less space and is much lighter than fresh fruit, fruit can be packed more efficiently. This means that shipping dried fruit is much more efficient compared to fresh, and thus emits much less CO2 per kg. Air freight is a common means of transport for fresh fruits, something that's not necessary for dried fruits, due to their longer shelf life. Transport by sea is much more environmentally friendly then airfreight, which gives dried fruit another sustainability benefit over fresh fruit.

TIP: When selling dried fruits, emphasize the sustainability benefits of dried fruits over fresh.

1.3.6 Plant based diet / alternative proteins.

Consumers are increasingly interested in alternative proteins and the meat replacements market has been growing for years in a row.

Meat replacements made from ingredients such as soy, peas, and jackfruit have gained significant popularity in recent years due to their nutritional benefits and potential to reduce the environmental impact of traditional meat production. According to a report by Research and Markets, the global meat substitutes market is projected to reach $7.5 billion by 2025, growing at a CAGR of 7.7% from 2020 to 2025.

Meat replacements respond to consumer concerns about the negative effects the meat industry has on the environment. According to the United Nations, livestock production is responsible for 14.5% of global greenhouse gas emissions. Meat replacements have the potential to significantly reduce this impact, with some studies suggesting that they could reduce greenhouse gas emissions by up to 90%. In response, a growing group consumers opts for a plant-based diet. Since most traditional European meals comprise of meat, many European consumers seek for meat replacement to enjoy their traditional meal, without the environmental impact. Supermarkets follow the consumers demand and have increased the amount of meat replacements. In the Netherlands, some supermarkets have doubled their offer in meat replacements in just a few years. McKinsey, a renowned management consulting firm, expects the market for meat alternatives to grow and foresees a stagnation in growth of the meat sector. This will especially take place in western Europe, where meat alternatives are widely available, and consumers are aware of the effects meat consumption has on the environment and animal welfare.

Soy-based meat replacements are the most well-known and widely available, with products like tofu and tempeh being used in a variety of dishes around the world. Pea protein is also gaining popularity, with companies like Beyond Meat and Impossible Foods using it as a primary ingredient in their plant-based meat products. Jackfruit, a tropical fruit that has a texture like pulled pork when cooked, has also become a popular meat replacement option in recent years.

Examples of companies that are providing vegetarian or plant based alternatives are The Vegetarian Butcher, The Herbivorous Butcher and Vivera.

Since vegetarian meat replacements will become more normalized, the demand for these ingredients will grow. Hence, it's expected that the market for products such as soy, peas and jackfruit will grow.

TIP: Respond to the demand for plant-based foods and show potential buyers your products can be used as meat replacements. You can showcase this by providing prototypes or recipes.

1.3.7 Packaging

In recent years, there have been several trends in the packaging of processed foods in Europe. This trend is pushed by the European Green deal, which tries to achieve climate neutrality by 2050 in the Union. The EU Green Deal on packaging has proposed a series of initiatives to reduce unnecessary packaging and waste. These initiatives will force suppliers to seek for more sustainable packaging materials, reduce the amount of packaging or work with recyclable packaging materials. Examples of recyclable materials are carton, tin, bioplastic, or biodegradable materials like cane. Another option for suppliers is to work with reusable packaging or a system of deposit. The latter is more challenging to organize as it requires more action from the buyer.

Another trend is the use of packaging that provides better protection for the food, thereby extending its shelf life and reducing food waste.

Additionally, there is a growing trend towards convenience and portability, with many consumers preferring smaller, single-serve packaging options that are easy to carry and consume on-the-go.

Finally, there is an increasing focus on the use of packaging to communicate information to consumers, such as nutritional content and allergen warnings, to help them make more informed purchasing decisions.

TIP: It is advised to discuss packaging with your buyers, especially considering increased shelf life, as an increased shelf life allows your product to be sold over a longer period and thus creating more opportunity to sales. Over time, more sustainable packaging materials will be obliged by the European Union, hence it is advised to research which rules apply to your products and start experimenting with them in an early stage.

1.3.8 Digitalisation of sustainable supply chain management

European buyers are demanding more information about the origin of the product. They want assurance that the product they buy is consistent in quality and meets traceability and transparency requirements. Buyers also want assurance that their product is ethically and sustainably sourced. Some companies, like Fair Chain, are forerunners on digitalisation and use blockchain technology to give consumers insight in their value chain. This technology provides greater transparency and accountability in the supply chain and helps to reduce the risk of food fraud and contamination.

As part of the EU Green Deal, the Corporate Sustainability Reporting Directive as discussed above, sets rules and regulations on transparency in the value chain. It is expected that European companies will increasingly ask from suppliers that they provide data related to sustainability. Digitalisation will be useful to manage these data including collection from farmers and transfer to the European buyers.

Examples of digital solutions for data collection and analysis include:

- KoBo Toolbox is a solution that can collect data both online and offline via smartphone, tablet, or web platform. It also allows for data collection by the user through a survey system.
- iFormBuilder by Zerion is a powerful data collection tool for agriculture. The system can easily be linked to other platforms or applications and is very customisable. Users can create lists, collect pictures, record GPS data and more.
- CommCare by Dimagi lets you build your own digital app with no need for IT support or coding expertise. It can be used to collect data, store information, and monitor the information you want. The tool also lets you send notifications to your field teams, guide them in collecting data and communicate any data errors.

TIP: By integrating digital tools in your business, you can provide buyers with a digital guarantee that you can meet their demands on sustainability, ethically sourced and fair pricing.

TIP: As part of the European Green Deal, more transparency in the value chain will be required. Using digital tools will help you provide a transparent insight. It is advised to start experimenting with this early in the process as this will give you more time to set up a working system, and it could help convince buyers they should buy your product.

2. The EU and Swiss market for Jackfruit

2.1 Trade

The consumption of exotic fruits like jackfruit is strongest in European countries whose consumers are making a transition towards vegan protein-rich diets. For imported exotics, the best opportunities for exporters can be found in Northern Europe, in countries like Germany, France, and the United Kingdom. Much of the European import is facilitated by the Netherlands and Germany due to their large import capacity.

However, the short-term opportunity may be limited because of inflation and reduced consumer confidence. This is because European consumers typically reduce consumption of higher-priced exotics during recessions and an uncertain economic outlook. Nevertheless, the long-term growth trajectory for consumption of exotics is positive.

Figure 1 represents the total import volume, in tonnes, of processed fruits and edible plants in the European market. Data for the import volume of processed jackfruit only could not be located. Despite this, the table below gives a good indication of the European demand for processed fruits. The UK no longer provides the EU with trade data, which is why there is no information from 2020 onwards.

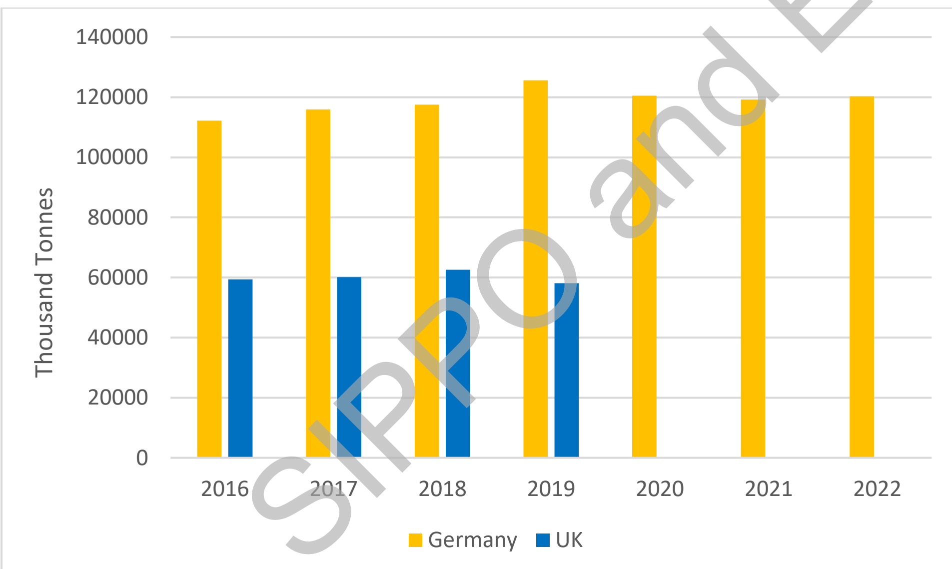

Figure 1 Total Imports of Fruits and Edible Plants, prepared or preserved, 2016-2022, in tonnes.

2.1.1 The Netherlands: Best entry market for niche exotics

Most of the exotic fruits traded on the European market are exported from producing countries directly to the Netherlands. Covering the period 2016-2022, the Netherlands imported an average of € 230 million worth of exotic fruits. Given the strong trade position of the Netherlands as a re-exporter, it is advised to explore business opportunities and potential importing partners in the Netherlands as an entry strategy. Some import companies that specialise in exotics in the Netherlands are Bud Holland, Unidex Holland, and Satori. Although exotic fruit consumption in the Netherlands is lower compared to Germany and the UK, you can still find a wide range of exotic products in Dutch supermarkets and speciality stores.

2.1.2 Germany and the UK: Top importers and changing consumer habits

The main consumption markets for jackfruit in the European Union are Germany and the UK. Figure 1 shows the total imports of processed fruits to Germany and the UK. As can be seen, there was a steady increase in the demand for processed exotics in Germany up until 2019, with a peak volume of 1.2 million tonnes. In the UK, the import volume for processed exotics is about half of Germany, with a peak of 63 thousand tonnes. Data is not available from 2020 onwards because the UK government no longer provides trade data to the European authorities. The slight decrease in the volume of exotics imported is attributed to the COVID-19 pandemic and the associated disruption to global supply chains.

Vegetarians comprise a major market for jackfruit products, which provide plant-based meat alternatives for this consumer group. Over the period 2014 to 2022, the number of vegetarians in Germany increased from 5.3 million to 7.9 million, now representing approximately 9% of the population.

In the UK, approximately 3 million people, or 4.5%, of the population are vegetarians and vegans. Traditionally, the United Kingdom is a receptive market for new fruit varieties because of the multi-ethnic consumer base and the exploration of new foods and flavours. However, the impact of BREXIT on trade relations is still uncertain, and this may hinder the export of high-value exotics to the UK.

Even though the percentage of vegetarians in both the UK and Germany are starting off from a low base, young consumers are making the transition towards meat-free diets. As a result, the number of vegetarians and demand for meat-free protein sources is expected to continue to rise in the long-term as inflation decelerates and consumer confidence in the economy improves. Nevertheless, strict requirements for food safety and high-quality produce will heavily impact the growth of jackfruit exports to both German and British markets. To improve chances of doing business in Europe, exporters can export processed jackfruit (dried or frozen) which eliminates the perishability aspect of fresh jackfruit. However, the strict requirements for food safety and high-quality products will hinder the growth of jackfruit exports to both German and British markets.

A sales manager at Biona shared that their jackfruit imported from Sri Lanka are ''prepared, labelled and canned at source for local income generation and shorter supply chains''. Given the novelty of jackfruit amongst European consumers, processing jackfruit allows consumers, restaurants, and manufacturers to adapt jackfruit to consumer preferences.

2.2 Consumption

The market for plant-based proteins was valued at €14.5 billion in 2020 and is set to increase to €31.4 billion by 2026. This translates into a compound annual growth rate of 14% over this 5-year period. Although demand for jackfruit is not comparable to other vegan products like tofu, jackfruit is becoming increasingly popular in Europe due to its versatility, unique flavour, and its ability to serve as a meat substitute for vegetarian and vegan diets. Additionally, fish replacement options are also becoming more widespread in Europe, for example plant-based fish steaks and vegan tuna.

