CBI Product Factsheet:
Dried ginger in Europe
Introduction

Imports of dried ginger have performed well in recent years despite high prices. China is still the dominant supplier but smaller suppliers are also increasing their exports to the EU. Opportunities exist especially for suppliers from countries that are able to combine high quality with low production costs.

Product description

Ginger is the washed, irregular-shaped root (rhizome) of the reed-like ginger plant of the family Zingiberaceae, which is cultivated in the tropics. It is used in oriental and Indian cooking and in bakery and confectionery products and liqueurs. This document focuses only on dried ginger (henceforth referred to simply as 'ginger').

The statistical data in this document are based on Combined Nomenclature (CN) codes. The CN uses Harmonised System (HS) codes to classify products.

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<thead>
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<th>HS Code</th>
<th>Description</th>
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<tr>
<td>09101000 – code used until 2012</td>
<td>Ginger</td>
</tr>
<tr>
<td>09101100 – code used from 2012 onwards</td>
<td>Ginger, neither crushed nor ground</td>
</tr>
<tr>
<td>09101200 – code used from 2012 onwards</td>
<td>Ginger, crushed or ground</td>
</tr>
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</table>

Product specification

Quality

Product quality is a key issue for buyers in the EU and also includes food safety issues. The European Spice Association (ESA) has published the Quality Minima Document, which is vital for the national spice associations affiliated with the ESA and therefore for most key players in the EU. It specifies the legal EU requirements as well as the terms of delivery between buyer and seller that are not defined in legislation. It contains the chemical and physical parameters that determine the minimum quality requirements for ginger:

- Ash: maximum 8%
- Acid-Insoluble Ash: maximum 2%
- Moisture: maximum 12%
- Volatile oil: minimum 1.5 ml/100 gr

Quality specifications are imposed by the importing country and largely concern cleanliness. In addition, ISO standard 1003-2008 provides some general guidelines on the grading, handling and packaging of ginger. The ESA has not developed cleanliness specifications. Therefore EU buyers often use The American Spice Trade Association (ASTA) cleanliness specifications.

The quality of ginger can be seriously affected by temperature. When stored at room temperature (23-26 ºC), losses of up to 20% oleoresin can be observed in dry ginger after 3 months, and the content of (6)-gingerol decreases. Dried rhizomes, slices, or splits should therefore be stored in a cool environment (10-15ºC).

The production country determines the types of ginger available to spice importers: Indian (Cochin and Calicut), Chinese, African (Nigeria and Sierra Leone) and Jamaican. Indian (Cochin) and Jamaican gingers have the reputation of offering high quality, a light colour and delicate flavour. African ginger is darker in colour with a higher monoterpene content, giving a more pungent aroma with camphoraceous notes. Chinese dried ginger is whiter than Indian ginger and tends to be more fibrous and bitter.

Labelling

Incorrect labelling is a major source of frustration for European buyers. Therefore, you must be sure to do this properly. For requirements about consumer packaging refer to the CBI Product Factsheet Consumer Packaged Spices and Herbs in the EU. Bulk products have to include the following information:

- The name of the product
- Details of the manufacturer (name and address)
- Batch number
- Date of manufacture
- Product grade
- Producing country
- Harvest date (month-year)
- Net weight
- Any information that exporting and importing countries may require: bar, producer and/or packager code, any extra information that can be used to trace the product back to its origin.

**Packaging**

Bulk rhizomes are packaged in jute sacks (36-65 kg, second-hand bags) or, less frequently, in wooden boxes or linen corrugated cardboard boxes (60 kg) for shipping. Dry slices or powder are packaged in multi-wall laminated bags. Further processed ginger (e.g. powder, slices) is sold in bags of different weights ranging from 1-25 kg. Common weight classes are 12.5 kg and 25 kg. The materials should be impermeable to moisture and air. Sealing machines can be used to seal the bags.

**Buyer requirements**

What legal requirements must ginger comply with?

Please be aware that your product will have to comply with EU legislation the moment it enters the EU. Compliance is therefore a must. Consequently, only consider exporting to the EU when you are able to comply.

