### The European market potential for dried garlic

Last updated:

06 December 2022

The European market is in search for healthy, natural, convenient and sustainable products, and dried garlic is a great match for these demands. While the size of the food industry in a certain country largely determines the demand for dried garlic, re-exports play a major role in European trade. You will find that most of the trade is concentrated in Germany and the Netherlands. These countries play a big role in the import of dried garlic to Europe and distribution to other countries.

#### Contents of this page

- 1. Product description
- 2. What makes Europe an interesting market for dried garlic?
- 3. Which European countries offer the most opportunities for dried garlic?
- 4. Which trends offer opportunities or pose threats on the European dried garlic market?

#### 1. Product description

This study focuses exclusively on dried garlic, also known in the trade as dehydrated garlic. Fresh garlic, including garlic bulbs with a dried outer skin, is not part of the scope of this study. Technically, dried garlic is a dried vegetable. However, buyers of dried garlic mostly use it as a spice.

The botanical name of garlic is *Allium sativum*, and this species has two subspecies with hundreds of varieties:

- Allium sativum var. ophioscorodon: hard-neck garlic which is generally grown in cooler climates and
  produces relatively large cloves. Garlic varieties such as Porcelain, Rocambole, and Purple Stripe are all part
  of the hardneck family.
- Allium sativum var. sativum: softneck garlic which is generally grown closer to the equator and produces small, tightly packed cloves. Artichoke, Silverskin and creole are varieties of softneck garlic.

Besides distinguishing species and varieties, the trade makes a distinction between white, pink and black garlic. By far the most traded garlic is white garlic. Nearly all dried garlic is made from white garlic. Pink garlic is garlic with a pink skin, such as Ail Rose de Lautrec. This garlic comes from a few small production areas where producers use special varieties. Black garlic is a type of specially processed garlic. Through a combination of fermentation, dehydration and low heat, the sugars in the garlic caramelise over a long period of time and turn black.

The European market needs dried garlic in different forms: whole, flakes, granules of different sizes, and powder. For drying purposes and consistent moisture in the dried product, garlic is usually sliced. Hence most dried garlic consists of flakes, granules and powder.

The HS code for dried garlic is 0712909010. Nonetheless, specific trade data for dried garlic are not available, as data is aggregated on an 8-digit level and the group 07129090 includes other dried vegetables, like olives. However, as dried garlic is the main product in this HS group, the trade data for 07129090 presented in this

study are representative for dried garlic trade.

Data in this study cover EU countries, EFTA countries (Iceland, Norway and Switzerland) and the United Kingdom. For the UK, data were not available for 2021. For Iceland, trade data were extracted using HS code 07129009. For Switzerland, trade data were extracted using HS code 07129081.

#### Tip:

Activate the 'Translation' function of your browser to make the studies available in your native language.

#### 2. What makes Europe an interesting market for dried garlic?

Although garlic is originally from Central Asia, consumption of garlic spread to Europe centuries ago and it is now a common ingredient in many European dishes. While many consumers and food service providers such as restaurants prefer using fresh garlic instead of dried garlic, the food industry uses large amounts of dried garlic as it has a much longer shelf life and is easier to process than fresh garlic. Consequently, the growth of the European food industry plays a major role in the development of demand for dried garlic.

Between 2013 and 2019, the turnover of the European food industry fluctuated and the net result was an increase of less than 1% to 1,093 billion. The slow growth of the food industry has a major impact on growth in demand for dried garlic, and consumption of dried garlic is forecast to continue to grow at low rates of a few percentage points annually in the next 3-5 years.

Within the food industry, the segments for meat products and various food products are particularly important for dried garlic, and those segments actually make up 36% of the total food industry.

Detailed statistics on the dried garlic market are scarce. The best estimate on the global market for dried garlic is derived from data by one of the world's leading manufacturers, Olam. Olam produces 15,000 tonnes of dried garlic products in their Chinese facility, where the company claims to have a 7% market share. This implies a total production in China of 214,285 tonnes. China is estimated to account for 80% of global production, which implies that global production is around 267,857 tonnes.

Europe is largely dependent on imports to cover consumption of dried garlic. The 400,000 tonnes of garlic that Europe produces, mainly in Spain, are targeted almost exclusively for the fresh garlic market. Unlike the dried garlic market, the proximity to the market is a strong competitive advantage for producers in the fresh market. In the dried garlic market, European producers cannot compete on price.