In recent years, unripe (young) jackfruit has overtaken ripe jackfruit in terms of demand in European markets because of its higher protein content relative to normal jackfruit. The flesh of jackfruit has a texture like pulled pork or chicken, which makes it a versatile ingredient in European kitchens. In general, European consumers purchase jackfruit in supermarkets, where it is sold in brine and tinned. It is important to note that jackfruit's protein percentage is not substantial enough for many consumers to constitute a full protein-rich meal. This is why consumers are combining jackfruit with other high-protein meat alternatives, such as beans and lentils to increase their daily protein intake. As European consumer's interest in global cuisines increases, and jackfruit is a popular ingredient in Asian dishes, consumers are increasingly seeking out ethnic flavours and incorporating them into their meals – examples of which are Sri Lankan young jackfruit curries, hot and sour jackfruit stir-fry, vegan smoked paprika jackfruit tacos, and pulled jackfruit coconut stews. An increasing trend in Europe is the involvement of food companies, who are experimenting with ready-to-eat vegan products, such as plant-based sausages, meatballs, and burger patties. Consumers who want to experiment with jackfruit or are looking for a quick and simple meal, ready-to-eat jackfruit products are causing an increase in demand.

In addition to using jackfruit as a meat substitute, jackfruit is incorporated in a range of other food products, such as snacks, jams, and baking. As consumers look for more natural ways to replenish their bodies and fight health issues, jackfruit flour is becoming popular in Europe as a food supplement. The fibre in jackfruit flour can help promote regular bowel movement and prevents constipation. Furthermore, jackfruit flour has a low glycaemic index, which means it can regulate blood sugar levels and prevent sudden increases in insulin. Demand for natural ingredients that combat infections and diseases has gained importance in Europe over the last years, and jackfruit is a natural source of vitamin C, which helps boost the immune system and thus protects the body from infections. Lastly, with the increase in demand for gluten-free products, jackfruit producers can market their products as naturally gluten-free which make them suitable for replacing wheat, barley, rye and other grains and flours that contain gluten.

2.2.1 Vegans in the UK drive jackfruit imports

In terms of sales of vegetarian foods, drink, and plant-based meat alternatives, the market in the UK reached € 1.1 billion in 2021, with the average yearly value of jackfruit imports standing at € 107 million between 2016 and 2021. Even though the UK is no longer a member of the European Union, and implications for trade still uncertain, it is still a key export market for jackfruit for several different reasons. Most important of which is the ever-growing transition towards vegetarian and vegan diets, as consumers are being more selective with the foods they consume, due to sustainability issues, animal welfare concerns, and climate change. In the UK alone, there are approximately 1.4 million vegans and the demand for high-protein meat free products is only expected to increase as sustainability issues and climate change become more pronounced.

A poll conducted by YouGov in the UK revealed a growth in the number of British consumers experimenting with vegetarian and vegan lifestyle. According to the study, 21% of adults in the UK added vegan lifestyle choices to their everyday life and a further 12% are considering adding vegan principles to their future habits. The outlook for 2023 suggests that a further 8.6 million British citizens plan to go meat-free in 2023, which translates into 16 million meat-free citizens at the beginning of 2023. Moreover, the rate of veganism among different demographic groups is also something to pay close attention to. In the UK, the younger generation is significantly more likely to follow a meat-free diet, with 43% of Gen-Z planning to cut meat out from their diets in 2023. This is because the younger generation is much more attuned to the impacts of climate change, CO2 footprint and a lack of sustainability in global supply chains.

Interestingly, there is also a clear difference between the choices of men and women when it comes to meat-free consumption. In the UK, there are currently 16% less men than women who don't consume meat. However, a recent study found that 319% more men than women are planning to go vegan this year. This can be attributed to the rapidly growing availability of innovative meat-free protein foods entering global markets. As men tend to place more value on consuming high-protein products, having a greater choice of protein-rich vegan products is going to increase demand for products like jackfruit amongst men. Furthermore, 'Veganuary' has become a permanent trend in the UK, with over 620,000 people officially signing up to the challenge of avoiding meat in January 2023.

Aside from demographic factors, the UK is a multicultural and multi-ethnic society. The Asian population with the UK currently stands as 1.6 million people, and this is only expected to grow exponentially. Supermarkets like Sainsburys and Waitrose, as well as small businesses need to accommodate for the needs of the large group of Asian consumers and the increasing number of people choosing to adopt vegetarian and vegan diets. Consequently, demand for exotic products like jackfruit or papaya has grown in recent years and consumers are more willing to experiment with new flavours for their pantry.

However, it is not only households that are changing their consumer habits. Particularly since the COVID-19 pandemic, fast food chains and restaurants have had to adapt to the increase in demand for vegan products. Established fast-food chains like Burger King and McDonald's have had to revamp their menus to cater to the demands of vegan consumers and are increasingly experimenting with vegan burger patties and vegan cheese. Other fast-food chains have found a niche in the market, whereby they serve meals centred around one main ingredient, for example Biff's Jack Shack in London. Typically, vegetarian, and vegan consumers are prepared to pay more for vegetarian fast-food meals, and some companies have taken used this niche effectively.

2.2.2 German consumers look for meat alternatives such as jackfruit

In Germany, the average yearly value of jackfruit imported was € 283 million covering 2015 to 2021. It is interesting to note that Germany increased its import volume of exotic processed fruits from developing countries during the COVID-19 pandemic. Figure 2 above shows exhibits the increase in import volume from developing countries into Germany, increasing from 24 thousand tonnes in 2019 to 28 thousand tonnes by 2022. Like the UK, consumers in Germany are transitioning to meat-free diets. In 2021, Germany consumed less meat than ever before over the last 30 years. This reduction in meat consumption is partly attributed to an increase in the awareness of the negative impacts of meat consumption on people, the planet, and plants.

In Germany, reports suggest that consumers are reducing meat consumption for several varied reasons. These are connected to wanting to contribute to sustainability efforts, increased awareness of animal welfare and personal health. The value of non-meat protein-rich products rose by 22.2%, or € 458.2 million in 2021. As the market expands, so does the number of businesses producing meat substitutes, and this increased from 34 in 2019 to 44 in 2021. According to the German Federal Statistical Office, the production of meat substitutes increased by 17% in 2021. This represents an increase of 62.2% compared to 2019. Consumers in the German economy are making the transition to more environmentally friendly products, and the consumption of high protein non-meat goods like tofu, plant-based burger patties, and vegetarian spreads are becoming the new normal. The market for these products is growing, and the price that consumers are willing to pay is oftentimes as high, or higher, than meat products.

Another important reason for the decline in meat consumption is shifting demographic trends. Although 1 in 2 German citizens are over the age of 45, older people tend to consume less food, of which meat usually accounts for a substantial proportion of caloric intake. Studies conducted by the Federal Ministry for Agriculture and Food (BMEL) show that German citizens aged over 60 tend to consume more fruit and vegetables than average. Like the UK, the younger generation of Germans are more politically aware and critical of animal products and companies who directly deal with animal produce. According to the Meat Atlas, the number of vegetarians and vegans is highest among 15–29-year-olds, and this is expected to increase soon. Young German citizens are much more open towards the variety of plant-based alternatives to conventional meat and milk products.

Despite this trend towards increased meat-free alternatives, the market for meat in Germany is enormous. In 2021, the value of meat products in Germany stood at € 35.6 billion, which is approximately 80 times the size of the plant-based industry. However, large organic retail stores in Germany are beginning to include jackfruit-based products on their shelves. DM, Germany's largest drug store now has a selection of jackfruit products in their product portfolio, including tinned jackfruit, smoked jackfruit, jackfruit burger patties, and jackfruit-based sausages. Like the trend in the UK, there are several vegetarian food trucks and restaurants opening across Germany, and in multi-cultural cities such as Berlin and Hamburg, competition is strong. This is why fast-food restaurants like McDonald's and Burger King have revamped their menus over the last 4 years to include vegan options, like 'plant-based nuggets' and vegan burgers.

2.3 Trade Structure and Distribution Channels

2.3.1 Retail

On retail level, the jackfruit market is split across physical supermarkets, online channels of supermarkets, physical speciality stores and online speciality stores. The supermarket segment accounts for the largest share, which is due to their size and consumer reach. The e-commerce segment is expected to expand as consumers explore new foods and increase the share of shopping they do online.

As jackfruit first became available on European markets, processed jackfruit consisted of pure jackfruit pieces in cans for retail. Retailers purchase jackfruit mostly through specialised processed fruit importers, such as Exotic Fruits and Special Fruit. These importers can respond to the small orders of many retailers which need small, but frequent volumes with short lead times. From their warehouses, these importers can efficiently break the imported bulk into smaller volumes and re-pack or label the products according to specific requirements of retailers. Another major reason for retailers to purchase from specialised importers is that these importers often offer a one-stop-shop or at least a wide range of products, which is convenient for retailers, as they can then purchase multiple products from the same supplier. Finally, many retailers do not have capacity to assess suppliers and deal with the administration and international logistics for direct imports from countries outside Europe. They rely on importers with experience and a good reputation to source products from countries such as Sri Lanka.

Cash and carry offer good options for small retailers to purchase retail-packed products in bulk at cheaper prices, and many businesses in the UK, such as speciality food shops buy exotic fruits in this way. Often, jackfruit is minimally processed and canned, dried, or frozen jackfruit products are sold onto retailers and restaurants as a ready-to-cook (RTC) or ready-to-eat (RTE) product. The main importers of minimally processed jackfruit are Otto Frank Imports, HANOS, Bidfood, VHC Jongens, Sigro, VERS TRADE, and Zegro.

The best time to supply jackfruit and other exotic fruits to the European market is during holiday seasons, such as Easter, Christmas, and Ramadan, where consumers often have more money to spend on exotic products.

Important to note is that the demand for exotic fruits decreases significantly during the European summer, July, and August. This is because there is a high local supply of superior quality fruit in Europe, meaning that the demand for exotic imports reduces dramatically. Therefore, it is critical for producers to remain informed, and follow the market to know when to supply their product and adjust production volume to match the fluctuations in European market demand.

2.3.2 Food industry

With the development of products that consist of jackfruit as an ingredient, the uptake and visibility of jackfruit in the European market increased. The development of the European jackfruit industry has been facilitated by food manufacturers and food formulators. Development of innovative jackfruit products enables new products like jackfruit to enter the mainstream market. Although jackfruit is a new product in European markets, EU food manufacturers have already launched a wide range of different value-added products centred around jackfruit. These value-added jackfruit products include jams, juices, variations of vegan meat dishes, and flour.

Given the stable role of EU food manufacturers, Sri Lankan jackfruit companies who manufacture their own final products may find it challenging to compete directly with European food manufacturers. It is recommended that Sri Lankan companies first understand what drives consumers to purchase meat-free products, how to market their products successfully, and if it is possible to collaborate directly with retailers or food manufacturers to tailor their products to the requests of buyers.