**Food safety: Traceability, hygiene and control**

Food safety is a key issue in EU food legislation. The General Food Law is the legislative framework regulation for food safety in the EU. To guarantee food safety and to allow appropriate action in cases of unsafe food, food products must be traceable throughout the entire supply chain and risks of contamination must be limited. One important aspect for controlling food safety hazards is to define critical control points (HACCP) by implementing food management principles. Another important aspect is that your food products can be subjected to official controls. Products that are not considered safe will be denied access to the EU. Some products are subject to increased controls but ginger is currently (August 2015) not on the list.

**Tips:**
- EU buyers will often ask buyers to implement a food (safety) management system based on HACCP-principles (see under Common requirements).
- Check for increased levels of controls regarding your product. The list of spices and herbs and their supplying countries is updated regularly. Check the EUR-Lex website for the most recent list (see latest document under Amended by).
- Read more about HACCP in the EU Export Helpdesk.
Contamination of ginger

Contaminants are substances that can be present as a result of the various stages of its growing, processing, packaging, transport or storage.

Mycotoxins

Ginger can be contaminated with mycotoxins (aflatoxin, ochratoxin and others). Specific requirements for ginger regarding the maximum level of mycotoxins are laid down in Regulation (EC) No. 1881/2006 (see Annex 2.1.9.). For ginger the maximum level of aflatoxin is between 5.0 μg/kg (aflatoxin B1) and 10 μg/kg (total aflatoxin content B1, B2, G1 and G2). For ochratoxin the maximum limit is 15μg/kg.

Pesticides

The EU has set maximum residue levels (MRLs) for pesticides in and on food products. Products containing more pesticides than allowed will be withdrawn from the EU market. The presence of pesticides above permitted levels is an important issue for EU buyers, as products exceeding EU limits are not allowed to be sold on the EU market. Pesticides are often used in the production of ginger, especially in China where limits are often exceeded and/or prohibited pesticides are used.

Salmonella

The reason for the rejections of ginger by EU custom authorities is the presence of salmonella (whole, crushed and ground). There are no specific salmonella requirements defined in EU legislation for spices and herbs as there are for other products. However according to Article 11 of the General Food Law, food products placed on the EU market must be safe. Therefore ginger is banned from the market if salmonella is found. In the EU steam sterilisation is the preferred method to combat salmonella as well as other types of microbiological contamination, especially for spices and herbs destined for the retail market.

Food additives and adulteration

Many of the spice and herbs rejected by custom authorities or buyers have undeclared, unauthorised or too high limits of extraneous materials. There is specific legislation for additives (e.g. colours, thickeners) and flavourings that list which E-numbers and substances are allowed to be used. Spices and spice blends can not contain added colours. Ground and crushed ginger sometimes contain illegal artificial colorants (e.g. Sudan red, tartrazine, erythrosine). Although these may be approved by the food authority in the country of origin, some of them may not be approved in the EU. Sulphur dioxide (SO2) is often added to ginger to preserve colouring. The maximum residue level is 150 mg/kg.

Ground ginger can also be intentionally adulterated with such substances as sulphuric acid, sago, meal rice, and turmeric. An important reason for intentional adulteration – which is a serious malpractice – is economic gain. Unintentional adulteration, due for example to fertiliser spillover or insects, may also be encountered. Food adulteration is an important issue for EU buyers. According to a panel of industry experts consulted for this study, this type of food fraud with spices
and herbs including ginger is quite common. The EU and national EU governments are also becoming stricter in the enforcement of food fraud legislation. The Dutch government increased the fines on operators wilfully tampering with food from € 4,500 to a maximum of € 810,000 in April 2015.

**Tips:**
- In case you use additives make sure it is legal and agreed with your buyers. Also make sure to mention them in the list of ingredients.
- You will have to build up a track record, provide transparency and references in case you want to sell processed ginger to EU buyers. It is impossible for buyers to test ginger for every possible extraneous material. They will therefore tend to refrain from buying processed ginger outside the EU or will buy only from suppliers they trust. The burden of evidence is on suppliers.
- Refer to the ESA Adulteration Awareness document for further information on food adulteration.
- Read more about food additives, enzymes and flavourings on the website of the EU. Many buyers in the EU will expect a test report on microbiological contamination. Providing this service will make it easier to find buyers in the EU.