European imports of dried garlic amounted to 119,821 tonnes/€387 million in 2021. These imports include both imports from producing countries like China and re-exporting countries like Germany and the Netherlands. In 2021, direct imports from producing countries accounted for 46% of total imports. This implies that a lot of dried garlic imported from producing countries like China is re-exported to other European countries.

The trade data show a modest growth in imports from developing countries of 3.7% annually. This is a significantly higher growth rate than the average growth rate of the European food industry in the past years. The main three drivers for this higher growth rate are the health trend, consumer interest in Mediterranean and Asian dishes, and growing demand for convenience. The next section of this study will provide more details

about these trends.

#### Tip:

Read more about the general developments in the spices and herbs market in our study 'What is the demand for spices and herbs on the European market?'.

## 3. Which European countries offer the most opportunities for dried garlic?

Germany and the Netherlands are by far the largest importers of dried garlic in Europe. They control most of the trade with the producing countries outside Europe.

#### Germany: a major consumption market and re-exporter

Germany has a population of 83 million people. This makes Germany the largest consumption market in Europe. Apart from that, Germany is a major re-exporter of food ingredients and processed foods. Many dried garlic importers and food manufacturers in Germany supply their products throughout all of Europe.

In 2021, Germany imported 28,447 tonnes and exported 17,778 tonnes of dried garlic. While the average value of German imports from producers in developing countries amounted to €3.1/kg, the average value of German exports amounted to €6.0/kg, reflecting the value addition in Germany through processing and packaging. The concentration of dried garlic trade in Germany has enabled many German players to source large volumes at low prices for the low-end segment. Suppliers that cannot differentiate their quality from that of the cheapest producing countries will find it particularly hard to compete on the German market.

Germany sources 65% of its dried garlic imports directly from the developing countries that produce the dried garlic. Many other European countries source their dried garlic from other European countries like Germany. Major sources of dried garlic for German importers are China (44% of import volume), Poland (15%), Egypt (8%) and the Netherlands (7%). Uzbekistan (3%) and Peru (1%) are two upcoming suppliers. Their supplies to Germany have increased by 98% and 61%, respectively.

Germany has a very large food industry that uses big amounts of different spices, including dried garlic. The food industry produces convenient processed foods, including sauces and marinades, ready-to-eat meals and processed meat products.

The spice companies in Germany are organised in the German Spice Association, which has 92 member companies. These spice companies supply retailers and food service providers, and are also important suppliers for food manufacturers. While large manufacturers source their main spices needs themselves, they often rely on spice traders when their own sources cannot fulfil their needs or when they need small volumes. Small manufacturers usually rely even more on spice traders, as many of them do not consider sourcing of raw materials as their core business and prefer to outsource it.

Value for money is important in the German retail market. This is also reflected in its large share of discounters. The leading spice manufacturer Fuchs dominates the market for low-end spices. The brands Fuchs, Ostmann, Ubena and BioWagner are all owned by Fuchs, which has a 75% market share. In addition to its own brands, Fuchs also packages dried garlic and other spices for several German private labels. The main private labels in Germany are Kania (of discounter chain Lidl), Le Gusto (by Aldi Süd and Aldi Nord), Gut & Günstig (by Edeka),

#### The Netherlands: trade hub for spices

The Netherlands is a major European trade hub for spices. While the size of its population and respective domestic consumption are small, importing wholesalers in the Netherlands play a large role in processing and particularly re-exporting dried garlic and other spices to other European countries. In 2021, the re-exported volume of dried garlic (25,781 tonnes) was almost equal to the imported volume (26,550 tonnes). Compared to the average value of German exports, the average value of Dutch exports was much lower, at €3.6/kg. This indicates that Dutch re-exports mostly consist of bulk trade, and that these re-exporters add less value than the German re-exporters.

In 2021, the Netherlands sourced 29% of its import volume from neighbouring Germany. Chinese suppliers accounted for 23% of imports and Spain accounted for 18%. Imports from Germany actually increased by 192% between 2017 and 2021.

The Dutch Spice Association in the Netherlands strongly supports sustainable sourcing of spices. The association is committed to Corporate Social Responsibility; a leading group of spices importers in the Netherlands set up the international Sustainable Spices Initiative with members from the Netherlands and other countries. This Initiative provides opportunities for suppliers taking a lead in raising the bar for Corporate Social Responsibility. They have a competitive advantage in trade with members of the Sustainable Spices Initiative, and can work together with that Initiative to further improve the sustainability of their business.