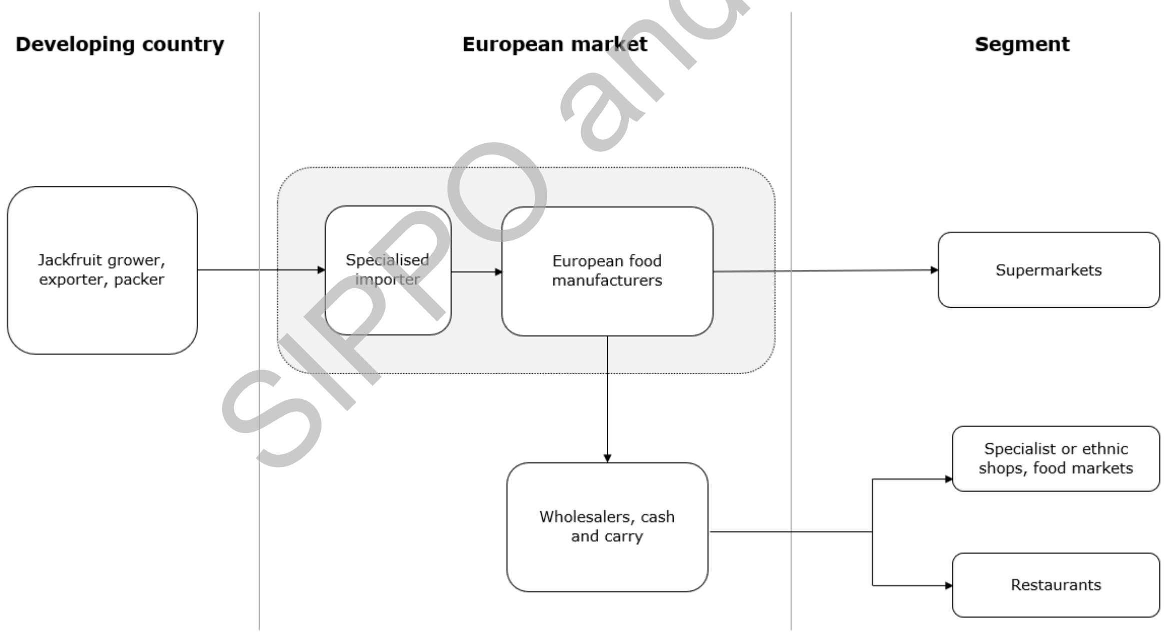

Figure 2 Distribution channel for jackfruit, from farm to fork

2.4 Price and Quality

The supermarket segment of jackfruit products comprises of minimally processed canned products that can be used per consumer preference. The quality of jackfruit products found in supermarkets vary, from high-end supermarkets that focus on consumers who purchase sustainable, high-quality jackfruit, to low-end supermarkets whose consumer base often shop on a budget. Examples of low-end supermarkets in the UK are ASDA, Tesco, and Morrisons. Conversely, high-end supermarkets in the UK are Waitrose and M&S. In Germany, the split is similar, and budget-conscious consumers shop at Netto, ALDI, and LIDL, whereas those willing to spend more shop at EDEKA and REWE.

At the low-end segment of the market, canned products and ready-to-eat meals are the dominant value-added jackfruit products. The opportunities below showcase some of the jackfruit products available in supermarkets, but not limited to these as there are other options such as ready-to-eat pizzas and curries. As can be seen, supermarkets are promoting vegan products as a 'plant revolution' to cater to the demands of consumers who are shifting their purchasing habits.

	Product	Picture	Retail Price (€/kg)
Low-end	ASDA, Tropical Sun Jackfruit in Water (400-gram can)		3,25
	Morrisons, Plant Revolution Shredded Jackfruit in Water (400-gram can)		3,75
	ALDI, Plant Menu Smoky Jackfruit Chilli (400-gram meal)		4,98

Figure 3 Table of prices for low-end jackfruit products

At the high-end segment of the market, jackfruit products comprise ready-to-eat products, such as dried jackfruit, burger patties, and frozen jackfruit. The examples below show the opportunity for exporters to market niche product that have been processed. The high-end section of the market places a key focus on sustainable sourcing, clean labelling (which involves avoiding the use of complex and unfamiliar terms, artificial ingredients, and additives which may be considered harmful to consumers), and packaging, and top-quality tasting products. European companies are experimenting with various processed jackfruit goods to understand better what consumers want. As a result, speciality shops and retailers are experimenting with a range of ready-to-eat meals to introduce to jackfruit to consumers unaware of its applications and taste.

	Product	Picture	Retail Price (€/kg)
High-end	Pinati, Bio Jackfruit Dried (500-gram pack)		25,90
	Nu3, Bio Jackfruit Burger (540-gram pack)		23,13
	Waitrose, Biona Jackfruit Sweet and Smoky (400-gram can)		8,75

Figure 4 Table of prices for high-end jackfruit products

Whether producers are targeting low-end or high-end markets, the parameters for quality that buyers are interested is the same. Typically, jackfruit is described as sweet and fruity. But the exact taste of jackfruit depends on its ripeness. When unripe, jackfruit has a more neutral and starchy texture. As it ripens, it becomes sweeter and softer. In general, buyers look for jackfruit that is free from additives, preservatives and artificial colours and flavours. If the jackfruit is processed, it is important that the fruit retains its natural flavour, aroma, and texture – and this should be consistent across all batches exported.

If you are supplying canned jackfruit products, you will need to ensure that you monitor the BRIX level and the PH value. The BRIX value can be used as an indicator of the ripeness and quality of jackfruit, as well as its sweetness. The PH value is a measure of the acidity or alkalinity of the jackfruit. PH values have a significant impact on food's safety, taste, texture, and shelf life. If supplying dehydrated jackfruit, you need to monitor the moisture content and the water activity level. Usually, the moisture content of dried jackfruit will be below 12%. Excessive moisture can lead to spoilage and reduced shelf life of jackfruit products.

In all cases, processed jackfruit should be properly packaged in clean, sturdy, and properly labelled packaging. At BIOFACH 2023, the general observation from most importers of processed jackfruit was that the most demanded form of jackfruit on the European market is vacuum sealed jackfruit in plastic packaging. This is sold onto restaurants across Europe, but particularly London where the jackfruit is used in food preparation, decoration, and experimentation.

2.5 Opportunities

With the increase in demand for plant-based foods in Europe, jackfruit is gradually becoming a popular ingredient as vegetarians and vegans look for meatless high-protein sources. European consumers are exploring new foods and importers are expanding their supply of products to reduce dependence on traditional imports. Given that jackfruit is a tropical fruit which cannot grow in Europe, its import and sale in European markets presents an opportunity for businesses to expand their portfolio of processed fruits and vegetables. Furthermore, as consumers place a greater importance on sustainable sourcing, jackfruit can benefit because it is a crop that requires less water and pesticides compared to other traditional crops. Jackfruit fits the trend of sustainable and healthy foods, and is high in fibre, vitamins, and minerals. As consumer preference shifts, producers of jackfruit can benefit from increased demand.

Given the versatility of jackfruit, it can be used to prepare savoury and sweet final products. In addition to burger patties, dried and canned jackfruit, jackfruit can be used in the preparation of pickles, jams, fruit juices, sweets, and chips. The University of Agricultural Science carried out research and development work on jackfruit to identify innovative applications of the fruit in the food industry. This yielded the result of the following new jackfruit product options: tender jackfruit for vegetables, jackfruit bulb flour, jackfruit seed flour, jackfruit peda (a type of Indian sweet that is made with jackfruit pulp, milk, sugar, and cardamom powder), ice-cream, and jackfruit shrikand (a popular Indian dessert made with jackfruit pulp, strained yogurt - known as hung curd or Greek yogurt - sugar, and cardamom powder). Further to this, a popular application of jackfruit in the Netherlands is jackfruit bitterballen. The seeds of jackfruit can also be roasted, boiled, or cooked for direct consumption or storage, as well as for making cookies or ripe jackfruit cake.

To improve your chances of success in European markets, suppliers must show potential buyers how jackfruit can be used. This can be incorporated into promotion material, where you highlight recipes involving. Alternatively, exporters can bring jackfruit prototypes to European trade fairs to get buyers interested in jackfruit as an effective meat-alternative. In the retail sector particularly, exotic fruits have always been consistent, and retailers import and sell exotic fruits to differentiate themselves and make their assortments more attractive to buyers.

However, one of the most critical factors impacting the demand for products like jackfruit is taste. Biona, an importer and distributor of processed jackfruit in the UK, explained that consumers are still unaware of the applications of jackfruit and its taste profile. For this reason, it is critical that producers always ensure premium quality because first-time buyers will want to taste a product that is delicious and unique. This includes correct packaging and preventative measures to conserve the quality of fruits for the longest duration possible. If this is not done, producers and exporters can be criticised in the media, which may impact the consumer demand and competitiveness of jackfruit products.

3. The European and Swiss market for Virgin Coconut Oil

3.1 Trade

Over the last 15 years, the European market for virgin coconut oil (VCO) has grown significantly. Demand for VCO has grown tremendously, and the market valuation has risen from € 690 million in 2016 to € 1.28 billion in 2022. For producers of VCO, the best opportunities in European markets can be found in the Netherlands, Germany, Italy, and the United Kingdom. Much of the European import is facilitated by the Netherlands and Germany due to their large ports and import capacities.

However, the short-term opportunity for VCO may be limited because of inflation, supply chain disruptions and low consumer confidence. At the BIOFACH trade fair for organic products in 2023, many exporters of VCO shared that the demand for VCO has stagnated over the last 3 years. European consumers reduce spending on unique, quality, and higher-priced products when confidence in the economy is low. Nevertheless, the long-term growth trajectory of VCO consumption in Europe is strong, and this is driven by a combination of the growing awareness of the health benefits of VCO, increased consumer spending on functional food, and the growing application of VCO in food, cosmetics, and pharmaceuticals.

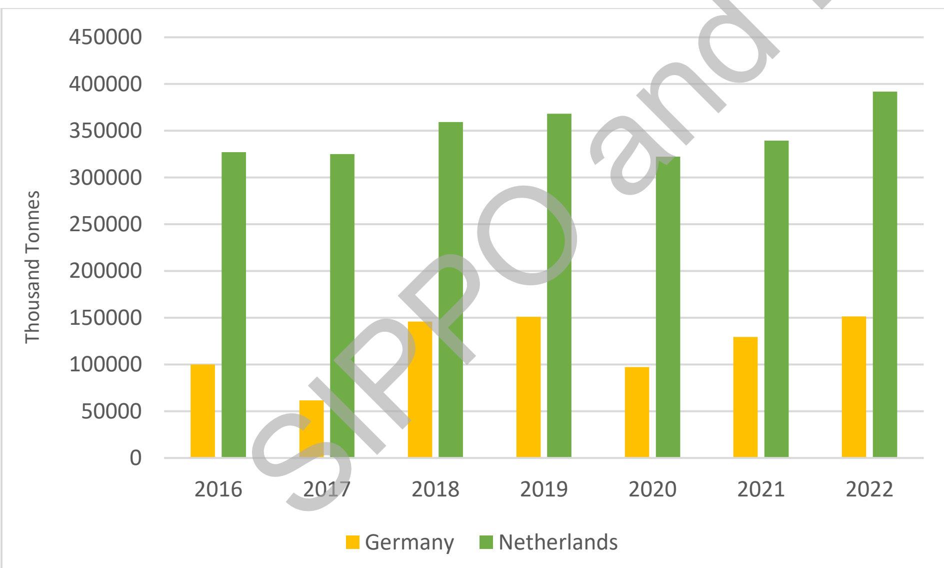

Figure 5 Total Imports of crude coconut oil, including VCO, 2016-2022

3.1.1 The Netherlands: Best entry market for virgin coconut oil

Since 2013, European imports and sales of VCO have grown at a significant pace. However, initial attention surrounding VCO has stagnated, and there has been a lower, but more stable demand for VCO since 2016.

Most of the VCO traded on the European market are imported from Asian countries directly to Dutch ports. Covering the period 2016-2022, the Netherlands imported an average of € 404 million worth of crude coconut oil including VCO. As shown in Figure 1, there has been a sustained demand for crude coconut oil into the Netherlands from 2016 to 2022. On average, Dutch companies have imported 3.6 million tonnes of crude coconut oil into the European market. Most of the crude coconut oil imported to the Netherlands comes from developing countries, such as Indonesia, the Philippines and Sri Lanka. Despite the reduction in imports at the onset of the COVID-19 pandemic, crude coconut oil exports to the EU recovered rapidly and started to increase in 2021, reaching a peak export volume of 3.9 million tonnes in 2022.

Given the strong trade position of the Netherlands as a re-exporter, it is advised to explore business opportunities in the Netherlands as an entry strategy to European markets. Some import companies that specialise in plant-based oils in the Netherlands are Tradin Organic, Do It BV and Cargill. As a general consideration, the Netherlands will continue to remain a strategic partner as it imports, adds value and re-exports coconut-based products throughout the EU and abroad.