**Irradiation**

Irradiation of spices & aromatic herbs is allowed. It is a safe way to kill organisms and affects the taste of spices and herbs less than steam sterilisation. The maximum overall average, absorbed radiation dose is 10 kGy. Consumers generally prefer non-irradiated products. Therefore, this method is not widely used.

**Tips:**
- Please note that irradiation is less damaging for the taste of spices and herbs than steam sterilisation. However, consumers in the EU generally prefer non-irradiated products. Therefore, this method is not widely used. In other buying countries (e.g. USA) there are fewer objections to irradiation. Ethylene oxide fumigation for combating microbiological contamination is prohibited in the EU. It is however allowed in the USA.
- Read more about irradiation on the website of the EU.

**What are additional requirements buyers often have?**

**Food safety management and traceability**

As food safety is a top priority in all EU food sectors, you can expect many players to request extra guarantees from you in form of certification. Many EU buyers (e.g. traders, food processors, retailers) require the implementation of a (HACCP-based) food safety management system. The most important food safety management system in the EU are BRC, IFS, FSSC22000 and SQF. All the mentioned management systems are recognised by the Global Food Safety Initiative (GFSI), which means are accepted by major retailers.

**Tips:**
- EU market entry is more likely than not to include implementing a food safety management system, and it is therefore important to familiarise yourself with them.
- Different buyers have different preferences for a certain management system. Check which one is preferred (e.g. UK British retailers often require BRC, IFS is more commonly required on the mainland).
- Read more on Food Safety Management Systems at the Standards Map

**Corporate social responsibility**

EU buyers (especially those in Western and Northern EU countries) increasingly pay attention to their corporate responsibilities regarding the social and environmental impact of their business. This also affects you as a supplier. Important issues in the ginger supply chain are the use of pesticides, soil degradation, waste water treatment and the impact on biodiversity. EU companies have different definitions of CSR and different priorities and ambition levels in this field. Hence, there is no single way to address CSR issues. The right approach could range from signing a code of conduct to ensure compliance with the most important requirements to mapping out and addressing all the CSR issues in your entire supply chain.
What are requirements for niche markets?

Sustainable product certification

There is a growing market for certified products with well-known consumer logos. Organic products focus on land use and inputs. **Fairtrade** focuses specifically on improving the living conditions of smallholders in developing countries by paying them a premium. **Rainforest Alliance**, a mainstream sustainability scheme with a focus on social as well as environmental issues has recently developed a standard for several spices and herbs. Processors and exporters can play an important role in the certification process by coordinating the activities of smallholders. If they handle certified sustainable ginger they will have to be certified themselves to ensure a reliable chain of custody. There are specific certifications for traders, such as Fairtrade’s **Trade Standard** or the Rainforest Alliance’s **Chain of Custody standard**.

**Tips:**
- To find companies in the EU or in your own country that supply organic spices and herbs: **ITC** and **Organic Bio**. Refer to the Fairtrade **producer database** to find certified suppliers. The **pricing list** will give you an indication of the price you will have to pay farmers for Fairtrade or Fairtrade/Organic spices and herbs.
- Refer to ITC’s **Sustainable Spice Initiative Equivalency Tool** for an explanation and comparison of sustainability standards.

Verification

Self-verification is an alternative to product certification. Suppliers (after some instruction) can assess their own compliance with a sustainability code. Self-verification does not require expensive audits. It does however entail certain additional costs for suppliers. Unilever’s **Sustainable Agricultural Code** (SAC) or the **Olam Livelihood Charter** are two examples of publically available self-verification systems. Self-verification is expected to become more common in the coming years. Self-verification systems such as those mentioned above have the potential to become industry standards, which would be available and could then be used by all suppliers.

**Tips:**
- Refer to Unilever’s Implementation Guides for further information on self-verification.
Trade and Macroeconomic Statistics

Imports

Figure 1: EU\(^1\) imports of ginger, 2010-2014

![Graph showing EU imports of ginger, 2010-2014]

Source: Eurostat, 2015

Figure 2: Most important supplying developing countries of ginger to the EU, 2014

![Graph showing most important supplying developing countries of ginger to the EU, 2014]

Source: Eurostat, 2015

Most important developments

EU imports increased by 12% per annum between 2010 and 2014. Imports have more than tripled since 2002. This strong growth shows the growing appreciation of EU consumers for ginger.