Major retail chains like Albert Heijn (AH label), Aldi (De Kruidencompany label) and Jumbo control much of the dried garlic retail sales in the Netherlands. The leading independent brands of garlic in the Netherlands are Verstegen and Euroma.

#### France: major user of dried garlic for its Mediterranean cuisine

With 65 million inhabitants, France has the second-largest population in the EU. With their traditional usage of garlic in cooking, relatively speaking the French consume a lot of garlic per person. Additionally, France houses the port of Marseille, Europe's fourth-largest sea port. The port of Marseille contributes to France's role as a hub, although its role in European dried garlic is much smaller than that of Germany and the Netherlands.

While France produces some of its dried garlic domestically by processors such as Rochias, and many consumers have a strong preference for local produce, France remains heavily dependent on imports. In 2021, France imported 10,593 tonnes of dried garlic. The leading suppliers to France are China (38% of total imports), Germany (19%) and Belgium (9%). Supplies from Egypt, the second-largest producer origin, steadily increased by 16% annually between 2017 and 2021. This made Egypt the seventh-largest supplier in 2021, with a share of 3% in total imports.

Similar to many Northern European markets, the retail market in France is highly concentrated. France houses a number of large retail chains like Carrefour, Delhaize and Intermarché, who all take up a large part of the domestic garlic sales.

France has a significant fresh garlic production, which includes several special varieties. Some of these have even received a Geographic Indication in recognition of their distinctive characteristics. This makes French consumers more aware of the differences between garlic varieties and can provide opportunities for suppliers of dried garlic using unique varieties to differentiate on quality.

#### Poland: big market for dried garlic

Garlic is a commonly used product in Poland's national cuisine. It plays a dominant role in a wide variety of its traditional dishes. This makes Poland one of the main importers of dried garlic in Europe. In 2021, Poland imported 8,637 tonnes of dried garlic. The average value of the dried garlic imports was only €1.75/kg, which

means that Polish importers are mainly looking for dried garlic for the low-end segment.

The main countries Poland imported garlic from in 2021 were China (34% of total imports), Germany (30%) and Egypt (12%). One of the main importers in Poland is Falcon. Despite the proximity to leading re-exporter Germany, Poland imports much of its dried garlic needs directly from countries of origin. This provides opportunities for those suppliers.

In Poland, Biedronka, ABC and Zabka comprise the largest retail chains of the country. Combined they have roughly 18,000 stores throughout the country.

#### Spain: exporter of fresh garlic and importer of dried garlic

Spain is Europe's leading supplier of fresh garlic. Spanish garlic suppliers are organised in the Spanish National Producers and Traders of Garlic Association (ANPCA). Their membership base consists of 1,800 producers and 57 garlic trading companies, which together account for 70% of the total production marketed in Spain. Annual production is close to 170,000 tonnes or € 178.5 million.

However, as prices of garlic from Spain are relatively high compared to competitors, Spanish garlic suppliers are focusing on high-end fresh markets. Their role in the supply of dried garlic is negligible. In fact, Spain imported 6,462 tonnes of dried garlic in 2021, making it the fifth-largest importer in Europe. In line with most other European importers, much of the dried garlic is sourced from other European countries. Major sources of dried garlic for Spanish importers are China (48% of import volume), Germany (13%), Poland (8%) and India (7%). Hungary (5%) and the Netherlands (4%) are also stable providers of dried garlic to Spain. China is the world's largest producer and exporter of garlic, which makes it the largest partner for most countries.

#### Belgium: re-exporter of dried garlic

In line with most other major importers of dried garlic in Europe, Belgium has a large port via which it imports goods. Antwerp is the second-largest port in Europe, welcoming over 10 million containers in 2018. Thanks to this port, Belgium functions as hub for the region. Just like its northern neighbour the Netherlands, Belgium does not have a large domestic market, so a large percentage of imports is re-exported.

In 2021, Belgium imported 5,936 tonnes of dried garlic, 56% (3,335 tonnes) of which is imported from China. Another 13% is imported from Germany, 6% from Egypt and another 6% from Hungary. With 4% of Belgium's imports, the Netherlands is the fifth-largest supplier to Belgium. Belgium re-exports 73% (4,294 tonnes) of its imported garlic.