3.1.2 Germany: Large importer and shifting consumer demand for virgin coconut oil

The second biggest market for VCO in Europe is Germany. Figure 1 shows the total import volume of crude coconut oil to Germany between the period 2016 and 2022. On average, Germany imported € 152 million worth of crude coconut oil from 2016 to 2022.This translates to an average annual volume of 119 million tonnes. Despite an initial drop in demand at the onset of the COVID-19 pandemic, the demand amongst German consumers rebounded in 2020 and reached a peak in 2022, at 151 million tonnes. Approximately 85% of these imports came from developing countries such as the Philippines, Indonesia, India, Sri Lanka, and Vietnam.

The German market for VCO has grown significantly over the last 10 years. One of the main factors impacting the increase in demand for VCO and other plant-oils is increasing consumer awareness of the negative environmental impact of palm oil. According to a survey conducted by the German Federal Ministry of Food and Agriculture in 2021, 65% of German consumers consider sustainable sourcing to be important when making their everyday food choices. Additionally, a survey conducted by market researchers GfK in 2021 also found that 60% of German consumers are willing to pay more for products that are produced sustainably, with benefits for the environment and society. Consequently, both European food companies and cosmetics manufacturers are shifting their sourcing strategies to include more sustainable partners.

3.2 Consumption

3.2.1 Consumers seeking healthy products drives the uptake of VCO

The global market for VCO is expected to steadily increase in the coming decade, from € 2.11 billion in 2020, to a projected value of € 3.69 billion in 2028. In the 2010s, many consumers and health enthusiast supported the use of VCO because of its benefit for weight loss, heart health, and brain function. Furthermore, consumers enjoy using VCO because of its versatility in cooking, and its application in cosmetics product. Despite this, the market for VCO in Europe is still minor compared to the American and Asian markets.

Compared to traditional oils, VCO contains higher levels of lauric acid and no trans-fatty acids. Foods with high levels of trans-fatty acids are bad for human health because they raise the level of low-density lipoprotein (LDL) cholesterol in the blood, which can increase the risk of heart disease, stroke, diabetes, and arthritis. As VCO contains no trans-fatty acids, it is a considered a healthier ingredient for cooking. As consumers begin to better understand the applications of VCO, it is being used for a variety of different purposes, including in cooking, baking, personal care, and medicinal care.

Nonetheless, it is important to note that many health professionals began to question the positive impact of coconut oils on health in the early 2010s. VCO is one of the richest sources of saturated fat, with about 90% of its fatty acids being saturated. However, not all saturated fats are created equal, and VCO contains medium-chain triglycerides (MCTs) which are shorter in length than long-chain saturated fats found in many animal products. MCTs are metabolized differently, are less likely to be stored as body fat, and are a quick source of energy for the body.

In cooking, VCO has a high smoke-point, which makes it suitable for high-heat cooking and can therefore be used as a direct substitute for any other oils or butters. European consumers are experimenting with new ingredients in the kitchen, and as the interest in global cuisines and ethnic flavours increases, many are incorporating VCO into their meals – examples of the applications of VCO in Europe are coconut oil vegan banana pancakes with blueberries and pecans, roasting vegetables (which gives a unique flavour), nut and honey coconut granola, adding to smoothies which gives a creamy boost, an ingredient in health snacks, and as a substitute for butter or vegetable oils in popcorn. These are just a few of the applications of VCO, and European companies are now marketing VCO as a superfood, using words like 'immunity boosting, improved gut health, versatility, ethical sourcing' to appeal to consumers looking for natural and healthy food options.

The COVID-19 pandemic hindered the expansion of the VCO industry, caused disruptions in supply chains and lowered production of VCO in the major exporting countries. The lower production of coconut oil and its derivatives led to a 39% increase in coconut oil and VCO prices in 2020 compared to 2019. Nevertheless, the global market is gradually overcoming this as trade barriers are dismantled, supply chains become more stable, and consumer confidence in the economy improves. The demand for healthy food products is gradually set to increase again, as consumers become more interested in natural food products that are good for their bodies.

3.2.2 Sustainable sourcing and ethical farming drives shifting consumer habits for edible oils

In recent years, the sustainability and ecological impact of coconut oil was called into questions, and some coconut il producers were accused of engaging in unsustainable and unethical harvesting practices. As a result, consumers began to demand greater transparency and sustainability in the coconut oil industry.

This trend led to a shift in the way that coconut producers engaged with the farming communities. According to a survey conducted by the Rainforest Alliance, 70% of European consumers are prepared to pay more for products that contain sustainable palm and coconut oil. On the ground, the Rainforest Alliance has certified over 13,000 hectares of coconut farms in the Philippines, which yielded production volume of 35,000 tonnes of certified sustainable coconut oil. The action taken by the Rainforest Alliance shows the value that European consumers are placing on sustainably cultivated coconut oil.

Particularly in Germany, consumers consider the social impact of coconut oil production, most commonly in terms of labour rights, fair trade practices, and gender equality. European consumers who shop for sustainable products are increasingly selecting products that are fairtrade certified. Some standards for fairtrade are Fairtrade International, Fair for Life, Rainforest Alliance, and UTZ. These certifications validate that workers are treated fairly, and that the production process of coconut-based oils is socially responsible. The shift in consumer attitudes has also had an impact on retailer's sourcing of coconut oils. Some German retailers such as ALDI and LIDL have committed to sourcing only sustainably produced coconut oil for their private label products.

However, it should be noted that coconut oil is not as widely consumed in Europe in comparison to Asian countries and America. Therefore, the current demand for sustainable coconut oil is still relatively minor compared to other types of cheaper, more common, edible oils.

3.3 Trade Structure and Distribution Channels

VCO for edible consumption has three defined market segments, which are split across the consumer market, the food industry, and the cosmetics industry. In the consumer market, VCO is packed for direct consumption, and European consumers use VCO as a cooking oil or butter. As VCO entered the European market, it was initially available through health shops, such as Holland & Barrett. Now, most mainstream supermarkets in Western and Northern Europe have VCO in their assortment. Although the war in Ukraine caused an increase in price of traditional oils like sunflower oil and rapeseed oil, the average price of virgin coconut oil is still three times the price of both sunflower and rapeseed oil.

In the food industry, VCO is used as an ingredient in health snacks, food supplements, and smoothies. In cosmetics, VCO is being advertised as a vegan, high-quality natural ingredient with a multitude of applications, including anti-ageing creams, make-up removers, luxury soaps, and lip cream.

The main point of entry for coconut oil into Europe is via large importing companies, examples of these in the Netherlands and Germany are Wilmar International and ADM. Given that VCO is a speciality oil, it is traded in much smaller volumes than commodities like olive oil, sunflower oil, and conventional coconut oil. The speciality traders, such as Bio Planète and Cocofina, usually have strong relationships with buyers and processors in the end-market, and may refine and bottle the products for retailers and restaurants.

If you can build a long-term relationship with your buyer in the end market, it can yield fruitful results. Together, you can experiment with value-added products that integrate the natural properties of VCO. However, it may prove challenging for exporters to collaborate with stakeholders in the end market for several different reasons.

Firstly, large importers and speciality traders are better positioned to determine consumer expectation for brand development and can adjust their product offer accordingly. To give a few examples, it may be that some buyers want the VCO to be refined or have a specific request for packaging or branding. European importers usually have the capacity and facilities to respond to these requests. Secondly, the vicinity of European importers to their end markets means they are better positioned to respond to sudden shocks in the market. If a buyer requires a small amount of VCO as soon as they can get it, the importer is able to more cost-efficiently break the bulk and fulfil orders from their local warehouse just-in-time. For exporters, this is not possible unless they have a warehouse in Europe from which they can distribute their products. Lastly, if a poor-quality batch of VCO enters European markets, the responsibility for this will be traced back to the exporter and producer.

Without an import partner in Europe, exporters will have to collaborate with a company in Europe who can legally represent them. This can be expensive.

Independent of these non-tariff barriers, producers of VCO must comply with the strict quality requirements and guarantee the authenticity of their product if they want to successfully export their ingredient to European markets.

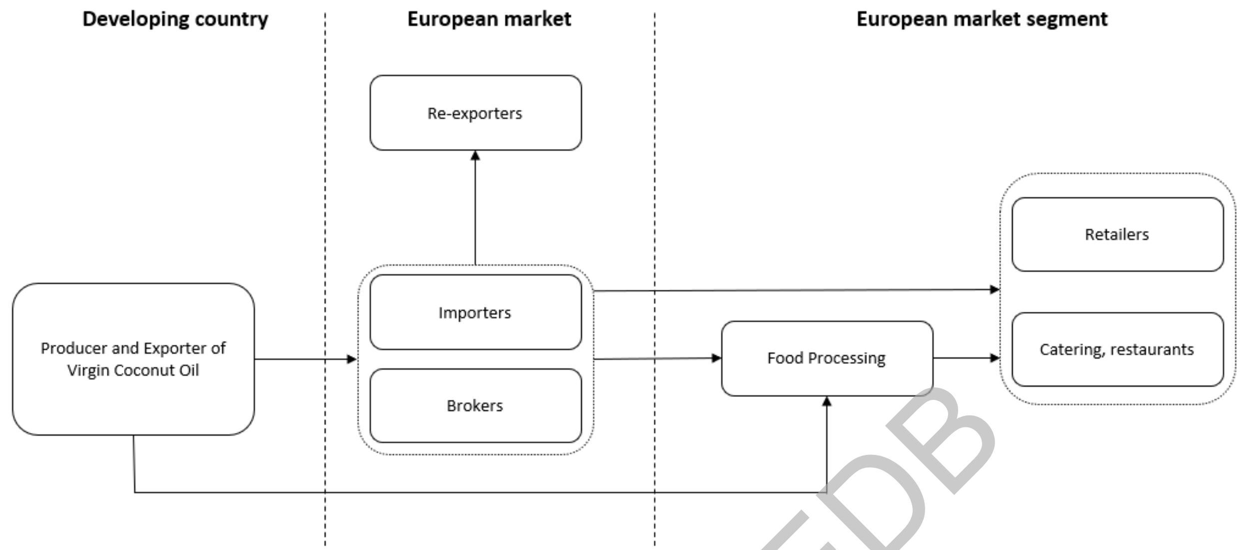

Figure 6 Distribution channel for VCO, from farm to market

3.4 Price and Quality

In 2020, the European VCO market was valued at approximately € 41 million, and is expected to grow at a compound annual growth rate of 8.5% between 2021 to 2026. The retail prices for VCO in the German and Dutch markets are specified below. In general, VCO is regarded a niche, high-value product, and the majority of the VCO on the European market is high in price compared to conventional edible oils.

The prices per kg for high-end non-value added VCO range from € 9.96 to € 17.23. In general, the price of VCO has been volatile in recent years due to supply chain shocks and inflation. It is important to note that prices are not fixed at the examples given below. The price of VCO depends on quality, and the market demand.

Some of the factors used to determine the quality of VCO are listed, and they include appearance, taste and smell, and price. High quality coconut oil should be a snow white in colour when it is solid, and water clear when liquid. If there are any hues of grey-yellow, it is classified as a lower quality coconut oil. Furthermore, high quality VCO should always retain a distinct aroma and taste – if this isn't the case, then the oil has been refined. Thirdly, the best VCO do not gave a strong roasted, smoky taste or smell. It should have a very mild coconut aroma and flavour. Some European consumers prefer VCO that has been roasted, but this is often accompanied by an undesired smoky smell. Lastly, a high quality VCO will usually be more expensive.

VCO is sold as an organic product. Examples of supermarkets in Germany where you can find VCO products are EDEKA, Ebl-Naturkost, and Alnatura. In the Netherlands, you can find VCO at supermarkets such as Albert Heijn and Ekoplaza.