**Tip:**
- The profitable market conditions make it a good time to invest in your business. Invest or look for investments to improve post-harvest processing, quality and extra cleanliness (depending on your current level of professionalism). It can provide you with a significant premium (2-5%).

The value of ginger imported by the EU has increased significantly faster (+22% per year) than the volume (+11%). This means that although prices have fluctuated significantly between 2010 and 2014 the price level is showing an upward trend (with an average annual rise of +8.4% between 2009 and 2013).

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Ginger is an annual crop, and thus has a short price cycle. Prices can fluctuate markedly between one harvesting season and the next. The price of dried ginger depends on that of fresh ginger. High prices for fresh ginger make conversion to dried ginger less attractive for producers and processors. High prices in recent years were credited to the tight supply situation on the global market. Prices are said to have dropped in 2015 due to better yields in China (Source: Freshplaza, 2015). Nigerian prices were also affected, as they follow the Chinese price. Many buyers that have postponed their purchase or have ordered smaller volumes will probably replenish depleted stocks now that the price has fallen.

\(^1\) For a list of EU countries, see the EU website
Imports of ginger have continued to grow throughout the economic recession in the EU. In addition, imports do not drop when prices rise. Ginger is a minor but important ingredient that contributes little to the total cost of the food in which it is used. The demand is inelastic to price changes.

Direct imports of ginger by the EU in 2014 amounted to 72 thousand tonnes, with a value of €150 million. The EU gets 95% of its supply of ginger from developing countries (DCs). Intra-EU trade (31 thousand tonnes, or 30% of total imports) consists of ginger re-exported directly or exported after having been processed. Imports from DCs increased by 8.9% per annum between 2010 and 2014.

The dominant supplier of ginger to the EU in 2014 was China (54% of EU imports). Nigeria (3.2%), Thailand (2.2%) and Peru (2.2%) are some of the smaller suppliers. Most small suppliers have significantly increased their exports to the EU: Nigeria by +23% per annum, Peru by +40% and Vietnam by +15%. Nicaragua, Ecuador and Cambodia supplied little or nothing to the EU before 2014, and 10-20 tonnes each in 2014. These shifts are a result of the quality of harvests worldwide, global price levels, variations in demand and production changes in the country of origin. Peru is an interesting region because of its low wages, favourable climate and the intensive training of its ginger farmers. It is expected to become a more important supply region in the future.

Harvesting periods in different ginger producing countries vary considerably. This has a major impact on your competitive position throughout the year. Refer to the harvesting calendars by Nedspice to consult the different harvesting periods in large producing countries.

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Tips:

- With a fast-moving market such as ginger it is crucial to keep up-to-date with regard to prices. The Spices Board India publishes weekly and monthly prices for ginger (Indian as well as international prices). Public Ledger is a paid service that provides information on the ginger market and prices. Freshplaza also provides up-to-date market insights.
- With global demand increasing it is becoming harder for EU buyers to secure supply. It is therefore a good time to establish long-lasting relationships with serious buyers. Buyers are willing to pay higher prices to suppliers that are able to help secure supply, comply with delivery times as well as food safety requirements. They will also be more willing to invest in your partnership.
- Because of the major fluctuations be careful not to commit to prices far in advance.
- Refer to the Exports section to learn more about (re-)exports by EU countries.
- Harvesting periods in different ginger producing countries vary considerably. This has a major impact on your competitive position throughout the year. Refer to the harvesting calendars by Nedspice to consult the different harvesting periods in large producing countries.

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2For a list of the developing countries, see the OECD DAC list
Ginger is usually exported from producing countries in large pieces (whole or sliced), which are then ground in the country where it is used. Only 8.6% (9.5 thousand tonnes) of total EU imported ginger was already crushed or ground when imported in 2014. Developing countries accounted for 62% (5.9 thousand tonnes) of crushed/ground ginger imports. China (24% of EU imports) was the largest supplier, followed by Nigeria (15%), India (10%), Vietnam (4.2%) and Pakistan (3.2%). Imports of processed ginger can fluctuate significantly from year to year, with a corresponding impact on the opportunities for entry to the market.