The re-export function of Belgium implies that traders play a large role in the imports. These traders are often looking for new suppliers to mitigate risks of dependency on their other suppliers and secure continuous supplies. This provides opportunities for new market entrants that can rely on the network of traders to find markets for their products.

#### Tips:

If you have limited capacity for promotion of your products to food manufacturers, focus on traders in Germany, the Netherlands and Belgium to gain entry to the European market through their sales networks.

If you aim to become a leader in terms of CSR, contact the Sustainable Spices Initiative to establish cooperation with European leaders on this topic.

For the contacts of German dried garlic traders, see the list of members of the German Spice Association.

For contacts of other leading dried garlic exporters, explore the members lists of national associations

such as the Dutch Spices Association (the Netherlands) and the National Union of Processors of Pepper, Spices, Herbs and Vanilla (France). For information about Polish companies, contact the Polish Chamber of Commerce.

# 4. Which trends offer opportunities or pose threats on the European dried garlic market?

### Socially responsible sourcing remains high on the agenda of food manufacturers

Socially responsible sourcing is key in Europe. Consumers are becoming more aware of the impact of their purchases on people. They have growing concerns about social conditions in supply chains and expect suppliers to take more Corporate Social Responsibility (CSR). Non-Governmental Organisations (NGOs) have often taken a lead in stimulating companies to improve their CSR and source responsibly. Together with leading brands and manufacturers, they originally focused on commodities which allowed them to maximise impact.

Coffee, cocoa, tea and sugar were among the commodity markets that already received wide attention from European stakeholders. The spices market, including the dried garlic market, has only recently come to the attention of NGOs and other initiators of social sustainability schemes. One of the supposed reasons for the spices market lagging behind these other markets in terms of sustainability is that food manufacturers have difficulty promoting sustainable spices as such to consumers. Spices are an important ingredient, but not the main substance in the end products.

A good example of an initiative from NGOs and leading companies in the spices sector is the Sustainable Spices Initiative (SSI). Some of the main social sustainability issues in the spices sector that SSI recognises are:

- Farmers often face poverty and food insecurity.
- Concerns around spices production, especially regarding long-term supply, food safety and traceability, due
  to poor agricultural practices, lack of adequate processing facilities, and growers switching to high-value
  crops or jobs

One of the major sustainability concerns in the dried garlic market is the lack of transparency in supply chains. For some buyers, transparency is a major added value and a decisive factor in selecting suppliers. Addressing sustainability issues becomes particularly important for companies aiming to brand their dried garlic. Brands can gain trust from customers by showing their CSR. This applies to leading spices brands like McCormick, which embed CSR into their strategy and report about their achievements in sustainability reports, but also to smaller brands in the high-end segment.

#### Tips:

Promote sustainable and ethical aspects of your production process and transparency of your supply chain. This means you should be able to prove and communicate a traceable chain back to the raw materials.

Look for potential partners to improve sustainability. You can use available programmes and subsidies from governmental or non-governmental organisations for investments in sustainability. For more information, visit websites like the Sustainable Spice Initiative, the Netherlands Enterprise Agency or the German Ministry for Economic Cooperation and Development.

See our study on trends for spices and herbs to learn more about current trends in the European market.

Find potential business partners in Europe by checking the lists of Fairtrade-certified operators, European Rainforest Alliance-certified spices brands and European organic dried garlic importers.

#### **European buyers search for healthier ingredients**

European consumers are searching for healthy ingredients. This is one of the most important trends in the European food and beverages market. Consumers perceive food ingredients like salt, sugar and synthetic additives as unhealthy. Other products that also add flavour, such as spices and herbs, are increasingly replacing these products.

The perceived health benefits of dried garlic are described, amongst others, in blogs, vlogs, health magazines, and scientific articles like Allicin: chemistry and biological properties and Potential Health Benefit of Garlic Based on Human Intervention Studies: A Brief Overview. These publications often mention that garlic consumption helps lower cholesterol, blood pressure and glucose levels, and that it has antibacterial and anti-hypertensive properties, amongst other health-promoting and disease-preventing effects. In fact, one of the world's largest dried garlic manufacturers has recently invested in research to identify garlic varieties with the highest levels of active substances.