	Product	Picture	Retail price (€/kg)

High-end	ALDI, Schneekoppe Native Coconut Oil (250-ml jar)		9.96
	Albert Heijn, Lois Harmony Bio VCO, Extra Virgin (220-gram jar)		17.23
	Narayana Verlag, Bio VCO from Unimedica (1000-ml jar)		12.90

Figure 7 Raw VCO options in European supermarkets/high-end stores

At the value-added segment of the market, VCO is processed into innovative products to target a specific set of consumers. Consumers are demanding organic, vegan, natural products, and the examples in Figure 4 show some of the opportunities available for exporters, who can collaborate with buyers to create niche products that consumers are willing to pay for.

	Product	Picture	Retail price (€/kg)
Value-addi-tion	Hail Merry, Dark Chocolate Cups, Almond Butter (43-gram pack)		68.18

	Thunderbird, Chocolate Bar Variety Pack (6-bars, 288-gram box)		47.91
	Zooplus, Bio VCO for Animals (500-ml jar)		18.58

Figure 8 Value-added products containing VCO

3.5 Opportunities

The market for VCO is expected to expand from € 2.1 billion in 2016 to € 4.2 billion in 2024, and the industry is expected to grow at an average of 10% throughout the period 2020-2027. As the demand for high-quality, sustainably sourced products increases in Europe, VCO can become a popular ingredient for consumers looking for healthier alternatives to conventional coconut oil, or other traditionally used oils such as sunflower oil and rapeseed oil. European consumers are exploring new foods, and importers of raw materials are expanding their supply of products to cater to consumer demand and reduce their dependence on traditional imports.

For this reason, the Sustainable Coconut and Coconut Oil Roundtable has been established to promote the sustainability, growth and quality of coconut products. This organisation is made up of key European companies, such as AAK and Nestle, who are leading efforts to a responsible and resilient coconut sector that drives positive impact for farmers' livelihoods, the climate, and the environment.

The versatility of VCO makes it an interesting product for many different buyers in Europe, and its high quality and exclusivity means that producers of VCO can charge premium prices compared to other vegetable oils. VCO can be used as a spread, as a substitute for cooking oils, as a food supplement, a food ingredient and now increasingly in the cosmetics industry. However, the ability to charge premium prices for VCO is dependent on the general economic outlook in target markets. If consumer confidence in the economy is low, spending on premium, high-priced products will fall as consumers look for cheaper products. Notwithstanding, the EU has favourable trade policies with South-East Asian economies, which makes exporting natural products from Indonesia, Sri Lanka, and the Philippines easier.

As technology advances, new opportunities for using VCO arise. Many pharmaceutical companies are now experimenting with VCO as an alternative to refined coconut oil, as it remains in its crude state without undergoing any adulterating procedures. VCO has been incorporated into anti-HIV/AIDS drug for the treatment of

Alzheimer’s disease and anti-cancer therapy. The reason behind its use in pharmaceutical products is due to scientific studies that confirm VCO’s antimicrobial and anti-inflammatory properties. Further to this, VCO is being used by patients who are diabetic, as it supports with efficiently reducing blood sugar. It is expected that demand for VCO will surge as new applications are discovered.

Food blogs and influencers can increase the visibility of VCO and motivate consumers and other food professionals to experiment with new natural ingredients. Although VCO was initially available only in health shops, its expansion into retail stores and supermarkets shows the increasing demand amongst everyday consumers for new products. Product diversification of VCO and developments of value-added products will be critical for the expansion of the VCO industry. To do this, it is advised to build relationships with European importers, who can support you to provide a demanded product to market.

4. The European and Swiss market for dried banana

4.1 Trade

Imports of dried banana have seen an increase in the European market in the period 2017-2021. In 2021, the import experienced a steep decline in volume. The United nations' Food and Agriculture Organisation's (FAO) Banana market review 2021 gives multiple reasons for a decline in the global supply of fresh banana, which likely affect the supply of dried banana too.

- Difficulties stemming from higher costs for inputs such as fertilizers as well as for packaging materials
- Shortages in refrigerated containers alongside substantial rises in global transportation costs
- Production shortages caused by adverse weather conditions
- Concerns surrounding the spread of plant diseases and particularly Tropical Race 4[1]
- More stringent limitations on maximum residue levels in some major markets
- Slightly lower import demand in several import markets

Prior to the 2021 dip, the import of dried banana experienced a steady growth for several years, due to large availability and low pricing, according to FAO's 2019 report.

Demand from importing countries remains high, but obstacles to global banana trade have been present on the supply side. This will influence the international sales price of banana, both fresh and dried. In most of the leading import markets, and notably in the European Union and the United States of America, prices at all levels have accordingly been displaying a tendency to increase.

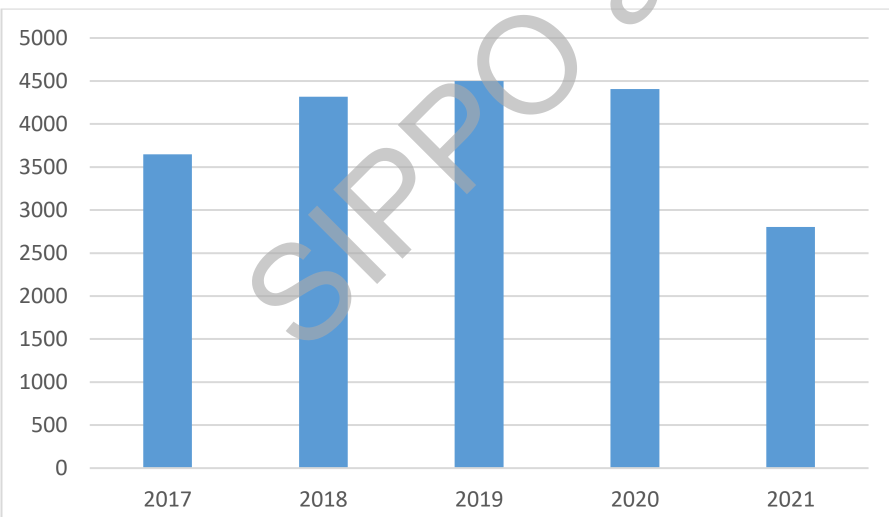

Figure 9 Import of dried and fresh banana (HS 08039090) by EU, in tonnes

[1] A fungus, Tropical Race 4, (TR4) is destroying banana plantations, mainly affecting the Cavendish variety. *It is a soil-borne pathogen that attacks the roots of the banana causing the Banana Fusarium Wilt disease by clogging its vascular system. Currently, the most effective approach to combat TR4 is to prevent its spread to clean areas and to contain it as soon as it is detected* (FAO).

Europe is one of the largest importing regions of fresh and dried banana in the world. Especially countries with large ports and well-maintained infrastructure import a lot. The countries in Europe with the largest ports are the Netherlands (Rotterdam), Belgium (Antwerp), Germany (Hamburg) and France (Marseille). Unsurprisingly, these countries are also among the largest importers of dried banana. Due to their infrastructure, these countries import a lot, but a sizeable percentage of import is re-exported to other countries in Europe.

In Europe, France is the major importer of dried bananas followed by the Netherlands and Germany. These import data do not necessarily reflect the per capita consumption of dried banana. Due to the European Union's rules on the internal market, countries can easily trade products amongst each other. This is especially the case in the Netherlands, with a small population and high import, due to its port of Rotterdam.

The main banana producing countries are in the tropics, where the production climate is ideal for bananas. The largest producer of dried banana is Ecuador, followed by Costa Rica, the Philippines, Guatemala, and Colombia. These countries are, unsurprisingly, also main exporters of fresh banana.

Ecuadorian producers of dried banana receive support from Pro Ecuador, a governmental organization that promotes export from the country. This organization helps connect Ecuadorian producers and exporters to buyers via one of their local offices. They do so by trying to link companies, as well as organizing participation to European trade fairs.

Examples of companies that produce and export dried banana to the European Union are Prime Fruits from the Philippines, Mal Organics from Sri Lanka and Verdeflor from Peru. Websites such as Tridge and Alibaba offer a wealth of information on competition. If you are looking for a specific type of producer, product or producing region, it is advised to review these websites.

In addition to these producing countries, some European countries produce bananas, although on the overseas territories. The French west Indies islands of Guadeloupe and Martinique and in the Spanish Canary Islands. These regions combined produce 90% of Europe's banana production. However, they do not play a significant role in the market for dried bananas.

Currently, import of dried tropical fruits is only 0.1% of the total imports of tropical fruit by the European union according to a study done by EuroCham Cambodia. The research states this gives opportunities for producers of these dried fruits, as there is much room for growth and the overall demand for dried fruit is growing.

When concerning types of banana, FAO states the following 'Virtually all bananas supplied to the US and European markets are Cavendish, which are better suited to international trade than other varieties as they are more resilient to the effects of global travel.' As many European consumers do not know other varieties than Cavendish, there is currently extraordinarily little market for other varieties of banana in the European market. To introduce new varieties with unique properties such as the Sri Lankan Ambul variety will require targeting market segments where consumers are open to try products different from what they already know. Besides specialty shops, European food manufacturers play a key role in targeting these segments, as they know how to make products that meet expectations of consumers using ingredients with unique properties. Suppliers of dried banana with notably different properties than the common dried banana from Cavendish bananas can hire European sensory panels to determine how European consumers appreciate the taste of their dried bananas. The results of sensory tests can be used to convince buyers such as specialty shops and their wholesalers, and food manufacturers to buy their unique products.

4.2 Consumption

The European market for dried banana consists of two main segments: retail-packed dried banana and dried banana for the food industry.

4.2.1 Retail-packed dried banana

European consumers often buy dried banana as a snack or as an addition to their breakfast cereals. In this segment, appearance is particularly important. Consumers expect light yellow dried banana in a form that is easy for snacking such as coins.

To cater to a larger audience of consumers, retailers tend to offer multiple types of the same product which differ from each other in terms of price and quality. See the chapter on Price and Quality for details.

While a significant consumer group likes sugar-coated dried banana to eat as an alternative to cookies, chocolate bars and other sweet snacks, a growing group of consumers prefers healthier foods, such as dried banana without added sugar. Dried fruits are increasing in popularity, as consumers see these as healthier than other snacks such as traditional candy or chocolate bars.

European consumers, especially in northern Europe, have become used to consume a lot of sugar. While the health trend makes consumers more aware of the need to reduce sugar intake, many consumers continue to prefer sweet snacks. They look for healthier sweet snacks without added sugar. Since dried fruits including banana contain naturally occurring fruit sugars, these snacks respond well to consumer demand for sweet snacks without added sugars. Many labels on dried fruit snacks therefore mention 'without added sugars' or something similar. Adding sugar to dried banana diminished the healthiness and makes dried banana less attractive to consumers looking for healthier alternatives.

4.2.2 Dried banana for the food industry

The European food industry processes dried fruits including dried banana in a wide range of products. These products often contain a combination of multiple types of fruits and are marketed as products with a 'tropical flavour.' Dried banana is often combined with pineapple, coconut, or chocolate. Dried banana as ingredient can be categorized in the following subsectors:

- Breakfast cereals: Most brands that sell breakfast ingredients like granolas, oats or muesli's have at least one variety with a tropical fruit flavour. In these products, manufacturers usually include a combination of various dried fruits. Examples of well-known cereal brands in Europe are Quacker, Eat Natural or Jordans. Many breakfast cereal manufacturers use dried banana pieces or broken coins.
- Ready to eat snacks: granola or muesli bars also frequently have a variety in which dried banana is processed. The global healthy snacks market size is expected to reach USD 32.88 billion by 2025, according to a new report by Grand View Research. This research states that healthy snacks are 'grab-and-go' foods that are convenient to consume and healthy. These are not only dried fruits but also include granola bars for example. banana is processed. Large players on the bars market are Hero, Liga or Nked.

- Bakery products: products like banana bread or banana pancakes. In the Netherlands, the company Sunt is gaining popularity by selling banana bread made from leftover bananas. An example of a company that produces banana bars is Banabar.