Tips:
- Addressing quality issues is a great way to add value and open up markets and should be explored before other methods of adding value.
- It is more costly to clean contaminated ground ginger than whole pieces. Your buyer will transfer costs to you if your products do not comply with requirements.
- Go to the Practical Actions website to learn more about improving pre-harvest handling and processing for dried ginger.

Tip: market selection
Although the EU is a single market, there are major differences between EU regions and countries that you should consider in your export strategy. Perform a statistical analysis to obtain an insight into these differences. Focus on the following aspects:
- Volume of imports - will reveal which countries are the largest buyers or traders in the EU. You will find the largest ginger buyers in Western EU countries (78% of total EU imports in 2014). Also look at exports to determine if a country imports for its domestic market and/or is a trader.
- Percentage and growth of imports from developing countries - will tell you whether a country depends on direct imports from developing countries or on imports from other EU countries. Focus on countries where the share of developing countries is high or growing. As shown by Figure 3, the Netherlands, the UK and to a lesser extent Germany mainly buys directly from developing countries. In comparison, Eastern and Northern EU countries rely on other EU countries for supply.
- Volume and growth of imports from your country - reasons why buyers in a certain EU country prefer to source from a specific sourcing country include taste preference, the ability to comply with extra-legal food safety requirements, historical trade relations and preference for the level of processing. The bitter and fibrous Chinese ginger is most popular in most countries. In the UK Indian ginger is also bought due to the presence of large Indian communities in the UK.
- Price – The prices paid for ginger vary throughout the EU. These price variations are largely determined by the quality level and compliance with extra-legal food safety requirements demanded. Northern and Western EU countries generally have the highest quality (and food safety) standards and pay the highest prices. The price paid also depends on the place in the supply chain. Countries that rely on other EU countries for supply and/or processing pay a margin for these services.
- Processed vs. non-processed - if you supply processed ginger be aware that some countries will prefer to do their own processing or rely on other EU countries. Some small EU countries with limited processing facilities import relatively large amounts of crushed/ground ginger from DCs. This is particularly true of the Eastern EU countries (over 90% in Estonia and Latvia in 2014) but also of Sweden (56%) and Germany (38%).

⇒ Create a free account for statistical databases such as Eurostat and ITC. Complement your statistical analysis with an analysis of your own position to ensure a strategic fit with your buyer: size, level of organisation, product (e.g. mainstream or niche) and ability to comply with extra-legal food safety and sustainability requirements. Refer to the CBI Product Factsheet Crushed and Ground Spices and Herbs in the EU.
Exports

**Figure 5: EU exports of ginger, 2010-2014**

Source: Eurostat, 2015

**Figure 6: Most important EU exporters of ginger, 2014**

Source: Eurostat, 2015

**Most important developments**

EU exports of ginger in 2014 amounted to 45 thousand tonnes worth € 110 million. The volume of exports grew by an annual average of 14% between 2010 and 2014, and the value of exports by 26% in the same period due to the marked rise in the global price of ginger.

Seventy-eight per cent of all EU exports in 2014 represented intra-EU trade. The Netherlands (71% of total exported volume) was the leading exporter in this category, followed by Germany (6.3%) and Lithuania (4.9%).

**Tips:**

- Increasing your direct exports means direct competition with EU suppliers. Be aware that you could be asked to provide the same service as them (short supply times, small orders, steam sterilisation, further processing etc.).

EU processors add a lot of value. The average price of whole ginger exported by EU countries to other EU countries is about 50% higher compared with that coming from developing countries. There are therefore opportunities for exporters from developing countries with experience supplying EU countries for direct sales to buyers that rely on other EU suppliers.

EU traders are also increasingly supplying developing countries. EU exports of dried ginger to developing countries increased by 43% per year between 2009 and 2013. For example, exports to Vietnam grew from 7 tonnes in 2009 to 247 tonnes in 2013.