Due to its perceived health benefits, dried garlic is also increasingly used as a food supplement. EU legislation allows the promotion of certain products on a positive list to be marketed as food supplements. Individual countries within the EU establish these positive lists for their own markets, and the harmonised list of food supplements for Belgium, France and Italy includes the bulb and essential oil of *Allium sativum L*. An example of a food supplement with garlic are the tablets with garlic powder from Kwai heartcare. The active substance in food supplements is allicin.

Despite the significant amount of research conducted on the health benefits of garlic, the listing on the harmonised list of food supplements and the listing in the European pharmacopeia, the EU does not allow food manufacturers to make any official health claims for garlic. The EU register for health claims does not contain any claim for garlic, which means that you cannot put a health claim on the label of your dried garlic to promote these potential health benefits. If you do, national food safety authorities will force you to take your products off the market.

#### Tips:

Show buyers the research done on health properties of garlic to convince them that garlic is a healthy ingredient with many potential benefits.

Refrain from making health claims, as EU legislation does not allow it.

One of the widely recognised health benefits of garlic is its positive contribution to the immune system. Read more about the potential for immune-boosting ingredients in this CBI article on the Increase in demand for immunity-boosting spices.

#### **Consumers look for convenience**

Due to their busy urban lifestyles, a growing number of European consumers buy ready-to-eat or easy-to-prepare meals from supermarkets. These meals can usually be reheated or eaten fresh. Europe is the largest consumption market of ready meals in the world, with around one-third of this market. Many of these meals use

dried garlic as an ingredient. Dried garlic is a particularly important ingredient for many dishes from the Mediterranean region, including Spain, France and Italy, and in Asian dishes, such as Chinese and Indian foods. Manufacturers use dried garlic in sauces, soups, meat, noodles, and many other prepared foods. They also use dried garlic for premixes for easy-to-prepare meals, such as this Chicken Tandoori mix.

A negative perception of the healthiness of ready-to-eat meals has slowed down growth of this product category. One of the reasons for this negative perception is the high amounts of salt in many of these meals, added for flavouring and conservation purposes. Health authorities in several European countries have warned consumers about the negative effects on their health from consuming large amounts of salt. In fact, food industries in several countries have committed to reducing salt in their products. This requires reformulation of foods, and the challenge for food manufacturers is to maintain the taste with smaller amounts of salt. Spices including dried garlic are part of the solution for reformulation of products, as they can provide flavour and prevent foods with less salt from tasting bland.

#### Tip:

Invest in research and development to find or develop product formulations that show food manufacturers how they can use dried garlic to mask salt reduction. Then share the formulations with food manufacturers or let them taste the products at trade fairs or during meetings.

#### **Organic market keeps growing**

Demand for organic spices, including dried garlic, is growing slowly. Organic certification strengthens the perception of natural and healthy characteristics of your product. While demand for organic products in other categories such as fresh fruits and vegetables, dairy products and meat products is stronger, the spices market still follows the general trend for more organic products. Part of the reason for the slower uptake of organic spices is the low dosage of spices in many composed food products. Spices like dried garlic often make up hardly more than 1% of the product, and the European organic regulation allows products with at least 95% of organic ingredients to be labelled as organic. For this reason, many food manufacturers do not prioritise sourcing of organic spices.

Certification bodies are now becoming stricter towards the use of non-certified ingredients in organic-certified food products, and this affects spices. The argumentation of the certification bodies is that availability of organic spices is improving and that the exception rule is no longer needed. Availability of organic dried garlic is indeed increasing. However, many buyers in Europe have concerns over the legitimacy of organic certificates. Laboratory analyses of organic certified products sometimes show residues of chemicals which are not allowed in organic farming. While this could be the result of cross-contamination from nearby conventional farms, some buyers question the certification process. The EU has recently updated the organic regulation, largely to prevent fraud and enhance trust in the EU organic scheme.

#### Tips:

Realise that certification against international sustainability standards such as organic or fair trade does not necessarily say anything about the quality of your dried garlic. If you are interested in exporting high-quality dried garlic to the European market, invest in research and product development.

Carefully assess your capacities to apply organic farming before converting to organic garlic production. The industry estimates that productivity during the conversion phase to organic farming tends to decline, sometimes by as much as 30%. The conversion phase usually takes two years, so

take this into account when investing in organic production, as a higher price will be generated only after this period.

Read the CBI market study on 'Entering the European market for dried garlic' for the requirements for organic certification.

This study was carried out on behalf of CBI by Kasper Kerver of ProFound – Advisers In Development and Gustavo Ferro.

Please review our market information disclaimer.