The aforementioned trend in healthier snacking contributes to an expected growth of the healthy snack market to USD 32.88 billion by 2025, according to a new report by Grand View Research. This research states that healthy snacks are 'grab-and-go' foods that are convenient to consume and healthy. These are not only dried fruits but also include granola bars for example.

4.3 Trade Structure and Distribution Channels

The schematic overview below indicates the most common routes how products get from the producer to the final customer. It starts at the producer, who sells their product to an exporter. The exporter usually sells to an importing wholesaler or processor, after which the product is sold at retail. Below scheme gives insight in the most common routes, yet there are other routes possible. The thicker lines indicate more common routes.

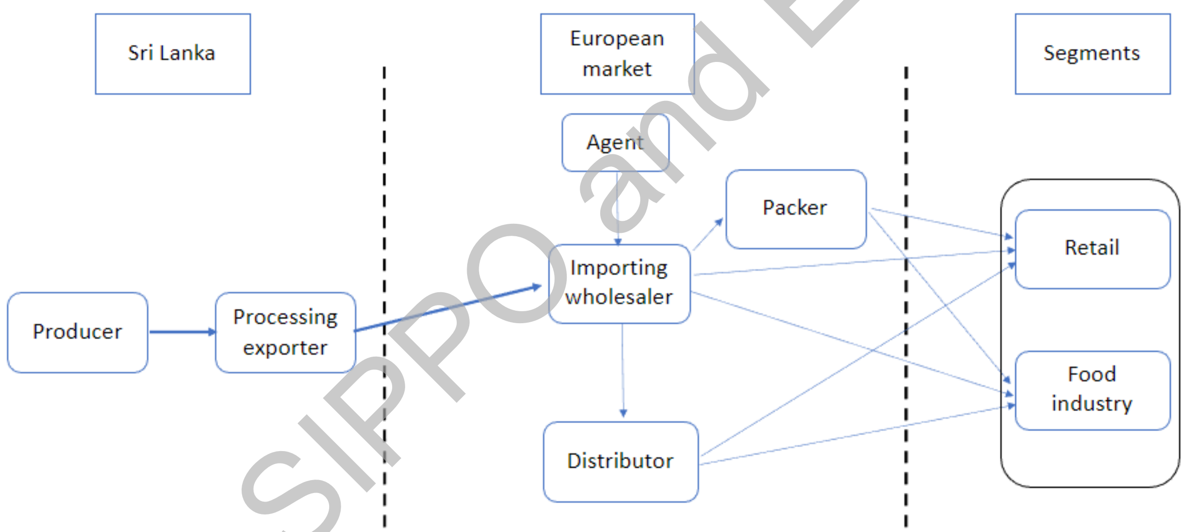

Figure 10 Distribution channels for dried banana

4.3.1 Importing wholesaler

Importing wholesalers are the most interesting channel for most dried banana exporters. They provide access to all the different segments in Europe and are interested in a wide variety of dried banana products. As they are usually more open to new suppliers than industrial users and retailers, they are easy to find.

As their main function and added value of importing wholesalers is import and bulk-breaking, their purchasing processes are well-organised and efficient. At the same time, they have a large network of suppliers from all over the world and can switch easily to other suppliers, which gives them a lot of negotiating power. They are up to date on current price levels in the global market and only provide room for margins when you can prove that your product is unique and is worth a price premium. Examples of importing wholesalers are TFC Holland, DoIt Organic and Tradin Organic.

4.3.2 Distributor

A distributor often does not take ownership of the product but provides services to the supplier. These services include storage of the product in the end market. This enables a supplier to respond quickly to orders of their buyers. In addition, storage in the end market enables cost-efficient supply of small volumes, as suppliers can transport the product in bulk to the distributor which can break the bulk into smaller volumes for transport to the buyer.

Distributors are particularly interesting for suppliers in Sri Lanka with final products such as retail-packed dried banana or final food products which meet the extremely high requirements of European retailers. Suppliers of dried banana ingredients will find distributors useful when they have a strong sales department which can identify small food manufacturers and can sell many small volumes to these food manufacturers.

4.3.3 Agent

Agents are particularly useful for suppliers focusing their activities on production and processing and with a small capacity for marketing and sales. These agents can provide the needed marketing and sales capacity. They typically have extensive knowledge of the market, industry trends and legislative processes, and help producers and packers to navigate the complex distribution channels and supply chains. They can assist in the negotiation of prices and contracts between buyers and sellers, ensuring that both parties receive fair value for their products and services. Agents also provide valuable market insights and feedback to producers, helping them to adapt to changing market conditions and consumer preferences. In addition, they may assist with logistics and transportation, coordinating the movement of the product from the packing facilities to various markets around the world.

4.3.4 Packer

Packers play a role in the supply of retail-packed dried banana to retailers. Particularly brands and private labels make use of packers when they need a retail-packed products and the importing wholesaler does not have the required packing capacities. Packers are responsible for packaging the bananas in a variety of formats, such as bags, pouches, or boxes, based on customer requirements. Some also monitor the product's quality and check for any defects or inconsistencies to ensure that only the highest quality product is delivered to customers. Properly packaging the dried bananas not only enhances their shelf life but also protects them from damage during transportation, thereby facilitating their distribution to various markets.

4.3.5 Retail

European retailers rarely source directly from exporters outside Europe. Particularly large retail chains prefer to source from European companies with a powerful reputation, which have much to lose from supplying non-compliant products. Many retailers are hesitant to source directly from exporters outside as they have concerns about:

- long-term reliability of supply volumes
- long lead times for orders and potential delays in deliveries
- lack of control by European authorities over suppliers outside Europe
- legal complexities around holding a company outside Europe liable for non-compliances.

4.3.6 Food industry

Food manufacturers will buy their ingredients either directly from an exporter or indirectly from an importing wholesaler. As food manufacturers guarantee a stable supply of final products to retailers, they also require a stable flow of ingredients. Hence, food manufacturers often prefer to make use of importing wholesalers with a large supplier network to minimize risk.

Food manufacturers will prefer to source directly from exporters when:

- they need large volumes and have a strong purchasing department with a large supplier network themselves.
- they need to collaborate closely with their supplier to develop an ingredient according to unique specifications or with a unique story (e.g., sustainability impact)

4.4 Price and Quality

The quality of dried bananas in the European market is highly variable, with some products being of a lower quality than others. In general, high-quality dried bananas are made from ripe, sweet bananas which are low in fibres and have the desired texture. They are carefully selected and processed to ensure that they retain their flavour, texture, and nutritional content. The drying process used by suppliers can also have a significant impact on the quality of the product. Low-quality drying processes can result in dried bananas that are tough, tasteless, and lacking in nutritional value. This video shows an example of a company with modern drying technology resulting in high-quality dried fruits.

High-quality dried bananas, on the other hand, are produced using modern technology and strict quality control measures. These products are typically free from additives, preservatives, and artificial flavours, making them a healthy snack option and the preferred option for consumers. In addition to the quality of the banana, the drying methods used are also a crucial factor in creating a high-quality product. The drying process should be carefully controlled to ensure that the bananas are dried evenly and retain their natural flavour, aroma, and nutritional content. The use of modern drying technology, such as temperature-controlled drying chambers, can help to preserve the quality of the bananas and result in a higher quality product. The drying process should also keep the product free from any contaminants, such as dust or insects, which can affect the quality of the final product.

While sulphuration can help to retain the yellow colour of bananas, many buyers prefer dried banana without additives. Drying and preservation methods that retain the yellow colour by preventing enzymatic browning without additives will give suppliers a competitive edge.

The prices of dried banana products can vary depending on several factors, including the quality of the product, the size of the order, and certification. Typically, prices for dried banana products range from € 6 to € 10 per kilogram in retail. Bulk orders can often attract lower prices, with some suppliers offering discounts for larger orders. On the other hand, smaller orders may be subject to higher prices due to the increased handling and packaging costs per unit associated with smaller quantities.

	Product	Picture	Retail Price (€/kg)

	Albert Heijn, Netherlands, banana chips 200 gram		10.00
	Carrefour, France, organic banana chips 150 gram		33.27
	Migros, Switzerland, organic certified banana chips, 140 grams		20.71

Figure 11 Table of prices for dried banana

Certifications, such as ISO 22000, and BRC, provide assurance to buyers that the dried banana products they are purchasing meet international standards for food safety. These certifications demonstrate that suppliers have implemented strict quality control measures in the production and processing of their products.

The quality of dried banana products in the European market is critical to building brand reputation, and certificates can help ensuring that. The usage of high-quality raw materials, modern drying technology, and the implementation of strict quality control measures are all critical factors that contribute to the quality of dried banana products.

Buyers are looking for suppliers who prioritize quality and have certifications that demonstrate their high-quality products. By selecting high-quality products from reputable suppliers, buyers can ensure that they are providing their customers with a healthy and natural snack option.

4.5 Opportunities

The overall market for dried fruits in Europe is growing and is expected to keep growing in the coming years. This creates opportunities for producers of dried banana.

European consumers become increasingly conscious of their health and have an increased interest in the environment and social responsibility. When selling dried banana, try to cater your product to any of the following trends, this can help you increase your sales volumes or price.

4.5.1 Health

Dried bananas can provide several health benefits, which create opportunities for sales. One of the primary benefits is their high nutrient content, which includes vitamins and minerals such as vitamin C, potassium, and magnesium. In the Annex to EU Directive 90/496/EEC you can find out when a product is considered to contain a significant amount of a certain nutrient, which allows for the use of the nutrition claim 'source of [name of vitamin/s] and/or source of [mineral/s] on the retail packaging. *These nutrients are important for maintaining good health, as they can help support a healthy immune system, regulate blood pressure, and support muscle and nerve function.* Additionally, they are low in fat and cholesterol, making them a heart-healthy snack option. When selling dried banana, focus on these health benefits to cater to the health-conscious consumers.

Dried bananas are also a major source of dietary fibre, which can help keep the digestive system healthy and prevent constipation. Unfortunately, European legislation only allows the nutrition claim 'source of fibre' when the product contains at least 3 g of fibre per 100 g, while the Ambul variety has a fibre content of approximately 2.1 g per 100 g.

4.5.2 Organic

Demand for organic certified dried banana is growing. Consider certification of your dried banana to gain access to this growing market segment. An organic certified product usually sells for a higher price and can be sold at more outlets, giving access to more potential buyers. The most important organic standard in the European Union is EU Organic, with alternative certifications complimenting the EU Organic standard. These are however niches with the organic sector. Some examples of such certifications are: AB France, Naturland, Demeter, Soil Association, which go further than EU Organic. One of the world's largest organic trade fairs, Biofach, is held annually in Germany. This trade fair is fully dedicated to organic products and offers a wealth of information and networking opportunities.

4.5.3 Unique

While it may not be as widely known as other popular types of bananas, such as the Cavendish or the Gros Michel, there is potential for Ambul banana to carve out a place on the European market if it is marketed as a distinctive and high-quality product. By highlighting its unique flavour and texture, as well as its origins and cultural significance, Sri Lankan Ambul banana could attract a niche market of consumers looking for something different and special. Additionally, promoting sustainable farming practices and fair trade could further enhance its appeal to environmentally and socially conscious consumers.

4.5.4 EU Green Deal

As part of its European Green Deal, the European Union encourages companies to use more environmentally friendly packaging materials via rules and regulations. It is advised to research which sustainable packaging can be used when packing dried banana. Try to move away from individual use plastics and pack your product in a reusable packaging material, use carton or (plastic free) kraft paper pouch bags instead of plastic.