**Tips:**

- Buyers in countries that do not deal directly with suppliers in origin might have reservations about the quality, food safety and supply security. Therefore investigate buyer requirements in your target market and eliminate potential buyers’ reservations. Provide references of your other EU buyers.
- With global demand rising also focus on emerging markets closer to home. Producers of Western food products in developing countries are an interesting target group. They are often looking for high quality products that comply with EU food safety requirements.
Production

Figure 7: Global production of ginger (fresh and dried), 2010-2013

Source: FAOSTAT, 2015

Most important developments

Global ginger production (fresh and dried) amounted to 2.1 billion tonnes in 2013. Fresh and dried ginger production increased by 8% per annum between 2010 and 2013. Eighty-nine per cent of ginger was grown in Asia in 2013, and 11% in Africa. African ginger has a high oil content and level of pungency. It is therefore usually preferred for the production of oils and oleoresins.

Tips:
- Refer to FAOSTAT for production statistics for ginger.
- Look for crop reports to learn about the expectation regarding harvests worldwide and the level of stocks in consuming and producing countries. These are often shared by industry players during specific spice events. Nedspice has published crop and market reports that include ginger. Freshplaza also provides up-to-date market insights.

EU imports only account for a small share (4.8%) of global production. Most ginger is consumed in the largest producing countries India and China.

Tip:
- The volatility of production and prices are important factors. When prices are high consider supplying fresh ginger. When prices are lower conversion to dry ginger is more interesting.

Backward integration by EU processors and traders is also becoming more common. The multinational trader Olam has set up and expanded processing facilities in Vietnam (400 local staff in a processing facility) that can deliver high quality processed spices (including ginger) to international markets. Vietnam is not a large producer of ginger and not a large supplier of (processed) ginger. Vietnam is however a major processor in the region. Olam is now centralising its processing facilities and regionally sourcing ginger.

Tip:
- Explore opportunities of cooperating with EU processors, especially large ones that have the size and resources to invest. Find EU processors in the member lists of the national spice association in the EU. Refer to the member section of European Spice Association (ESA) for an overview of associations.
**Apparent consumption**

Figure 8: Apparent consumption of ginger by EU countries, 2010-2014

Source: Eurostat, 2015

**Most important developments**

The apparent consumption (henceforth referred to simply as ‘consumption’) of ginger in the EU countries in 2014 amounted to 58 thousand tonnes. A large part of the consumption (around 70-80% of demand) comes from the food processing industry. Dried ginger is especially used a lot in bakery (e.g. gingerbread, cookies) and Asian food products as well as various drinks (e.g. ginger ale, ginger beer).

Western EU countries accounted for 77% of EU consumption in 2014. The UK (32% of consumed volume), Germany (20%) and the Netherlands (13%) were the largest EU consumers. The large ethnic community in the UK is an important driver of UK consumption.

The volume of ginger consumed in the EU increased by an average of 11% per annum between 2010 and 2014, despite the economic crisis. This increase was greatest (over 20% per year) in the Eastern and Northern EU countries.

**Market Trends**

**Social market drivers**

**Internationalisation**: The EU has a large Asian community (about 8 million people of Asian descent) that uses ginger in its cuisine. This community (most notably in Western EU countries) has had a major impact on the growing popularity of Asian food. Therefore, demand for Asian food is likely to increase in the long run.

**Steam sterilisation** is an effective way of combating microbiological contamination and is increasingly required by EU buyers. It can earn a significant premium for suppliers that are able to supply steam-sterilised ginger, sterilised at source. Investment in sterilisation equipment can be very costly (up to €1 million). An important downside of steam sterilisation is that it negatively affects the volatile oil content, which produces the flavour. EU buyers would switch to other methods if they were as safe, accepted by consumers and not too expensive. At the moment there are no alternatives that meet these requirements but GreenFooDec is conducting research at the sector level.

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3Apparent consumption is calculated by subtracting exports from imports. Failure to take stock levels into account may distort this calculation. In addition, large differences in trade need not always correspond to changes in consumption.
**Increasing profits for farmers:** while global demand is rising, farmers are increasingly switching to other crops as they provide higher and/or more stable income. Therefore the sector is looking for ways to increase income. The Indian ginger sector is investing in higher yielding and short-duration varieties.