Another pillar of the Green Deal, the farm to fork strategy, aims to make food systems fair, healthy, and environmentally friendly. It aims to accelerate the EU's transition to a sustainable food system that should have a neutral or positive environmental impact. It is therefore advised to research the possibilities of using processing technologies instead of food additives. If the application of food additives can be prevented by using technology, this could allow for easier entry in the European market. Additionally, could it prevent any blockage in the future if rules on additives are strengthened. Furthermore, can a ‘free from additives’ claim cater to a new group of consumers, who seek to consume natural products.

5. The European and Swiss market for dried pineapple

5.1 Trade

In recent years, the popularity of dried pineapple has been on the rise in western Europe, driven by increasing demand for convenient snacks and increasing interest in its perceived health benefits. Dried pineapple is a convenient and tasty snack that is easy to store and transport, making it an ideal option for on-the-go consumption. Additionally, it is a reliable source of fibre, vitamins, and minerals, which has contributed to its popularity among health-conscious consumers. As a result of its growing demand, trade of dried pineapple has increased significantly in western Europe, with importers sourcing the fruit from countries such as Thailand, the Philippines, and Costa Rica.

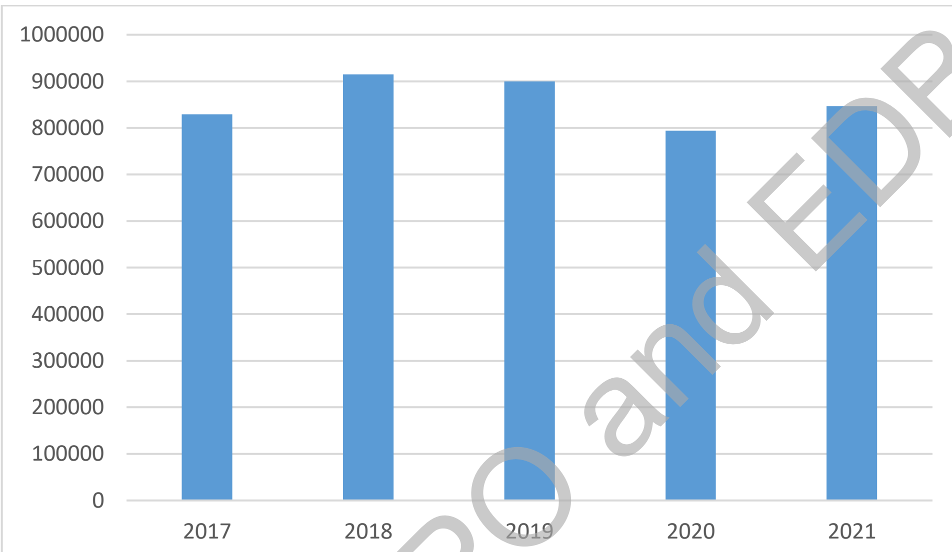

Figure 12 Import of fresh and dried pineapples by EU 27

As can be seen in the table above, the import of dried pineapple by the EU and Switzerland has remained stable over the last five years. In 2021, the total import was about 850,000 Metric tonnes of dried pineapple, compared to 790,000 metric tonnes the year prior. In the table, there was a steep decrease of almost 100,000 metric tonnes between 2019 and 2020. This is caused by the Covid crisis that affected the global economy, in 2020.

The largest importing countries in the European union are the countries with the largest ports. The Netherlands, home to one of the biggest ports in the world and several of Europe's leading exotic fruits importers, has the biggest share of imported pineapples. The country imported between 20-25% of the total pineapple imports in Europe between 2017 and 2021. The second biggest importer is Belgium with their port of Antwerp being a major port. This doesn't mean these are the major consuming markets. Both countries function as logistical hubs for other EU countries.

The rise in demand for dried pineapple has led to an increase in trade in the region. Importers are sourcing the fruit from countries such as Ecuador, Cote D'Ivoire and Costa Rica, where pineapple is grown and processed for export. These countries have favourable growing conditions for pineapple, and their tropical climates allow for year-round production.

Costa Rica is the major exporter of pineapple to western Europe, supplying 87% of the total European import of pineapples in 2021. Costa Rica's pineapple industry focuses on the MD2 variety for the fresh market and juices. This industry has grown rapidly in recent years, and its producers are known for their sustainable farming practices. Nonetheless, Costa Rica's role in the market for dried pineapple is small. Ecuador is the second largest exporter of pineapple, taking about 5% of the European import. Cote D'Ivoire, Ghana and Colombia complete the top 5 largest exporting countries. Colombia taking 0.7% of the total supply of fresh and dried pineapples. Sri Lanka is the 17th pineapple producing country in terms of export to the European Union, using ITC trade data for 2021. Sri Lanka exports more pineapple to the Union than Cuba, a bit less than Tanzania at the 16th place. This is both fresh and dried pineapple.

In recent years, there has been a growing demand for organic and sustainably sourced dried pineapple in Switzerland, leading to an increase in imports from countries such as Ghana and Uganda, which are known for their organic pineapple farming practices.

5.2 Consumption

In recent years, the consumption of dried fruits has grown steadily in western Europe. Consumers are becoming increasingly aware of their health and thus search for healthy alternatives. Dried fruits are perceived by many as healthy snack or ingredient. There are two primary ways in which dried pineapple are consumed in western Europe: retail packed and via the food industry.

5.2.1 Retail-packed dried pineapple

European consumers often buy dried pineapple as a snack or as an addition to their breakfast cereals. In this segment, appearance is particularly important. Consumers expect light yellow dried pineapple in a form that is easy for snacking such as coins.

Dried pineapple as a standalone snack has been growing in popularity in Western Europe. As people look for convenient, healthy snack options, dried pineapple has emerged as a go-to choice. Its flavour and long shelf life make it an appealing snack for many. Dried pineapple slices or chunks are available in grocery stores. Despite this increasing demand, it should be noted that the dried pineapple market in Western Europe is still relatively negligible compared to other snack categories like granola and muesli bars. However, as consumers continue to seek out healthy and convenient snack options, it is likely that the demand for dried pineapple will continue to grow.

To cater to a larger audience of consumers, retailers tend to offer multiple types of the same product which differ from each other in terms of price and quality. See the chapter on Price and Quality for details.

European consumers, especially in northern Europe, have become used to consume a lot of sugar. While the health trend makes consumers more aware of the need to reduce sugar intake, many consumers continue to prefer sweet snacks. They look for healthier sweet snacks without added sugar. Since dried fruits including pineapple contain naturally occurring fruit sugars, these snacks respond well to consumer demand for sweet snacks without added sugars. Many labels on dried fruit snacks therefore mention 'without added sugars' or something similar. Adding sugar to dried pineapple diminished the healthiness and makes dried pineapple less attractive to consumers looking for healthier alternatives.

5.2.2 *Dried pineapple for the food industry*

The European food industry processes dried fruits including dried pineapple in a wide range of products. These products often contain a combination of multiple types of fruits and are marketed as products with a 'tropical flavour.' Dried pineapple is often combined with, coconut or chocolate. Dried pineapple as ingredient can be categorized in the following subsectors:

- Breakfast cereals: Most brands that sell breakfast ingredients like granolas, oats or muesli's have at least one variety with a tropical fruit flavour. In these products, manufacturers usually include a combination of various dried fruits. Examples of well-known cereal brands in Europe are Quacker, Eat Natural or Jordans. Many breakfast cereal manufacturers use dried pineapple in easy consumable pieces.
- Ready to eat snacks: granola or muesli bars also frequently have a variety in which dried pineapple is processed. The global healthy snacks market size is expected to reach USD 32.88 billion by 2025, according to a new report by Grand View Research. This research states that healthy snacks are 'grab-and-go' foods that are convenient to consume and healthy. These are not only dried fruits but also include granola bars for example. Large players on the bars market are Hero, Liga or Nked.

5.3 Trade structure, distribution channels

Trade channels in the dried pineapple sector typically involve various intermediaries. The dried pineapple is commonly imported by importing wholesalers who sell the product to retailers and food manufacturers. Retailers include supermarkets, health food stores, and online marketplaces.

The schematic overview below indicates the most common routes how products get from the producer to the final customer. It starts at the producer, who sells their product to an exporter. The exporter usually sells to an importing wholesaler or processor, after which the product is sold at retail. Below scheme gives insight in the most common routes, yet there are other routes possible. The thicker lines indicate more common routes.

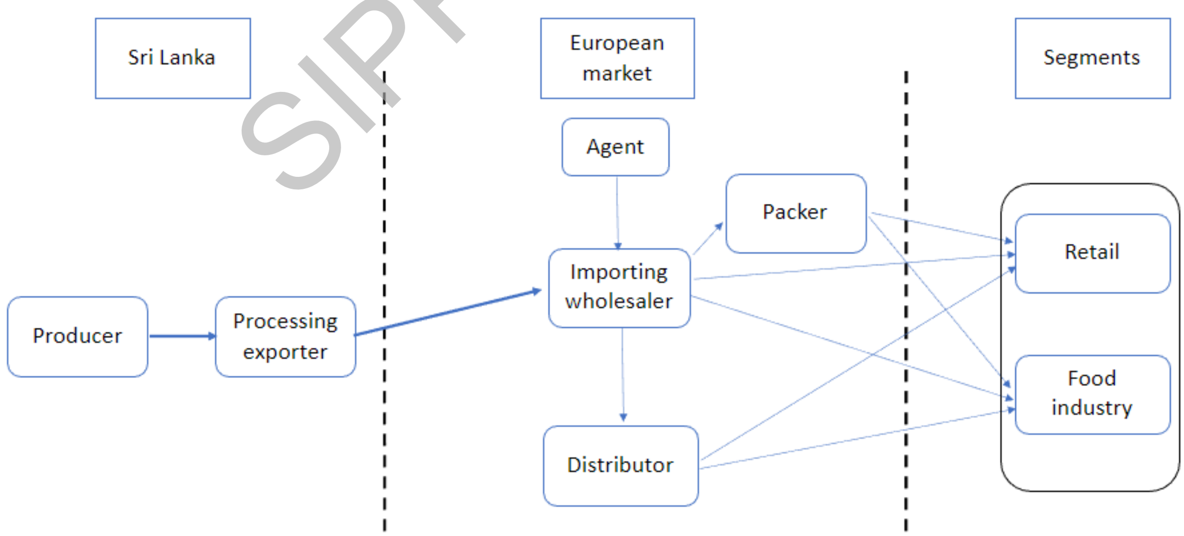

Figure 13 Distribution channels for dried pineapple

5.3.1 Importing wholesaler

Importing wholesalers are the most interesting channel for most dried pineapple exporters. They provide access to all the different segments in Europe and are interested in a wide variety of dried pineapple products. As they are usually more open to new suppliers than industrial users and retailers, they are easy to find.

Purchasing processes of importing wholesalers are well-organised and efficient, since their main function and added value is import and bulk-breaking. These importing wholesalers have a large network of suppliers from all over the world and can switch easily to other suppliers, which gives them a lot of negotiating power. They are up to date on current price levels in the global market and only provide room for margins when you can prove that your product is unique and is worth a price premium. Wholesalers: They purchase large quantities of dried pineapple from exporters or processors and sell them in smaller quantities to retailers. Examples of wholesalers are Real Foods, IFS Bulk, DoIt Organic and Berrico.

5.3.2 Distributor

A distributor often does not take ownership of the product but provides services to the supplier. Their services include storage of the product in the end market. This enables a supplier to respond quickly to orders of their buyers. In addition, storage in the end market enables cost-efficient supply of small volumes, as suppliers can transport the product in bulk to the distributor which can break the bulk into smaller volumes for transport to the buyer.

Distributors are particularly interesting for suppliers in Sri Lanka with final products such as retail-packed dried pineapple or final food products which meet the extremely high requirements of European retailers. Suppliers of dried pineapple ingredients will find distributors useful when they have a strong sales department which can identify small food manufacturers and can sell many small volumes to these food manufacturers.
Examples of distributers in the European market are Senikma Holdings and Liberty prim.

5.3.3 Agent

Agents are an important link in the dried pineapple sector. Agents typically have extensive knowledge of the market, industry trends and legislative processes, and help producers and packers to navigate the complex distribution channels and supply chains. They can assist in the negotiation of prices and contracts between buyers and sellers, ensuring that both parties receive fair value for their products and services. Agents also provide valuable market insights and feedback to producers and packers, helping them to adapt to changing market conditions and consumer preferences. In addition, they may assist with logistics and transportation, coordinating the movement of the product from the packing facilities to various markets around the world.
Examples of agents are Buttner-Co and QFN from the Netherlands.

5.3.4 Packer

Packers play a crucial role in the dried pineapple sector by ensuring that the product is properly packaged and prepared for distribution. Packers are responsible for packaging the pineapples in a variety of formats, such as bags, pouches, or boxes, based on customer requirements. The role of a packer is sometimes fulfilled by the importing wholesaler if they have packing facilities in-house. Some packers also monitor the product's quality and check for any defects or inconsistencies to ensure that only the highest quality product is delivered to customers. Properly packaging the dried pineapples not only enhances their shelf life but also protects them from damage during transportation, thereby facilitating their distribution to various markets.

5.3.5 Retail

European retailers rarely source directly from exporters outside Europe. Particularly large retail chains prefer to source from European companies with a strong reputation, which have much to lose from supplying non-compliant products. Many retailers are hesitant to source directly from exporters outside as they have concerns about:

- long-term reliability of supply volumes
- long lead times for orders and potential delays in deliveries
- lack of control by European authorities over suppliers outside Europe
- legal complexities around holding a company outside Europe liable for non-compliances.

Retailers can include supermarkets, health food stores, online marketplaces, and specialty stores that sell dried pineapple directly to consumers. Large retailers in western Europe are Albert Heijn (Netherlands), Lidl (Germany), Carrefour (France), Migros (Switzerland).

5.3.6 Food industry

Food manufacturers will buy their ingredients either directly from an exporter or indirectly from an importing wholesaler. As food manufacturers guarantee a stable supply of final products to retailers, they also require a stable flow of ingredients. Hence, food manufacturers often prefer to make use of importing wholesalers with a large supplier network to minimize risk.

Food manufacturers will prefer to source directly from exporters when:

- they need large volumes and have a strong purchasing department with a large supplier network themselves
- they need to collaborate closely with their supplier to develop an ingredient according to unique specifications or with a unique story (e.g., sustainability impact)

Examples of food industry players are Quacker or Nakd, who use dried fruit in granola bars

5.4 Price and Quality

	Product	Picture	Retail Price (€/kg)
	Migros, Switzerland, organic certified dried pineapple, 100 grams		35.00

	Carrefour, France, organic dried pineapple 100 gram		18.00
	Billa, Austria, conventional dried pineapple, 70 grams.		25.57

Figure 14 Table of prices for dried pineapple

The retail prices of dried pineapple in Western Europe vary depending on the location and the brand of the product. A 100-gram pack of dried pineapple costs between € 2.50 and € 4.00 in supermarkets. Organic and premium quality dried pineapple tends to be more expensive and can cost up to € 15 for the same pack size. Overall, it is important to note that the offer of dried pineapple in European supermarkets is less than other dried fruits.

It's worth noting that there can be significant differences in retail prices of dried pineapple between different markets in Western Europe. For example, prices tend to be higher in countries such as Switzerland, where the cost of living is higher than in other European countries. Additionally, retail prices can vary within a country depending on the location and type of store. In urban areas with high rents and operating costs, prices may be higher compared to more rural areas where the cost of living is lower. It's also common for specialty stores and health food stores to have higher prices compared to larger supermarkets.

5.4.1 Quality

Certifications, such as ISO 22000, and BRC, provide assurance to buyers that the dried pineapple products they are purchasing meet international standards for food safety. These certifications demonstrate that suppliers have implemented strict quality control measures in the production and processing of their products.

The quality of dried pineapple products in the European market is critical to building brand reputation, certificates can help ensuring that. The usage of high-quality raw materials, modern drying technology, and the implementation of strict quality control measures are all critical factors that contribute to the quality of dried pineapple products.

Buyers are looking for suppliers who prioritize quality and have certifications that demonstrate their high-quality products. By selecting high-quality products from reputable suppliers, buyers can ensure that they are providing their customers with a healthy and natural snack option.

The quality of dried pineapple in Western Europe can vary widely depending on the brand, production methods, and ingredients used. Premium quality dried pineapple tends to be more expensive, as it's often made from high-quality fruit that is carefully selected and processed. Additionally, consumers prefer dried pineapples that are free from additives, as anything added to the final product is considered as unnatural and less healthy.

Lower-priced dried pineapple may be made from lower-grade fruit or may contain additives such as sugar or preservatives. While these products can be less expensive, they may not offer the same taste and texture as higher-quality dried pineapple. As such, consumers should be prepared to pay a higher price for premium dried pineapple that is free from additives and made from high-quality fruit. In general, the price difference between lower and higher quality dried pineapple in Western Europe can range from a few cents to several euros per pack.

It is advised to collaborate closely with suppliers to ensure the highest possible quality is produced. This can be done on farming level, but also post-harvest practices and the usage of modern processing techniques. Additionally, it can be worth researching getting special certificates, as organic certified dried pineapple sells for a much higher retail price then non-certified.

Since there is little offer and retail prices for dried pineapple are already relatively high, selling certified dried pineapple for a markup might see little demand

5.5 Opportunities

The overall market for dried fruits in Europe is growing and is expected to keep growing in the coming years, creating opportunities for producers of dried pineapple.

European consumers become increasingly conscious of their health and have an increased interest in the environment and social responsibility. When selling dried pineapple, try to cater your product to any of the following trends, this can help you increase your sales volumes or price.

5.5.1 Organic

One of the most well-known certificates for produce is organic. With consumers increased interest in the environment and social justice, the demand for organic certified products grows. Consider certification of your dried pineapple to gain access to this growing market segment. An organic certified product usually sells for a higher price and can be sold at more outlets, giving access to more potential buyers. The most important organic standard in the European Union is EU Organic, with alternative certifications complimenting the EU Organic standard. These are however niches with the organic sector. Some examples of such certifications are: AB France, Naturland, Demeter, Soil Association, which go further than EU Organic. One of the world's largest organic trade fairs, Biofach, is held annually in Germany. This trade fair is fully dedicated to organic products and offers a wealth of information and networking opportunities.

5.5.2 Health

Specialty stores that sell healthy products are becoming a more common sight in Europe. These stores, such as Ecoplaza, sell products they consider healthy. If a producer can generate a health claim on their product, stating that dried pineapple is part of a healthy diet, this claim could lead to an increase in demand. It is however important to note that getting a health claim on a product is difficult and requires a lot of investment as this needs to be scientifically proven.

The European Union has strict rules on making health statements on your packaging, however, these statements can help convince consumers in buying your product. In the Annex to EU Directive 90/496/EEC you can find out when a product is considered to contain a significant amount of a certain nutrient, which allows for the use of the nutrition claim 'source of [name of vitamin/s] and/or source of [mineral/s] on the retail packaging.

5.5.3 EU Green Deal

The European union has set the Green Deal, this is a framework of rules and incentives to steer the European Union towards a green future. As part of its European Green Deal, the European Union encourages companies to use more environmentally friendly packaging materials via rules and regulations. It is advised to research which sustainable packaging can be used when packing dried banana. Try to move away from single use plastics and pack your product in a reusable packaging material, use carton or (plastic free) kraft paper pouch bags instead of plastic.

The EU Green Deal's Farm to Fork strategy aims to make food systems fair, healthy, and environmentally friendly. It aims to accelerate the EU's transition to a sustainable food system that should have a neutral or positive environmental impact. It is therefore advised to research the possibilities of using processing technologies instead of food additives. If the application of food additives can be prevented by using technology, this could allow for easier entry in the European market. Additionally, could it prevent any blockage in the future if rules on additives are strengthened. Furthermore, can a 'free from additives' claim cater to a new group of consumers, who seek to consume natural products.

6. Conclusion

Jackfruit is gaining popularity as a plant-based ingredient in Europe due to the increasing demand for meatless protein sources among vegetarians and vegans. European consumers are seeking new food options, and importers are expanding their product supply to reduce reliance on traditional imports. Jackfruit presents an opportunity for businesses to diversify their processed fruits and vegetables portfolio, as it cannot be grown in Europe. Additionally, jackfruit aligns with the sustainable sourcing trend, requiring less water and pesticides compared to other crops. Its high fiber, vitamin, and mineral content further contribute to its appeal as a healthy food choice. The versatility of jackfruit allows for the creation of both savoury and sweet products, such as burger patties, pickles, jams, ice cream, and desserts. Promoting innovative jackfruit applications through recipes and showcasing prototypes at trade fairs can enhance its market potential. Retailers import exotic fruits like jackfruit to differentiate themselves and attract buyers. However, taste remains a critical factor for consumer acceptance, and maintaining premium quality and appropriate packaging is essential to ensure a positive experience for first-time buyers. Failing to do so may lead to negative media coverage and impact the demand and competitiveness of jackfruit products.

As European consumers seek high-quality and sustainably sourced products, VCO presents itself as a popular ingredient for those looking for healthier alternatives to traditional oils. The demand for VCO is driven by the exploration of new foods by consumers and the efforts of importers to cater to this demand and reduce reliance on traditional imports. The versatility of VCO makes it attractive to a wide range of buyers in Europe, and its premium quality and exclusivity allow producers to charge higher prices compared to other vegetable oils. VCO finds applications as a spread, cooking oil substitute, food supplement, food ingredient, and increasingly in the cosmetics industry. While the ability to charge premium prices for VCO depends on the economic outlook in target markets, the EU's favourable trade policies with Southeast Asian economies facilitate exporting natural products from countries like Indonesia, Sri Lanka, and the Philippines. Advancements in technology open new opportunities for VCO, with pharmaceutical companies exploring its use as an alternative to refined coconut oil in various treatments, such as anti-HIV/AIDS and anti-cancer therapies, due to its antimicrobial and anti-inflammatory properties. The expansion of VCO from health shops to retail stores and supermarkets reflects the growing demand among everyday consumers for new products. Diversifying VCO products and developing value-added options will be crucial for industry expansion, necessitating strong relationships with European importers who can support in meeting market demands. As new applications for VCO continue to emerge, the demand for this versatile ingredient is expected to surge.

The overall market for dried banana and pineapple in Europe is experiencing steady growth and is projected to expand in the coming years. European consumers are becoming increasingly health-conscious and environmentally-aware. Therefore, it is essential for exporters of dried banana and pineapple to align their products with these emerging trends. Exporters can enhance their sales volumes and command premium prices by prioritising and emphasising the health aspects of dried banana and pineapple as well as organic cultivation. Dried banana and pineapple include a rich nutrient profile encompassing vitamins like vitamin C, potassium, and magnesium. By emphasising these nutritional advantages, producers can appeal to health conscious consumers seeking immune support, blood pressure regulation and improved muscle and nerve function. Highlighting that bananas and pineapple are also low in fat and cholesterol can position them as a heart-healthy snack option. Furthermore, the demand for organic certified dried banana and pineapple is on the rise, and obtaining organic certification allows access to a growing market segment, as organic products generally command higher prices. Moreover, exporters can seek certification under EU Organic standards or explore alternative certifications like AB France, Naturland, Demeter, or Soil Association. Participating in organic trade fairs such as Biofach in Germany, can provide valuable networking and information-sharing opportunities. The rise of specialty stores focusing on healthy products presents another avenue for dried banana and pineapple sales. Understanding the Annex to EU Directive 90/496/EEC can help determine when a product can make nutrition claims related to significant nutrient content on retail packaging. By aligning with the organic trend and leveraging nutrition claims, dried banana and pineapple producers can cater to evolving consumer preferences, enhance product appeal, and seize opportunities within the growing European dried fruit market.