**Sustainability is on the rise:** sustainable sourcing is an important trend in the EU, especially in the UK, the Netherlands and Germany. Important issues in the supply chain are child labour, health and safety in working conditions and loss of biodiversity. As a supplier you will be increasingly faced with sustainability requirements from your buyer. Although sustainable ginger is still a niche market, demand for products certified for compliance with sustainability standards is increasing. A big challenge for the market for certified sustainable ginger is the fact that it has to be sold at a higher price to cover some or all of the certification costs. This has resulted in an ongoing debate in the sector concerning the best way forward in the implementation of sustainability in the mainstream market. The option of third-party certification is still under debate. As mentioned above, self-verification could become more common in the future in the mainstream market.

**Tips:**
- Small operators with limited access to capital will probably have to find an alternative solution. Look for local sterilisation companies that are able to provide this service for you.
- Steam sterilisation is only effective if food safety is taken into account during drying, storage and processing. Contamination after the sterilisation step has to be avoided. Mycotoxins and other contaminants are insensitive to sterilisation and must be controlled during all steps of the chain.
- Determine whether your (potential) buyers want steam sterilisation before considering providing the service.

**New import tariffs:** in January 2014, significant changes were made in the EU’s Generalised System of Preferences (GSP). This system provides preferential import tariffs for products from selected developing countries. One relevant aspect for the ginger market is that spices (including ginger) from China will no longer benefit from preferential import tariffs. The import tariffs for whole ginger as well as crushed/ground ginger will however remain at 0% for all countries. This new measure therefore does not have an impact on the trade of ginger.

**Tips:**
- Refer to the CBI Product Factsheet Sustainable Spices and Herbs in the EU for more information about long-term expectations of the market for certified sustainable products.
- Refer to the TARIC consultation database to check what import tariffs apply to your own or competitive countries.

**Price breakdown**

*Figure 9: Snapshot of price breakdown of ginger*

<table>
<thead>
<tr>
<th>Raw material</th>
<th>Processing</th>
<th>Transport</th>
<th>Import &amp; processing</th>
<th>Retail</th>
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<td><img src="image3" alt="Transport" /></td>
<td><img src="image4" alt="Import &amp; processing" /></td>
<td><img src="image5" alt="Retail" /></td>
</tr>
</tbody>
</table>
Please be aware that this price breakdown for ginger is only a general indication. It is influenced by many different factors. These include the country of origin, the current and expected future harvest situation, quality of the raw material, level of processing, level of demand and the trend in prices. All these factors make it difficult to provide a reliable price breakdown.

Ginger is often ground and sold in the retail chain as powder. Retail prices of ground ginger depend on variables such as quality, brand, outlet and size. An indication of prices for ground ginger sold in containers of 20 grams or more is between € 35 and 65 per kilo. In 2014, the average import price of crushed or ground ginger ranged between € 2.40 and 3.40 per kilogram.

**Tip:**
- It is important to keep your eye on how prices develop. Search the Internet for recent reports. Public Ledger is a paid service that provides information on the ginger market and prices.

Prices are volatile. As mentioned above, the price of ginger is expected to fall in 2015. However, prices are likely to rise in the long term due to increasing shortages on the global market.

**Tip:**
- Certain price levels must be reached in order to encourage ginger farmers to continue farming. Therefore it is important to integrate fair pay practices to ensure your supply. This is especially relevant at times when prices are low and farmers are struggling.

Please be aware that the value of the Euro fell significantly in relation to that of the dollar last year. Various sources indicate that this decline may continue in 2015. International prices are often given in US dollars. The weakening of the Euro thus affects EU importers who have long-term contracts with their suppliers. Whether fluctuating exchange rates are beneficial for exporters from developing countries depends on the value of their own currency relative to the US dollar.

**Tip:**
- Keep up to date on exchange rates with the aid of such websites as Oanda.

**Useful sources**
- European Spice Association - [http://www.esa-spices.org](http://www.esa-spices.org) - provides information on its national spice association members
- Food Ingredients Europe - [http://www.foodingredientsglobal.com](http://www.foodingredientsglobal.com) - important international trade fair for the food ingredient and health sector in Europe
- SIAL - [http://www.sialparis.com](http://www.sialparis.com) - large international food fair held in France every year
- Biofach - [http://www.biofach.de](http://www.biofach.de) - largest European organic food trade fair held in Germany